The Group in Society

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PREFACE

Why study something you already understand? Small-group researchers regularly encounter this question from students who doubt they have anything more to learn about a process as natural and easy as walking or breathing. After all, we have spent so much of our lives in groups, even by the advent of adulthood, that we already have all the experience we need to participate in small groups effectively. Or do we?

What We Don't Know *Can* Hurt Us

One popular saying goes, "A camel is a horse designed by a committee." People often express surprise when a committee-drafted document comes out coherent, when a marketing group comes up with an original slogan, or when a commission makes a shrewd judgment. But turn around, and you might hear someone repeat the well-worn proverb, "Two heads are better than one." This truth we also know—that we can better analyze and think through a problem if we brainstorm and explore ideas together and get critical feedback from one another. So, which is it?

The problem with such conventional wisdoms is that they can't both be true—not in any absolute sense. To shrug and say simply, "Well, it depends," is another way of acknowledging that without more careful study, we do not know the conditions under which a committee will blunder or thrive. The very fact that we have negative cultural stereotypes of groups yet flock to them in every sphere of our lives suggests that few of us have worked out an accurate and useful understanding of small groups.

Sometimes, there are additional factors (often called "moderator variables") that determine which wisdom better applies. We might even conclude that a certain truth has strict boundary conditions—there are only specific times and places when it is likely to be apt. Other times, we can advance our understanding of groups by better defining our terms and claims, moving us well past the vague language of everyday speech. Even when a piece of conventional wisdom proves true, research might help us understand the *degree* to which it matters, as in the case of the real—but surprisingly small—productivity boost that often results from group cohesion.

Finally, the most thorough research can help us tease out the real impacts of different group behaviors from the spurious correlations. Thus, in the case of gender and leadership effectiveness, it turns out that the difficulty women experience in group leadership stems not from their style or skill so much as from sexist group member perceptions, which have the self-fulfilling effect of transforming a negative bias into real leadership challenges.

In sum, our knowledge of groups will remain incomplete if we rely solely on our direct experience participating in groups, our vicarious experience through television or films, and our other means of receiving cultural wisdom. *The Group in Society* connects with those experiences in powerful ways but provides a far more accurate and complete understanding of how groups function and shape our lives.

Why This Book Exists

Far from a dry distillation of research findings, this book links scholarship with the real textures of the diverse group contexts. This book stretches across the life span from our first group—the family unit—through the educational and work groups that fill our lives to the support groups that help us through personal difficulties to the civic, community, and religious groups that give our lives special meaning.

To give us a better appreciation of the variety of powerful groups in society, this book also helps us understand some kinds of groups we will probably never join—or may even fear. We will move from the destructive influence of cults to the liberating experience of consciousness-raising groups. We will also see the paradoxical role of group life in repressive East German society before the fall of the Berlin Wall, and we will see the tactical advantages of networked cells as a means of organizing deadly terrorist attacks. Moving across the globe and along the timeline of modern history, we will see groups playing a hand in designing foreign policy triumphs, triggering tragic accidents, and quelling (or fostering) deeply-embedded xenophobia, racism, and intolerance.

Beyond mere anecdotes, *The Group in Society* draws on case studies, interviews, and archival data. By the end of the book, readers will have learned how the small-group research community has built a wealth of knowledge about groups. Readers will also develop the theoretical perspective and practical research orientation that can help them investigate and better participate in the groups to which they already belong.

At the same time, I have written this book for the community of small-group researchers and other scholars and professionals interested in sharpening their understanding of group life. This is an exciting point in history to be studying small groups. It is easier than ever before for scholars to stay connected and collaborate across disciplinary boundaries, and there has been a resurgence of interest in—and research on—small groups, a subject that had drawn attention for decades but had experienced periods of neglect.[1]

Through *The Group in Society*, I hope to advance the field of small-group research by providing a novel approach, which I call the *embedded system theoretical framework*. I present the details of this framework in chapter 2, but a brief summary may be helpful at this point. My approach synthesizes many of the different disciplinary perspectives to further develop the numerous empirical theories scattered across the field of small-group research. This framework also introduces the idea of group archetypes—particular groups, like juries, families, and self-managing work teams—that may delineate scope conditions for many small-group theories. In other words, the validity of theories may prove strongest in particular, archetypical group settings. In addition, however, when a group identifies itself with a different archetype, theories built to explain the archetype may prove increasingly useful. Thus, when a work group imagines itself to be a family, family and relational theories become more important in understanding the family-like work group.

This approach simultaneously appreciates the value of case study research, which delves into the particulars of a specific group in a single place and time, as well as experimental and survey research, which seeks to uncover broader patterns. Thus, qualitative and quantitative traditions are seen as complementary—or even interdependent as means of developing and testing rich empirical theories.

Because the embedded system framework looks at groups from a higher level of abstraction, it can be called *meta-theoretical*: It is general enough to encompass more precise theories concerning specific group phenomena. Like structuration theory, described in chapter 2, the embedded system framework can amount to a set of "sensitizing devices"[2] that help researchers ground their specific findings in a larger theoretical context. Working with a manageable set of general concepts that can frame empirical group theories, the embedded system framework can help integrate the larger field of small group research.

Finally, the embedded system framework makes it easier to see how and why groups are such a powerful feature of societies. One weakness of the field of small-group research is unnecessary humility about its subject. Too often, groups come across as a curiosity, as isolated

social units, or simply as scattered minutia—nothing more than the oddly curled sawdust shavings on the floor of society's woodshop. From the vantage point of this book, it becomes clearer that small groups are among the most important elements in building, sustaining, and changing a society. The small group—as the most basic unit of collective relations—holds a special responsibility for the social lives we alternately choose or are forced to live.

Organization of Topics

Part I of the book lays the groundwork. Chapter 1 introduces the field of small-group research by defining small groups, briefly discussing how scholars study and theorize about groups, and touring the bestiary of small groups—from criminal gangs to juries, from work teams to support groups. Chapter 2 introduces the embedded system framework and provides the analytic tools that will help describe the behavior of the varied types of groups.

In organizing the theory and research covered in Chapters 3–9, I avoid replicating conventional topic orderings. Instead, the chapters pair together the most closely related group contexts and theories. The chapter structure of this book efficiently introduces topics and contexts together by wedding theories to the group archetypes (and other common group contexts) most closely associated with them.

Linking specific contexts with particular theories, the book divides the main chapters into a pair of clusters. Part II addresses the range of theories on discussion and decision making. It begins with a chapter on juries, along with theories of decision making. The jury also has the advantage of being a relatively simple, formally constrained group environment, which allows focus on a more limited number of group influences before moving on to the more complex aspects of group decision making that follow. Chapter 4 looks at how we design groups through technology and procedures to avoid groupthink, build consensus, or secure a democratic process. The fifth chapter considers how we assemble task forces and other small groups to generate ideas and keep information flowing.

Part III shifts the focus to group roles, relationships, and identity. It begins with a chapter on the special role of the leader in teams and squads, which opens up a broader discussion of power, status, and teamwork. Chapter 7 spans from families to gangs, with a focus on relational communication, cohesion, and the different roles of groups across the life span. Chapter 8 focuses on how joining identity groups or clubs socialize us and give us a distinct sense of place in society, for better or for worse. Chapter 9 shows how we develop our inner selves in therapy groups, support groups, and classrooms.

The concluding chapter then pulls together the book's themes and findings. As a final demonstration of the power of small groups—and the importance of sound theoretical knowledge—this chapter considers the roles groups played in the fall of East Germany, the emergent "small-group movement" in modern society, and the growing emphasis on group deliberation in democratic reform efforts. The conclusion also integrates the different archetypes introduced through the preceding chapters and presents an integrative summary model of group theories through the embedded system framework. Throughout, the chapter stresses how much we have yet to learn but also the practical utility of the knowledge we already have acquired.

Relative to other texts on small groups, this organization may be unconventional, but rest assured, it still covers the main theories and topics in the field of small-group research. A recent study asked leading group scholars to identify which topics they found most important,[3] and *The Group in Society* covers all of those that received the highest marks:

♦ Real contextual applications are woven through every chapter.

♦ Groups in larger organizational and social contexts are a central theme in the book and receive special attention in chapter 2.

♦ Decision making is featured in chapters 3 and 4.

♦ Creativity and diverse group memberships figure prominently in chapter 5. Cultural variations in group form and behavior appear throughout.

♦ Technology is emphasized in chapter 4 and throughout.

♦ Leadership, status, and power are foregrounded in chapter 6.

♦ Social identity and intergroup conflict are a major theme in chapter 8.

♦ Conflict in groups appears in four forms, in terms of how groups handle substantive argument (chapter 3), status and power struggles (chapter 6), relational and process tensions (chapter 7), and intergroup conflict (chapter 8).

In addition, I have included topics that traditionally appear in reviews of the literature on small groups. Attitude shifts appear in chapter 3, and information processing appears in chapter 2 (briefly) and chapter 5. The fourth chapter addresses discussion procedures, decision rules, and the physical (and virtual) arrangement of groups, and chapter 6 addresses team effectiveness and role specialization. Woven into chapter 7 are relational communication, group cohesion, and member commitment and bonding, and chapter 8 adds norms, socialization, and symbolic convergence.[4]

Other important topics in this book do not appear in conventional texts on small groups, though they have, at times, been caught in the field's wider net. Throughout the book, I discuss groups in their *historical contexts*—that is, group forms as particular cultural accomplishments (or problems). In addition, chapter 2 considers directly how groups change society (a direction of influence given too little emphasis), and this theme recurs in each of the main chapters in the book. Chapter 9 addresses personal growth in groups and psychodynamic group processes, as well as how groups change and grow along with their members.

In the end, however, this book will have served its purpose if it simply helps readers better see the larger universe of groups and begin to understand the groups that affect their own lives—how those groups work, and how to make them work better. After all, we build theory and conduct research for one common purpose—to sharpen our grasp of the complex social world in which we live. With that goal in mind, let us begin.

Acknowledgments

Notes

1. To get a sense of the scope of the early phase of small-group research, consider that the second edition of Paul Hare's *Handbook of Small Group Research*, published in 1976, contained over 6,000 references. Even Hare (1976, p. 422) admits to making "no attempt . . . to locate all the books and articles" he lists in his references. McGrath and Altman (1966) undertook an ambitious effort to bring the field together, though they were ultimately unsuccessful at popularizing their particular framework for integration.

2. Giddens (1984) explains that "the concepts of structuration theory, as with any competing theoretical perspective, should for many research purposes be regarded as sensitizing devices,

nothing more." He explains that "they may be useful for thinking about research problems and the interpretation of research results. But to suppose that being theoretically informed . . . means always operating with a welter of abstract concepts is as mischievous a doctrine as one which suggests that we can get along very well without ever using such concepts at all" (pp. 326–327).

3. For details on this research project, see http://comm.research.arizona.edu/ingroup/docs/Poole-DephiPaperv1.doc.

4. To be clear, this book does not aim for comprehensive coverage of all small-group communication topics, let alone every theory or cluster of empirical findings. Such undertakings likely have run their course, as the field has grown too large and sophisticated in its details to accommodate such an undertaking.

PART I

AN INTRODUCTION TO SMALL GROUPS

1

SMALL GROUPS UP CLOSE

Groups have their detractors. From the left, playwright Oscar Wilde quipped that "the problem with socialism is that it takes up too many evenings." From the right, pundit George Will once observed, "Football incorporates the two worst elements of American society: violence punctuated by committee meetings." From outer space, Captain James T. Kirk offered that "a meeting is an event where minutes are taken and hours wasted."[1]

Our distaste for group life has justification. Small groups can create more problems than they solve, and they can wreak havoc in the service of dubious or even evil purposes. But as our own experiences already attest, groups can prove indispensable and help us achieve great ends. After all, if groups truly had nothing to offer, how could they be so prevalent? When employers look to hire, the ability to work effectively in teams ranks among the most desired qualities. Over 90% of the Fortune 500 companies use groups daily, with managers spending 30–80% of their days in meetings.[2]

At the highest levels of power, groups also play prominent roles. Many countries entrust their most challenging legal questions not to single individuals but to panels of judges, like the U.S. Supreme Court. The largest cities on Earth make their planning decisions through a small municipal board of elected or appointed officials, rather than leaving those matters to a city manager, mayor, or executive. The question of whether and how to go to war typically falls not as much on a head of state but on a security committee, a war council, or another assembly of generals and officials.[3] We have also turned to small groups when seeking to resolve international disputes[4] and intractable domestic policy debates.[5]

Even decisions traditionally made by individuals may be just one retirement away from conversion into a group process. When Ben Bernanke took over the Federal Reserve in 2006, he brought with him a different idea of how to run the nation's banking system. Vincent Rinehart, who worked at the highest levels of the Federal Reserve for many years, observed that Bernanke's goal "is to have the committee be more actively involved in the deliberation of U.S. monetary policy. He doesn't want to be the iconic figure that Alan Greenspan was." Bernanke believes that if you have "more people deliberating on policy, maybe on average you make a better decision." The Fed chairman believes, Rinehart explains, in "the wisdom of crowds."[6]

That phrase was the title of a bestselling book by *New Yorker* business columnist James Surowiecki. Replete with compelling anecdotes and research, this book probably did more to burnish the reputation of small groups than any single event in our time. Reading Surowiecki, one comes to recognize that the virtues of group-level thinking appear throughout our culture. Even the TV studio audience of *Who Wants to Be a Millionaire* guesses correctly 91% of the time, a far better performance than the 65% accuracy rate obtained by the experts contestants call by "phoning a friend."[7] Unfortunately for *small*-group researchers, Surowiecki was more interested in the "mob intelligence" of very large, loosely connected "groups," such as a network of stock traders. As a result, his analysis only modestly advanced our understanding and appreciation of small groups.

If groups serve us so well, how is it that we overlook and underestimate them? One reason is that small groups are inextricable from daily life and, as such, become taken for granted. Above all else, the family group serves as the most basic social unit: In spite of tremendous cultural variation, in some form or another, the family proves nearly universal across the wide span of geography and history. When we venture

beyond the home, we enter the world of friendships and social ties that, again, center on groups of manageable size. Even with the Internet's spawning of Friendster, Facebook, MySpace, and other social networking sites, most people still report having only two or three close friends in their inner circle, wherein they discuss the most important events in their lives.[8] Then teams, clubs, and hundreds of other small group forms occupy much of our professional, political, and community lives and help us build and maintain our social identities. When asked by inquisitive researchers, people will admit that they value their intimate social groups more than the larger social categories and organizations to which they belong.[9]

Immersed in a sea of small groups, we develop commonsense or "folk" theories about how to behave in groups—some true, some not—but we don't like to think that participation in groups requires special skills or knowledge. After all, being in groups is as routine as tying our shoes or having a conversation. Surely we don't need special courses, seminars, or books to do something so basic. It's an ironic notion when one considers how quickly we turn to books and counselors to help us solve our dyadic crises in marriage and intimate relationships. Groups pose even graver challenges yet get a fraction of the ink on the popular bookshelf.

Understanding Groups

To think systematically about how we behave in groups—and how groups shape our social world—we need to use precise language to discuss them. Concepts, such as group cohesion, leadership, and diversity, require clear definitions, and the theories we build need to deploy these concepts carefully. Moreover, the research we conduct on groups must build and test our theories in a way that helps us evaluate plausible accounts of groups from implausible ones. This chapter sets the groundwork for understanding group concepts, theory, and research, but we begin by defining the most important concept of all—the small group itself.[10]

A definition might seem a trifling thing. After all, we know a small group when we see one. Or do we? When does a small gathering of neighbors become integrated enough to begin to look like a group activity? If a small gathering of fans celebrating a victory begins rioting, at what point does it cease being a group and spiral into a mob? How complex can a small business grow before changing from a group to an organization? At what point does a small clan grow into a community? If a jury is a small group, is a city council also a group? By defining a small group more precisely, we can answer each of these questions and get on with the business of understanding the behaviors and impacts of groups in society.

Group Size, Copresence, and Boundaries

The foremost question for many may be, How large can a small group become before it ceases to be *small?* Throughout this book, the term *group* serves as a shorthand term for *small group*, but the smallness of groups is always implied. It is relatively easy to see that the minimum size of a group is three people. With only two people present, we have a *dyad,* a pair of people who can communicate back and forth and make decisions together. Adding just one more person to the mix makes possible majority-minority splits, introduces potential competition for attention, and otherwise changes the fundamental nature of the social unit.

Some investigators would have us draw a sharp upper boundary by claiming that a small group can be no more than fifteen members in size.[11] Such a restrictive definition would exclude from our analysis social entities that are *more like a small group than anything else.* A gathering of rural villagers to conduct local business, for instance, looks and behaves more like a small group than, say, a large organization or diffuse community.
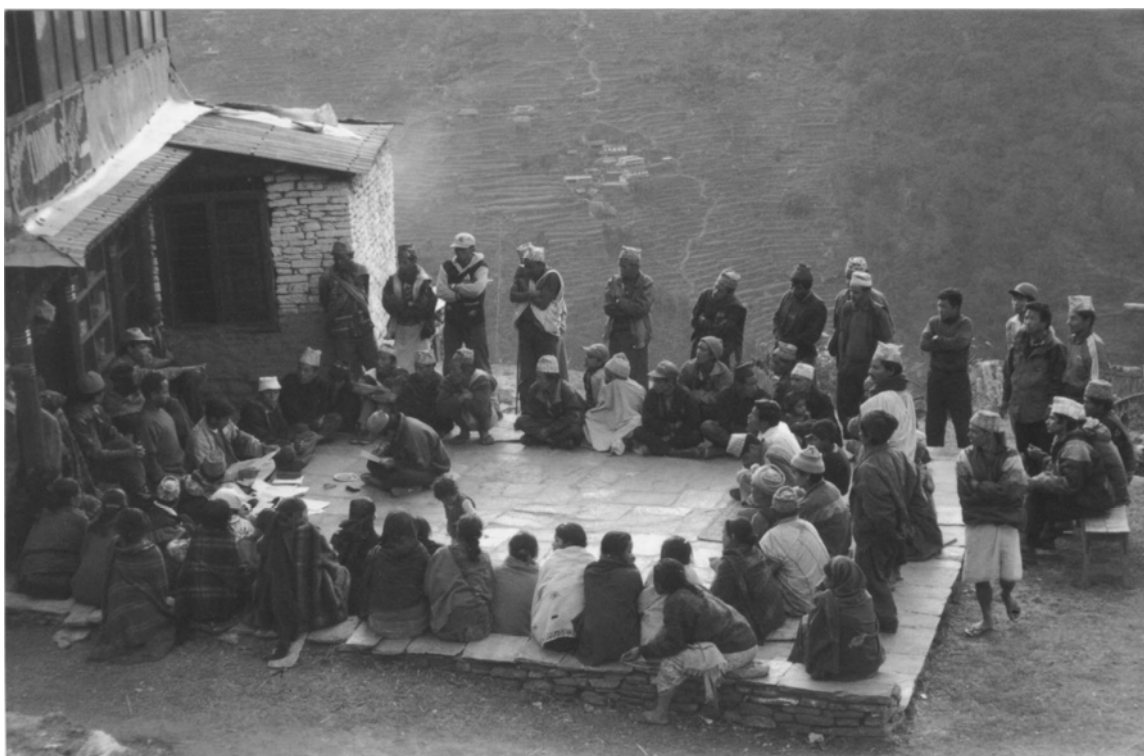
When these Nepalese villagers met to weigh the benefits and costs of electrification, were they too numerous to constitute a small group? Credit: Photo courtesy Alisa Bieber.

A better way of limiting the size of a small group is to require that every group member have a sense of every other member's copresence. When people exist as members of a small group, they are *together* in this minimal sense, each aware of every other individual in the group.[12] They may not (yet) know each other's name, let alone one another's personal histories or preferences, but they are all part of each other's present reality. In the case of a virtual group, they may not all be aware of who is or is not present online— let alone paying attention—at a given time, but they do know what set of people make up the group.

But size alone does not determine copresence. Even smaller groups might fail to meet this criterion and thereby constitute something other than a small group. My three closest friends might all e-mail me on the same day, but that makes me the center of a social network, not the convener of a group. A vice president might designate a set of ten employees as an informal "leadership team" in a company, but if those ten people never meet together, they share a certain status or title but not a group membership.[13]

A related consideration is the sense of a group's boundaries, an understanding of the group as a defined entity. Group theorists have a term for this phenomenon, which they call *entativity*. A group has this quality to the degree that "members of a group are perceived as being a coherent social unit."[14] *Coherence* in this sense means that the group members—and outside observers—can at least identify the boundaries of the group's membership. Many groups, such as open-enrollment support groups, have members joining and leaving with great regularity, but if they remain small groups, they still have sufficient coherence at any given time.

Communication, Goals, and Interdependence

There is more to a group, though, than simply having a sense of bounded copresence. There is also the matter of what groups *do,* and that consists of communication in the pursuit of group goals that require effective collaboration.

To count as a group, a social entity must have regular member interaction. Most commonly, this means either speaking, signing, or typing to one another, though some groups' most important interactions are physical or nonverbal, as in the case of a play group, jazz band, or work crew. If communication does not occur with any regularity in a group, there may exist a social gathering or relationship network of some kind, but not a group. After all, the very idea of *grouping* entails an ongoing pattern of communication among the group's members.

What counts as "ongoing" is also a question. Much of the available research looks at experimentally formed *zero-history groups*, which literally have no history of working together. Typically, they stay together for only a brief period of time, ranging from a period of minutes to a handful of meetings over the course of a few months. But even these zero-history groups are still *groups*; they simply have different social contexts and connections. In the case of the prototypical experimental group of undergraduates, the participants have followed similar paths to membership, such as the pursuit of extra-credit points. The context is real enough, involving a university environment, a sense of fellow-student camaraderie, and the physical and mental contours of being involved in laboratory research. After all, many juries form and dissolve in a single day, with the jury deliberating for less than an hour. Excluding such an entity from the definition of a small group would miss one of the most powerful group experiences that people can have in the United States.[15]

Part of what makes juries remarkable is the speed with which jurors can receive and begin working on the collective goal of reaching a verdict or judgment. By definition, every group has a *shared purpose*—at least one goal, aim, or task that brings them together. Their task could be to make decisions together. Or they might have a physical challenge, such as moving a piano. Learning new information, ideas, or insights might motivate a study group, just as self-discovery might motivate a therapy group. Or a member might have the purely social purpose of meeting new people. Frequently, the shared goals of a group fall into all of these dimensions, as in the case of a book club that coordinates schedules, learns together, and socializes regularly.

A group's goals might change over time, and they might overlap or vary tremendously, but they *must* be shared by group members to some degree. A set of assembled individuals without *any* sense of shared purpose or goal becomes simply a social gathering, or perhaps a meeting of even smaller groups. But simply meeting together does not make a social entity a group any more than a pitched street brawl constitutes a fight club.

A final requirement holds that members must be at least somewhat *interdependent.* Even a group of students who get together to study for an exam they will each take separately meets this criterion if the study group assigns different readings to different individual members. Each counts on the other to report on their respective readings, and the failure of one to do his or her task affects the entire group. A military unit on patrol counts on each member to watch out for the safety of the entire group, and though each soldier may have a high sense of self-confidence, the personal safety of each may ultimately depend on the alertness and skill of their least capable comrade.

Summary

To see how the pieces of this definition fit together, take a quick look at the book's cover, which features the Blue Man Group. This theatrical trio gets top billing because they strip down their performance to the bare bones of a quintessential small group. A three-person troupe of Blue Men has just enough members to form coalitions and exert social influence, as when two of the grease-painted Men turn to stare bug-eyed at the third to get him back in line. Along with blue skullcaps and black clothes, their body paint gives them clear boundary demarcations from others, though they often perform within the boundaries of a slightly larger group, such as a full rock band. They remain mute yet clearly demonstrate knowledge of each other's copresence and communicate efficiently. As musicians, they use their odd-sounding instruments to complement one another, and they occasionally play a single instrument that requires three Blue Men to operate. Each performer gradually shows a distinct personality and purpose, but they share an overriding

goal of effective theatrical performance, be it in New York City, Las Vegas, Berlin, Tokyo, or who knows where.

How We Learn About Groups

A diverse array of groups meets this broad definition, and small-group scholars have taken an equally varied array of approaches to studying them. This book draws on every conceivable kind of group research, and it may help to see a few of the basic methods in the researcher's toolkit.[16]

Because groups involve complex behaviors embedded in larger social systems, the most straightforward research method may be the case study. By focusing on a single group in a specific time and place, the researcher can see a group in all its detail and trace the connections among individual group members' actions, the group's shifting norms, and the dynamics of its larger organizational and social context. The "naturalistic" case lets the researcher become immersed in the group's unfolding activities, as in the case of a residential AIDS facility,[17] whereas the careful historical case study lets the researcher pore through archival and interview data to see—with some historical perspective—how a group's strategic choices played out, as in studies of group decision making at the highest levels of government.[18] Researchers sometimes can afford to observe a small *sample* of different groups that belong to a larger population. Thus, one investigator observed twelve different mixed-sex bridal and baby showers to see how groups used ritualized embarrassment to socialize males to what had historically been a female-only activity.[19]

There are limits to how many groups one can study in this way. A case study commonly involves intensive data collection, such as repeated in-depth interviews with group members, observations made as a participant in the group, and analysis of videotaped group discussions and archival documents, such as meeting agendas and minutes.[20] Such a study yields a rich understanding of a single group—or a particular class of groups, but it can be difficult to establish general patterns from those limited observations. More often, the case study yields original theoretical viewpoints, hypotheses, or concepts.

A variation on the case study is the field study in which the investigator looks at a relatively large number of groups in their natural setting. Because of the larger sample, the researcher's focus usually narrows to a particular set of questions, such as how variations in one group characteristic might affect certain group outcomes.[21] Typically, this research approach relies on systematic observation that can be conducted on a large scale. My own research on juries illustrates field research, as coinvestigators and I examined the impact of jury service on thousands of jurors across the United States. In one study, we collected and merged archival data on juries and voting behavior to demonstrate that serving on juries made individuals more likely to vote in future elections. In a related study, we administered survey questionnaires before and after hundreds of different juries deliberated to learn how subjective experiences on the jury influenced jurors' future civic attitudes and participation in politics.[22] In both cases, keeping our field research manageable required collecting a thin slice of data, and we never directly observed the juries interacting. Even then, such studies cost hundreds of thousands of dollars to conduct, which makes them an impractical approach for most investigations.

Historically, most group research has taken place not in the field but in the laboratory. One of the most famous illustrations of this method was social psychologist Solomon Asch's studies of conformity.[23] In a series of experiments, Asch gathered together groups of seven to nine undergraduates to see how readily an individual would conform to an incorrect group judgment. In the lab, an experimenter showed the group of students a white card with a black line on it, then showed a second card with three lines. When asked which of the three lines matched the length of the first one, each of the group members gave the same—incorrect—response, until the last group member was left to decide whether to agree with the rest of the group or to offer a dissenting opinion. Unbeknownst to this lone individual, the rest of the group members were all "confederates"—accomplices of the experimenter who deliberately gave a false answer. In this study, more than a third of the time that lone group member went along with the majority, which provided Asch compelling evidence of the potential for conformity in group judgment.
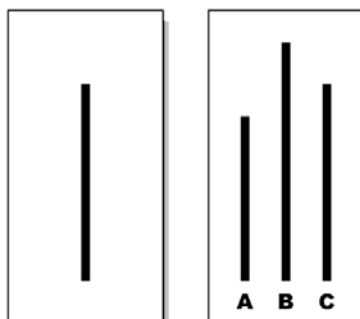
Reference and comparison cards used in
conformity experiments conducted by Solomon
Asch. Credit: Wikimedia Commons.

Ever the careful experimentalist, Asch conducted multiple studies that varied some of the factors he believed influenced conformity. In particular, he repeated the experiment but changed it so that one of the confederates gave the correct answer. In these trials, that last group member could oppose the majority opinion without becoming the *lone* dissenter, and this reduced the conformity rate by three-quarters.[24]

Whether in the laboratory or the field, researchers studying groups have some special opportunities and challenges. When studying an individual, a researcher can focus on the behavior and attitudes of a single person. A personality psychologist can administer a questionnaire to learn whether a given person exhibits neurotic or extraverted traits, or a communication scholar can observe a person's comforting behavior or argument style. But how does a group researcher know what a *group* believes, feels, wants, or thinks? It is a metaphor to say a group even has these characteristics, since a group does not literally have a brain in which to store and process attitudes and the like. A group might have a written record of its actions, but researchers often want to know more than these limited details about a group's qualities.

In formal terms, researchers sometimes refer to this as a "unit of analysis" challenge. Is the researcher studying individuals or groups?[25] A study often involves administering questionnaires to individual group members, who then describe their own beliefs, intentions, and behaviors, as well as their perceptions of other group members' motives and behaviors. Consider the example of group cohesion. It is widely believed that an athletic team must be cohesive to have success, and, as it happens, this is true.[26] But if we want to assess how cohesive our hockey squad or hoops team has become, what to do? One popular approach is to ask the individual team members, then average their responses. By this approach, the group's cohesiveness is nothing more than the sum of the individual group members' sense of bonding with their teammates. If the average player rates the team as a "7" on a ten-point cohesion scale, we might then say the team has a decent amount of cohesion.[27]

Not all sevens are equally lucky, however. One team might have all ten players give the same rating, but another team might have six players rate the team's cohesion as a "10," with the rest giving a score of "3" or lower. Both would have an average of seven, but the latter team is in serious trouble. (Somebody probably wants to be traded.)

To make matters worse, it can even prove difficult to know what a group is *doing*. When a group makes a concrete decision or its members take coordinated action, we can see the group clearly. But when a group meeting adjourns, sometimes members will disagree about what, exactly, they just decided. Without a formal vote and written minutes (or even *with* these), a nonprofit committee's members might tell outsiders that the group's discussion strongly favored holding a press conference on global warming, while others say that the committee leaned toward holding a protest. In this case, what can we say the *group* did in its meeting?

Problems such as these lead some researchers to prefer direct observation over recording individual group members' private assessments of their gatherings, instead relying on the content of group discussions themselves. Social psychologist Robert Bales developed one widely used method of observation, sometimes known as Interaction Process Analysis, or simply IPA.[28] Research assistants would watch groups interact and make marks on a score sheet to note when someone gave an opinion, displayed tension, disagreed, or engaged in any other of twelve different behaviors. A pair of well-trained observers could reach the point where their coding marks would match, thereby making their observations consistent, or what researchers call "reliable."

In recent decades, researchers have developed a large number of different "coding schemes," which they use to categorize the talk and nonverbal behavior they witness in small groups. Those taking this approach can attest to having seen the group directly, as opposed to through the eyes of the individual members. Only by coding the group interaction directly—or at least observing and interpreting it without the aid of a systematic measurement system—can researchers make judgments about group behavior independent of the members' own biases.[29] This approach also lets researchers see the group interaction as a whole, leaving aside the question of aggregating individual perspectives or experiences.

One more approach has the group come together and analyze its own behavior. This is, essentially, a group interview, and it is used infrequently in group research, partly owing to concerns about group dynamics distorting its results.[30] From another perspective, though, a kind of reality of the group comes out through the group's interaction in such an interview. Imagine that we bring together the members of a family, and a domineering parent insists that theirs is a happy household—silencing any dissent that might arise with harsh glares at the other family members. Only a naïve researcher would simply write "Happy family" in the field notebook. Instead, what one sees in this group interview is the *official* group position (happiness), as expressed through the group's authoritarian decision-making style. That autocratic style, accompanied by the active suppression of disagreement, also becomes worthy of recording in the researcher's notes. Thus, the interview itself produces group behavior that can be observed and recorded.

As scholars publish study after study, they eventually get the chance to use one more tool in their quest to understand small groups. A *meta-analysis* allows an investigator to systematically combine the results of multiple statistical studies into a single summary set of findings. To return to an earlier example, how do we know that group cohesion helps sports teams win games? We know because a team of investigators compiled 164 estimates of the link between cohesion and performance and found that, across these varied studies, cohesion was a consistently strong predictor of success. Even more importantly, meta-analysis permits looking for those factors that enhance or limit effects of this sort. Thus, the researchers in this study found that the cohesion-performance link was even stronger for women's sports, compared to men's. To their surprise, however, they found no difference in cohesion bonus for highly interactive team sports, like basketball or field hockey, as compared to those sports that are merely "coactive," like rowing.[31]

Putting the Pieces Together

Findings like these have immediate, practical significance for players and coaches hoping to win championships, and they help the rest of us, who find ourselves in analogous situations where a boost in group cohesion might make us more effective. Small-group researchers, however, aim to do more than reason by analogy when it comes to making general statements about how groups behave and why. To advance our knowledge, researchers ultimately aim to develop theories about groups.

We can, however, take stock of the individual empirical theories that these perspectives have generated. When group researchers develop theories, they ultimately arrive at testable claims about how groups communicate, coordinate action, wage conflict, influence members' beliefs, and so on. After conducting research testing and refining that theory, we can step back and assess a theory's merits using a set of evaluative criteria.[32] Taken together, the criteria in Table 1.1 constitute an *epistemology,* a way of judging the relative quality of empirical theories.[33]

Table 1.1 Criteria for Evaluating an Empirical Social Scientific Theory

Criterion	Description
Clarity	Transparency of theory's statements
Logical Coherence	Free of logical errors
Novelty	Presents a new idea
Falsifiability	Subject to testing
Validity	Passes many of its tests
Parsimony	Simplicity of theory's statements
Scope	Sufficiently broad generalizations

Clarity, Logical Coherence, and Novelty

The two most fundamental requirements for a sound theory are clarity and logical coherence. The first of these might appear unnecessary if one believes that a specific theory could never get off the ground if it was not clear in the first place. On the contrary, the fields of academe bloom each spring with new theories that befuddle those who might hope to understand and use them. Within the field of small-group research, one candidate for such criticism might be symbolic convergence theory, which we examine in chapter 8. This theory has received insufficient appreciation owing to the difficulty of precisely defining its elements and empirical claims. To the extent that this powerful theory resists precise formulations of its key concepts, such as *fantasy themes* and *special theories*, it undercuts its value as a collection of knowledge about small groups.[34]

Even those theories that make straightforward statements sometimes fail to pass the requirement of logical coherence. To hold value, a theory must be free of internal contradictions, tautologies, or any other logical flaws. Those theories that lack coherence most often fail owing to a borderline tautology, a statement that comes close to being a mundane truism (X equals X). Some sociobiological theories fall into this trap when they claim that normal social behavior must be adaptive because only the most fit human communities can survive the rigors of natural selection.[35] When deployed uncritically, this amounts to a tautology: Evolutionary forces have shaped the way groups behave because, by definition, normative group behavior reflects evolutionary forces.

Assuming that a theorist can build a set of clear and logical statements, a separate question is whether those claims constitute a *novel* theory. For instance, in the 1980s and 1990s, "schema theory" became popular in social psychology. A schema, roughly speaking, is what we believe or think about other people, social roles, the groups we belong to, and other social phenomena. Critics, however, smelled a rat, and close inspection of the theory led some to conclude that schema theory amounted to nothing more than a rebranding of traditional theories of attitudes, cognitive maps, and other concepts dating back to the 1950s.[36]

Falsifiability and Validity

Even a shiny, new theory, though, serves no useful purpose if it is not *falsifiable.* To be useful to researchers, a social scientific theory of groups must be testable. It must be possible for an investigator to set up a study or experiment that *could* prove elements of the theory false or flawed. If we *can't* design a fair test of a theory's validity, the theory's soundness becomes strictly a question of faith or taste—that is, questions for seekers of religious or aesthetic truths, not social scientific ones.[37] Some of the most famous small-group theories, on close inspection, do not fully meet this criterion. Groupthink theory, which we examine in chapter 4, has proved very valuable to both researchers and laypersons, but in a strict sense, the theory likely will never be subjected to a complete, rigorous test owing to its sheer complexity.[38]

Most empirical theories *do* fully expose themselves to tests, and to qualify as a strong theory, they must pass these tests. To the extent that a theory appears to bear some clear correspondence to reality, social scientists conclude that the theory is *valid.* To judge a theory's validity, researchers typically break it down into even more precise hypotheses. In special circumstances, researchers can even juxtapose two rival theoretical accounts, devising a study that could support one theory while simultaneously contradicting another one.

Along these very lines, social psychologist Deborah Gruenfeld devised a study to assess two different theories about decision making in a particularly important small group, the U.S. Supreme Court. The ideological-contingency theory contended that politically conservative justices would exhibit more rigid and simple arguments than those of liberals, owing to conservative ideology's relative emphasis on rigid adherence to a limited set of core values. By contrast, the status-contingency *model* (a synonym for *theory* herein) held that complex reasoning flows not from ideology but from having to advance a majority position that will be met with objection, whereas dissenting opinions—whether written by liberal or conservative justices—can offer relatively simple, often strident critiques of the majority position. After studying a large body of Supreme Court opinions, Gruenfeld found stronger support for the status-contingency theory.[39] In epistemological terms, we would therefore conclude that these studies lend *validity* to the status model while undermining our confidence in the ideological account.

Even after dozens of studies like these, however, scholars can never conclude that an empirical theory is universally accurate, and it is equally rare that research definitively falsifies any theories. When a theory passes a validation test, it simply has *more* validity—never reaching some absolute standard of truth.[40] When a theory fails a test, it *loses* some validity, at least momentarily, until theorists can find a way to explain the anomalous findings. In this way, theories that fail hypothesis tests can become heavy with ad hoc corrections, elaborate explanations, or methodological stipulations that try the patience of other scholars, particularly new generations who may choose to improve on conventional theories by replacing them altogether.

Parsimony and Scope

The strongest theories can explain a phenomenon like group decision making with a small number of factors and interrelationships. James Davis' social decision scheme model shows the potential power (and limitations) of a simple theory. Imagine if the owners of a small carpet-cleaning business in Elyria, Ohio, meet to debate whether to open a new branch in Columbus. To predict their final decision, Davis' model requires measuring only the individual owners' preferences and their group decision scheme (e.g., majority rule). With just those facts in hand, the social decision scheme proves a highly predictive model, in spite of all the things that can come up in the course of a group discussion. Simply put, if the majority want to open the new store before the meeting begins, then it is exceedingly likely that the majority will prevail at the end of the discussion.[41]

The social decision scheme model does fail to account for some group decisions, and other theorists have sought to amend the model to account for these differences. For instance, communication scholars have demonstrated that in some cases, the balance of arguments in a discussion prove an even more powerful predictor of group outcomes. Combined with measures of initial preferences, this valence distribution model has more validity, but at the price of greater theoretical complexity.[42] When added detail substantially increases a theory's power, the loss in parsimony may be worthwhile. If a theory becomes too complex, though, it ceases to be a satisfying *model* of reality and starts to look just as detailed and nuanced as the real world itself.

Theories that fail their validation tests have an alternative to amending their core claims to make their theories increasingly complex: They can, instead, narrow the breadth of their claims, thereby reducing the overall scope of the theory. In this example, the ideology-contingency adherents could change their theory to say that it does not apply to panels of judges. When this happens in response to anomalous findings, however, it can seem a dodge.

More convincing are those theories that, from the outset, explicitly describe and explain the *scope conditions* of their theory. For example, social psychologists Reid Hastie, Steven Penrod, and Nancy Pennington developed the story model of jury decision making in their landmark study *Inside the Jury.* Looking at how mock juries deliberated in the evidence-driven style, these investigators saw that jurors review evidence "without reference to the verdict categories, in an effort to agree upon *the single most credible story* that summarizes the events at the time of the alleged crime. And the early parts of deliberation are focused on the *story construction* and the review of evidence."[43] This story model, however, meant to describe jury decision making, a specific kind of group process that occurs in a special legal context. Were one to produce evidence of group discussion outside the jury room contradicting the story model, these findings would not decrease the model's validity because they would fall outside the boundaries of the theory's scope.

As it happens, most small-group theories, like the perspectives that inspire them, have an extremely broad or universal scope. Such universal theoretical scope can earn commendations for having tremendous potential value as a general theory of group behavior. After all, if we could take one theory with us to any group context, knowledge of that theory could help us improve everything in our lives, from our volleyball team to our study group to our family reunion. As we shall see, however, it is more likely the case that many valid theories with universal scope simply have not yet been exposed to those group contexts far removed from the researcher's own time and place.

The next chapter introduces a way of studying groups that clarifies the situated nature of theories. By clarifying the different types of groups that exist and by considering the wider range of historical and cultural settings, it becomes clearer which theories might not stretch so easily into the past (or future) and across continents. For now, it is simply important to recognize that a theory's strength is a function of *both* the validity of its claims and the breadth of its scope.

The Value of Theory

If these criteria seem too abstract or disjointed, it might help to look at them as a whole. Taken together, these criteria say that a good small-group theory generates useful and powerful insights into our social world. A theory that meets all these criteria becomes practically valuable for both researcher and layperson because it is well designed (clear and logical), insightful (novel), road tested (falsifiable and valid), of manageable complexity (parsimonious), and applicable across a range of times and places (scope). To quote the small-group research pioneer Kurt Lewin, "Nothing is so practical as a good theory."[44]

Small-group researchers may understand this better than most social scientists because of the applied nature of their work. In social psychology, considerable research has focused on how groups reinforce or break through prejudices to better understand how we can promote cross-cultural tolerance and cooperation. In business schools, research on team building and group leadership aims to increase group productivity and innovation. In communication departments, research on metaphors and storytelling in groups aims to understand how groups can build the cohesion and trust necessary for coordinated action. In social work, research on "group work" hopes to improve the relationships between social workers and their clients. In legal studies, jury research predominates owing to a concern with the quality and fairness of verdicts. From one group theory to another, researchers tackle questions that have immediate practical significance. In the end, the small-group research community succeeds not owing to the relevance or importance of its topic but because of the quality of the theories we build and use.

Illustration: Terrorist Cells

If this discussion of definitions, research methods, theories, and academic articles seems too abstract, it might help to consider a single case that demonstrates the importance of developing systematic knowledge about small groups. One way to appreciate the power of small-group processes is to see how they can change the course of our lives. Every reader of this book has been touched by one particular small group, the terrible power of which was revealed to us on September 11, 2001.

"You are going into battle, an unconventional battle against the most powerful force on Earth. You are facing them on their land, among their forces and soldiers with a small group of 19."[45] The events of September 11 came to a tragic conclusion with not one small group but four. Each of four planes, American Airlines flights 11 and 77 and United flights 93 and 175, had a small team of hijackers, each of whom had specific responsibilities, whether piloting the plane, killing flight crew, or subduing the passengers. Years before these teams formed, though, it was another small group that provided the key to the September 11 plot—the Hamburg Cell.

A glimpse into the small groups woven into the these attacks comes from the *9/11 Commission Report* released in 2004. After sifting through documents, interviews, and interrogation transcripts for more than a year, the bipartisan National Commission on Terrorist Attacks Upon the United States published this report, in part, to provide a comprehensive account of the events leading up to the attack.[46]

The story began with Mohammad Atta, who would become the operational field commander of the 9/11 hijackings. Quoting from the Commission report,

> When Atta arrived in Germany [in 1992], he appeared religious, but not fanatically so. This would change, especially as his tendency to assert leadership became increasingly pronounced. . . . As early as 1995, Atta sought to organize a Muslim student association in Hamburg. In the fall of 1997, he joined a working group at the Quds mosque in Hamburg, a group designed to bridge the gap between Muslims and Christians. Atta proved a poor bridge, however, because of his abrasive and increasingly dogmatic personality. But among those who shared his beliefs, Atta stood out as a decision maker. Atta's friends during this period remember him as charismatic, intelligent, and persuasive, albeit intolerant of dissent.

On November 1, 1998, Mohammad Atta moved into a spacious four-bedroom apartment in Hamburg with Marwan al Shehhi and Ramzi Binalshibh, both of whom would be instrumental in the 9/11 attack. The three roommates, along with other friends and houseguests, held meetings three to four times each week to discuss their anti-American and anti-Semitic ideology and to consider what actions they might take to advance their struggle, their jihad. According to the Commission report,

> the group became something of a "sect" whose members . . . tended to deal only with each other. Atta's rent checks for the apartment provide evidence of the importance that the apartment assumed as a center for the group, as he would write on them the notation "Dar el Ansar," or "house of the followers."

By the latter part of 1999, Jarrah and the Atta household had become increasingly secretive and reclusive as they came to form the Hamburg Cell.[47] At the urging of Mohammed Haydar Zammar, an outspoken Islamist and al-Qaida recruiter, the cell members went to Afghanistan, where they abandoned their plans to fight in Chechnya against the Russians and, instead, accepted the 9/11 mission that Khalid Shaikh Mohammed had proposed to Bin Laden three years earlier.

The al-Qaida leadership saw in the Hamburg Cell the nucleus of their hijacking team. The cell members had become intensely loyal to one another as well as dogmatic adherents to their cause. Moreover, they were intelligent, technically skilled, and well acclimated to Western culture. Without this group, Bin Laden and Mohammed had a plan but not the core operational team necessary to carry it out. The al-Qaida leaders gave the cell general instructions to obtain flight training and take up residence in the United States, where they would ultimately be joined by the remainder of the 9/11 hijacking team. Atta made clear, however, that the cell itself would be responsible for working on the logistical details of the plan.[48]

When the Hamburg Cell members returned from Afghanistan, they broke off their ties with the outspoken radical Zammar and tried to appear de-radicalized. They shaved their beards, wore conventional German student clothing, and ceased worshipping in mosques. With financial backing from al-Qaida, they attended flight schools in Germany, then continued their studies in the United States. In doing so, they left behind their cellmate Binalshibh to serve as an operational liason, owing to his inability to get a visa when U.S. officials came to suspect that he intended to reside permanently in the U.S.

In the summer of 2001, the cell members completed their flight training and began to meet their fellow hijackers, most of whom took up residence in southern Florida near Atta and Shehhi. Nearly all of these new "muscle hijackers" hailed from yet another country, Saudi Arabia, but they were able to function as a single team—and four subteams—owing to shared training and ideology, along with some redundancy in their prior contacts, not unlike when a common friend vouches for two strangers and induces them to meet. In the final months before the attacks, the details of the plan emerged from strategy discussions among the Hamburg Cell's core members, who continued to receive financial assistance from al-Qaida but avoided direct communication to avoid detection.

For the sake of national security or in the interest of global peace, it remains vital that we come to understand what forces led to the execution of the deadly attacks of 9/11. As the foregoing time line shows, small groups played a significant role in facilitating them. Though there exists very little direct research on the role of groups in the formation and operational activities of terror cells, small-group theory and research can offer considerable insight.[49]   In the course of reading this book, for instance, we will examine theories that can help to explain how nineteen strangers could become such a deadly and efficient band of jihadists. Chapter 2's discussion of how groups embed themselves in networks and organizations can shed light on the connections among terror cells and the critical role of al-Qaida's financial and logistical support network. The decision-making theories in chapter 3 show how events like the ideological discussions in the Hamburg apartment can serve to polarize group members, leading them to adopt increasingly extreme views in response to one another's arguments. The fourth and fifth chapters show how to assemble and structure a team to facilitate creativity and effective decision making, both of which, unfortunately, the Hamburg Cell demonstrated. Theories of leadership in chapter 6 help explain how Atta effectively motivated and radicalized his comrades, and chapters 8 and 9 introduce theories that can account for how quickly the cell and the larger group of nineteen hijackers developed into cohesive and committed terror squads.

In these ways and others, small-group theories can be put into the service of explaining—and hopefully preventing—barbaric behavior. Chapter 10, however, will emphasize how an improved understanding of groups can help us harness the positive power of groups to improve the larger social world. It is this more encouraging purpose that animates this book, but as our journey continues, never doubt the ability of a small group of people to change the world, for good or for ill.

Discussion Questions

1. What groups have you belonged to over the course of your life? What groups do you currently belong to? What specific characteristics made/make those groups a "small group"?

2. At this point in your life, what is the most important group to which you belong? What might be the most fruitful approach to studying and understanding that group? As you reflect on this group, what patterns of behavior might the investigators uncover?

Notes

1. Quotes are from www.thinkexist.com, except for Oscar Wilde. That quote has uncertain origins and has been attributed to multiple one-time socialists.

2. Hirokawa (2003), p. 125.

3. See Janis (1982) and chapter 4 of this volume. Thompson (2002) provides a more contemporary glance into council deliberations on Iraq.

4. See Fisher (1998).

5. See Gastil and Levine (2005).

6. Ydistie (2008).

7. Surowiecki (2005), pp. 3–4. In fairness, the phoned experts often field tougher questions.

8. McPherson, Smith-Lovin, and Brashears (2006).

9. Spencer-Rodgers, Hamilton, and Sherman (2007), p. 369.

10. See Levine and Moreland (2006), pp. 2–3.

11. Hirokawa, Cathcart, Samovar, and Henman (2003), p. 1.

12. The Oxford English Dictionary etymology for *together* gives a sense of this meaning of the word, suggesting that it is not merely "to gather" in the physical sense, but also a kind of union, companionship, or collision of persons. See http://dictionary.oed.com.

13. Meier (2003) provides a more refined analysis of this problem when he describes a teleconference "doing groupness."

14. Spencer-Rodgers, Hamilton, and Sherman (2007), p. 370.

15. On the civic impact of jury service, see the Jury & Democracy Project (www.jurydemocracy.org), note 22 of this chapter, and chapter 3 of this volume.

16. For an overview on the subject, see Poole, Keyton, and Frey (1999).

17. Adelman and Frey (1997).

18. Janis (1982).

19. Braithwaite (1995).

20. These are all tools commonly used in ethnographic approaches to studying groups (Dollar & Merrigan, 2002).

21. For this conception of field research, see Riva and Wachtel (2005).

22. See Gastil, Deess, Weiser, and Meade (2008) and Gastil, Black, Deess, and Leighter (2008).

23. Asch (1955).

24. On small-group experiments generally, see Hoyle (2005).

25. Fisher and Hawes (1971) proposed a parallel unit-of-analysis conflict by stressing the need to move all the way down to the level of individual actions and reactions. Their "interact system model" hoped to build small-group theory up from a foundation of systematic research on the microdynamics of group interaction. Some ambitious research, such as Meyers and Brashers (1998), follows this path but simultaneously shows the links from communicative exchanges back up to group and even social structures.

26. Carron, Colman, Wheeler, and Stevens (2002).

27. Carron et al. (2003). Another approach is to treat the variance among group member responses as a variable in itself (Moreland, Levine, & Wingert, 1996, pp. 11–12). Thus, one's study might ask what factors influence the degree of variance in group member attitudes on a subject. See, for example, Gastil, Black, and Moscovitz (2008).

28. This was introduced by Bales (1950). A report on twenty-one studies using this method can be found in Bales (1968). A refinement, introducing the SYMLOG method of analysis, is presented in Bales (1970).

29. For more on coding group interaction, see Keyton (2003). In a variation on this method, researchers have at times asked the group members themselves to observe videotape or transcripts of their group interaction. See, for example, Gastil (1993).

30. Frey and Fontana (1991).

31. Carron et al. (2002). One can also do traditional, interpretive literature reviews, in which the investigator attempts no statistical summary of a large body of studies. Even this, however, can be done

systematically when reviewing sufficiently detailed case studies, as suggested by Peterson (2002). On meta-analysis of groups generally, see Mullen, Driskell, and Salas (1998).

32. I have developed this set of criteria based on a wide range of readings and discussions with colleagues. Their principal early influence was Joseph Cappella, who taught the communication theory course at the University of Wisconsin-Madison when I began my graduate studies there. The criteria are far from idiosyncratic; for example, they bear considerable resemblance to those currently in use by group scholars (e.g., Schiller & Mandviwalla, 2007) and empirical or "postpositivist" theorists generally (e.g., Infante, Rancer, & Womack, 2003).

33. There are at least two other kinds of theories not discussed here that are subject to different criteria. Moral-philosophical theory (also sometimes called normative theory) makes claims about what is right and wrong, just and unjust, good and bad. There also exist strains of interpretive theory that concern themselves exclusively with what something means—from the "true meaning" of a text to the more existential meaning of life. On different types of communication theories, see Miller (2002).

34. See Bormann, Cragan, and Shields (2001). The clearest statement of the theory in its full scope might be Bormann (1996). Even there, however, Bormann insists that "the symbolic convergence theory does not rely on quantitative measurement nor on mathematical application of formulas to specific cases for its operation" (p. 88). The problem lies not so much in the theory's independence from such methods, but rather in the difficulty of developing such methods as a viable *option* in investigating the theory. If one cannot know with any precision what measuring a fantasy theme entails, it is difficult to know exactly what constitutes such a theme.

35. Quadagno (1979). Considerable research since the time of Quadagno's critique shows that the evolutionary approach has much to offer small-group researchers. See Caporael, Wilson, Hemelrijk, and Sheldon (2005) and chapter 2 in this volume.

36. Kuklinski and Luskin (1991). Ultimately, the concern becomes not so much taking credit for past theories but displacing them altogether—and losing some of their original insights. See Wilcox and Williams (1990).

37. This does not mean that one must be able to devise a *quantitative* test, as ethnographic, anthropological, and interpretive study can subject a theory to strong validity tests (Kirk & Miller, 1986; Stewart, 1994). In a broader sense, however, quantitative approaches can be mixed with qualitative judgments to satisfy even the numerically minded researcher; thus, if one claims that a particular theory's validity lies in its resonance with a particular population's own views of social reality, one need only find a way to collect a large sample of this population to assess such resonance.

38. Park (1990), p. 243. To take another example, McGrath and Altman (1966), p. 80, note that critics described Kurt Lewin's field theory as "non-predictive" and "non-testable."

39. Gruenfeld (2006).

40. Kuhn (1996/1962).

41. Davis (1973) introduces his theory in complex mathematical language that obscures its underlying parsimony.

42. Poole, McPhee, and Seibold (1982); for a refinement, see Meyers and Brashers (1998). More recently, Kerr (2006) adapted Davis' model to account for how a group's discussion unfolds. See the discussion of juries in chapter 3 for more on this topic.

43. Hastie, Penrod, and Pennington (1983), p. 163, emphasis added. The idea of a "story model" of jury deliberation originated in Pennington's doctoral dissertation, as reported in Hastie et al. (1983), p. 22.

44. Lewin (1945). On the virtues of this practical orientation for small group research, see Levine and Moreland (1990), p. 621.

45. The instruction was recalled by Ramzi Bin Al Shibh, who served as Chief Logistics Officer of the operation. Quoted in Gunaratna (2003), p. 14.

46. *National Commission on Terrorist Attacks upon the United States.* (2004). The quotes and material that follow come from chapter 5 of the report.

47. The cell may have consisted of as many as eight members, with the others playing logistical or uncertain roles in the 9/11 hijackings. It is certain, though, that these four represent the core of the cell. See The Hamburg connection (August 19, 2005).

48. The *9/11 Commission Report* (2004), p. 166, considers it "remarkable" how quickly al-Qaida chose the Hamburg Cell for its most ambitious of missions, but by that time, Bin Laden had already come to recognize the "deficiencies" in a previously chosen team.

49. Works offering direct insight into small groups and terrorism include Krebs (2002) and Bongar, Brown, Beutler, Breckenridge, and Zimbardo (2006).

2
WIRING GROUPS INTO ORGANIZATIONS AND SOCIETY

We have groups to thank for civilization. Had we never found our way to living together in small clans and bands, we would never have grown into communities, towns, and cities. We would never have developed complex language and culture. That means no Jane Austen, no *Wizard of Oz*, no Aretha Franklin, no New York Yankees.[1]

Linnda Caporael, a professor of science and technology, has drawn on research in paleontology, anthropology, and psychology to account for the development of groups and social life in early human history. Writing with a team of colleagues, she lays out the basic logic of how groups shaped our evolution:

> Natural selection is a process that adapts organisms to their environments. For group living to evolve, the advantages would have to outweigh the disadvantages. Basically, individuals who grouped would have more offspring compared to individuals who lived solitary lives.[2]

Caporael points out that grouping together has inherent disadvantages: "Parasites and disease spread more easily in groups than among solitary critters" and groups always face the problem of "free riders" who draw energy and resources from the group but give little in return. For humans, as for other creatures from crows to coyotes, however, the benefits of group living outweighed the drawbacks. Groups provided more effective defense against formidable predators, facilitated effective foraging and hunting, and permitted a specialization of labor that made it possible to care for our "slow-growing offspring," whom some group members could tutor and guard while others gathered and killed the group's food.[3]

Iron Age site at the Pembrokeshire Coast National Park in Britain.
Credit: Photo by Richard Dunmore.

Grouping for self-preservation may have brought an even greater benefit by sparking the development of language and, more fundamentally, the brain itself. Caporael and other researchers have traced the expansion of the neocortex, a part of the mammalian brain that aids perception, movement, spatial reasoning, conscious thought, and language. When we became interdependent with others, we evolved into "gossip groups," which served the new purpose of exchanging useful information about our fellow group members.[4]

As we developed stable groupings, an even more dramatic change took place: Our groups settled into normative behavioral patterns that began to shape the life courses of future generations. "Natural selection," Caporael explains, results from "behavioral variation regardless of whether it is genetic or cultural in origin." As a result, "norms and culturally acquired traits can result in forms of evolutionary change that could never happen by genetic evolution alone." Unlike the hapless children in *Lord of the Flies,* adult human groups tend to develop—and generally abide by—a set of norms that crystallize into formal laws and regulations. Fortunately, prosocial and altruistic behavioral rules tend to prevail in the longer span of time, as groups that can effectively cultivate those practices become internally cohesive and formidable opponents for other groups that might seek to rob, kill, or enslave them.

Over the course of millennia living in such groups, an even more remarkable change took place, according to the cultural evolution theory advanced by environmental scientist Peter Richerson and his colleague in anthropology, Robert Boyd. In their view, early humans thrived in groups to they extent that they demonstrated and rewarded two "social instincts," a responsiveness to moral persuasion and attunement to ingroup identity. Those groups whose members could perceive their group's boundaries accurately and adhere to its norms had greater chances of survival than rival groups, thereby increasing their chances to produce healthy offspring and further strengthen their group's position. Over the generations, this resulted in humans ever more adept at grouping together. The development of these instincts explains how humans managed to make the dramatic leap to the large-scale societies that have prevailed even to this day.[5]

In the modern world, humans continue to live and work in very small groups. Even large residential communities consist of houses, condominiums, and apartments. The largest companies subdivide themselves into units and teams. Political parties, unions, and nongovernmental associations live and breathe through local chapters or micronetworks that give their millions of members a manageable number of proximate human connections. Unlike the earliest human groups, however, these small units exist in the midst of vast organizations and social systems. This chapter presents a theoretical perspective that helps us understand those connections. We will examine the interplay between group and society, how groups interact with their organizational environments, and how groups adopt and adapt to changing technology.

Building a Theoretical Framework

To understand how small groups behave and how they relate to larger social systems, we begin by building an abstract theoretical framework, like the skeleton of timbers, piping, and wires that frame a house. Even after its framework is fully in place, a house could end up with many different finishes and furnishings, but its frame gives a general idea of how it will appear when it is done.[6] A good framework meets similar criteria to those presented in chapter 1 for evaluating theories, but its core empirical claims may represent well-established *axioms,* basic propositions that, once clearly defined, may be self-evident. Assembling such understandings into a full framework has two advantages. It makes certain that theories built on that frame have an empirically sound foundation, and it makes it easier to see the structural similarities and potential relationships among a wide variety of theories.

The Group System

The input-process-output framework is the simplest one group researchers currently use.[7] This approach separates every variable into three categories: input variables, process variables, and output variables. The term *variable* simply refers to any measurable entity or property that varies in degree, amount, or kind, from a group member's age or cultural identity to the rate of interruption in a discussion to a level of

intimacy. The inputs, such as the group's tasks or its structure, have effects on the process and outputs but are not themselves subject to change. The output variables, such as the quality of a group decision, depend on the inputs and the group process. Finally, the process variables, which include the group's discussion and its members' ongoing thoughts and feelings, "mediate" the relationship between inputs and process; they represent the conduit between inputs and outputs.

Because of the variety of contexts in which groups exist, it is helpful to add a fourth type of variable, commonly referred to as a *moderator* or *moderating factor*. These variables have an effect on the *relationship* between inputs, processes, or outputs. Thus, one kind of input (members' speaking skills) might generally improve a group's discussion process, but this effect could be *moderated* by a third variable, the degree to which the group's leader permits members to speak during group meetings. When a group has an autocratic executive, the membership's rhetorical abilities go untapped (thus, no relationship between input and process), whereas we do expect to observe members' skills aiding the discussion when a more egalitarian leader is present.

Along with the addition of moderating factors, we can continue to extend the input-process-output framework by drawing on one of the broadest and oldest approaches to studying small groups, the systems perspective.[8] This approach assumes that the different facets of groups interrelate as parts of a system, such that changes in one variable reshape others, often in complex ways.

The most comprehensive and compelling work in this tradition comes from small-group researchers Holly Arrow, Joseph McGrath, and Jennifer Berdahl, who present a comprehensive model of group behavior in *Small Groups as Complex Systems*.[9] Trained in social psychology and organizational behavior, these scholars see groups both as internally complex social-psychological processes and as organizationally embedded entities. They begin with the premise that groups represent complex, adaptive, and dynamic systems, which means (roughly) that one can expect a group to develop increasingly complex structural properties as it adapts to changing circumstances over time.

Recalling the "unit of analysis" challenge discussed in chapter 1, their system model stresses that group research must look at the elements of groups (e.g., individual members), the group as a coherent entity in itself (the group-system), and the social contexts in which groups are placed or "embed" themselves. Most of all, researchers conceptualizing groups as systems must recognize the interplay among each of these levels of analysis.

To see these connections more clearly, Figure 2.1 adapts the input-process-output model to demonstrate the feedback loops back from group process and outputs to the inputs. First, note that from the systems perspective, an output of group discussion often reshapes the inputs that feed into the next discussion. Today's dependent variable (input → output) is tomorrow's independent variable (output → input).[10] A nonprofit board of directors, for instance, might hold a meeting that concludes with the revision of its ethics rules regarding conflicts of interest; those new rules become an input into its next meeting, wherein a member asks to recuse herself from a discussion in light of the new ethical guidelines. Second, the group process itself can change the inputs that continuously feed into the group's ongoing discussion. For instance, a cult's new members might begin a session wary of the extreme views of their discussion leader. As a result of seeing the other members repeatedly endorse the leader's viewpoint, though, these newcomers might come to share the leader's opinions. That attitude shift might enable the group to reach a consensus decision that would have been impossible when the discussion began. In other words, the process (group discussion) changed what were originally inputs (attitudes) and, thereby, changed the final output (decision).

Organizational Context

To expand this framework further, it is necessary to look more closely at the contexts in which groups exist. The bona fide group perspective advanced by communication scholars Linda Putnam and Cynthia Stohl sheds light on the importance of thinking about groups in their organizational settings. This perspective highlights the fact that most groups emerge within or are built into rich organizational networks. As a result, the members of a given group already have membership in *other* groups, and these groups may

have interdependent relationships, where neither can reach its goals (or their shared goals) without coordinating its actions with the other. In this sense, we would have trouble drawing rigid boundaries around any one group, as the individuals simultaneously exist within and *outside* that border by virtue of their other memberships.[11]

Figure 2.1. The basic input-process-output theoretical framework for studying groups

Group outcomes reshape future
inputs (e.g., procedural rules)

INPUT → PROCESS → OUTPUT

Group process immediately resets
input variables (e.g., attitudes, roles)
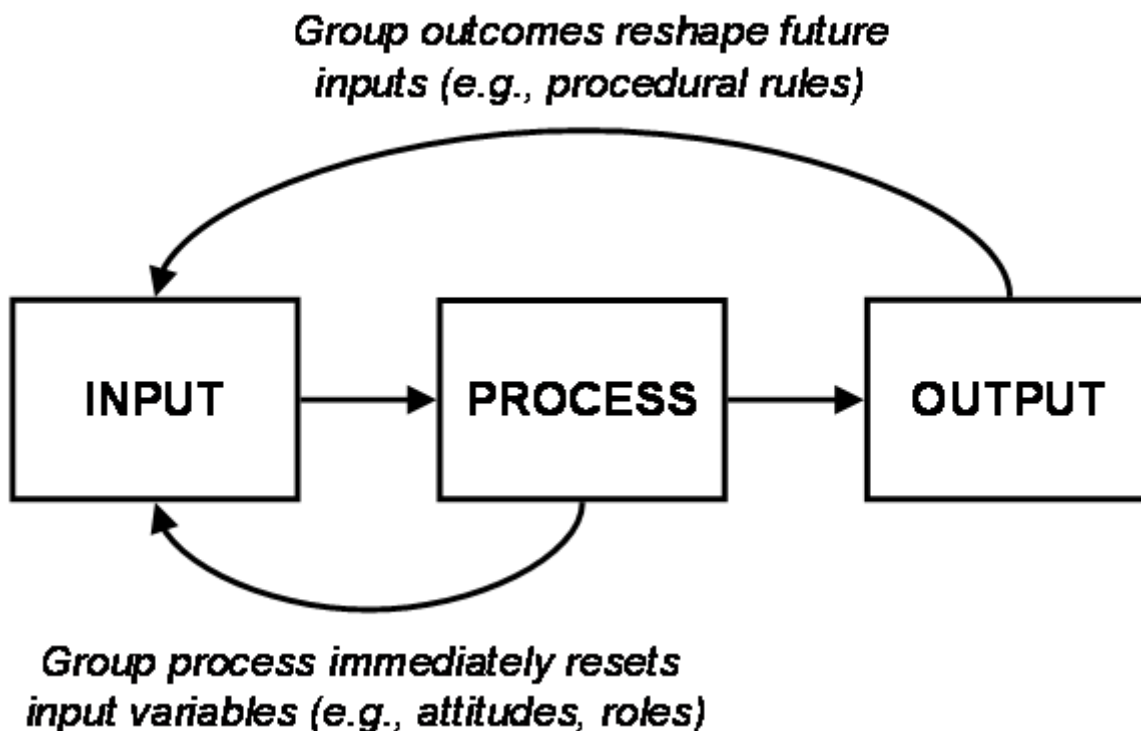
Cynthia Stohl and her colleague Kasey Walker ask us to consider the case of a modern commercial organization that requires tremendous coordination among different units that may be distributed geographically. Moreover, effective development and marketing of a new product may require collaboration with other companies. The development of the desktop personal computer, which has made the writing of this book possible, required cooperation from Hewlett-Packard, IBM, Sun Microsystems, and many other companies. For such interorganizational efforts to succeed, the companies first need to create a hospitable *organizational context*. The various partners in the collaborative venture need to work out what Stohl and Walker call a "negotiated temporary system," which includes rules and procedures for sharing knowledge, assigning responsibility, making decisions, and so on. More informally, such a system would also have to build trust and commitment in the venture.[12]

One could simply call this organizational system another "input" in the model in Figure 2.1, but it will prove useful to distinguish the larger organizational context from the more proximate inputs into group discussion, such as group rules or member characteristics. In the system terms introduced earlier, the organization really constitutes a distinct level of analysis—a larger socially constructed entity that houses within it different small groups, just as the groups themselves contain within them different individuals.

The Interplay of Group and Society

At this juncture, we can now add essential concepts from British sociologist Anthony Giddens' theoretical framework, which he dubbed *structuration*.[13] Giddens aimed to reconcile conflicting sociological

theories of structure, which emphasized the power of larger social forces, with theories of agency, which stressed the ability of individuals ("agents") to make their own choices even in the midst of powerful social pressures. In Giddens' own words, he hoped to clarify "how it comes about that social activities become 'stretched' across wide spans of time-space" to the point that small individual choices form the bricks and mortar of stable and far-reaching social institutions and practices.[14]

According to Giddens, the core of any social system consists of individuals making choices of how to act in light of their own goals and their understanding of their circumstances. Giddens explains that in any given social event, though particularly in the midst of a small group gathering, "individuals are very rarely expected 'just' to be co-present," that is, merely present but not paying attention. Instead, the others there with us expect every person present to monitor one another's actions carefully. A social occasion "demands a sort of controlled alertness." As participants in any small group encounter, we monitor the beliefs and aspirations of the others who are present and, more importantly, any shifts in the rules that govern the group's behavior. To the extent that our group develops a common understanding of its rules and routine practices, it becomes integrated as a more coherent and system-like entity. Ultimately, the systemic properties of small-scale social encounters feed back into the larger social system, which may encompass and shape the behavior of not a dozen but *millions* of people.[15]

Social structures and institutions, though, do not simply emerge from the voluntary behavioral choices of individuals. After all, any time we choose to say something at a social gathering, we do so in consideration of our *circumstances*. In the present day, for instance, if a person strongly opposed gun control laws, she might express her views more freely at an afternoon Republican Party meeting than at that same evening's public forum on school violence at the local high school. In fact, her behavior would likely differ across those two settings in more subtle ways, such as how she took turns to speak and what metaphors she might employ. In these and all other social contexts, we govern our behavior such that our words and deeds come across as meaningful, appropriate, and legitimate. The forces shaping those behavior choices are *social* forces.

Social structural forces establish meanings (e.g., language), power relations (e.g., authority), and norms (e.g., etiquette). The most powerful social forces influence our behavior in ways we may not even perceive. Consider, for example, all the laws that exist in your own society. There are millions of regulations on your behavior, from local ordinances to state and federal restrictions and requirements. On a conscious level, you may know few of these, and even fewer come to your awareness at a given time. A quick glance at the speed limit sign while driving down the freeway counts as one of the rare occasions when we deliberately check our behavior against a specific law, one that our government mentions via signposts every mile or so along the road.

More pervasive than explicit laws, however, are the broad social conventions that we come to recognize more clearly only when we step outside our society. What happens when you walk hand-in-hand with a friend, shout during a disagreement, ignore an elder, or use an expletive depends critically on the time and place of your action. In one geographic location at a specific point in history, your actions could have consequences dramatically different from another—not because of written and enforced laws but because of widely shared social conventions and understandings.[16]

Social structures not only constrain us but they also *enable* us to live together. Returning to the evolutionary context at the opening of this chapter, it was only through developing shared ways of talking, stable power relationships, and a set of behavioral norms that we managed to build clans, then communities, then civilizations. In the context of our modern society, for instance, the aforementioned speed limits not only *prevent* you from driving faster but also *enable* you to travel safely by making the velocity of the other cars on the road more predictable.

The Embedded System Approach

Pulling together these theoretical concepts and axioms, Figure 2.2 introduces the structure of the *embedded system theoretical framework.* This framework derives its name from the idea of an "embedded

system," a term used commonly in computer science and engineering to refer to a subsystem built into a larger device designed to perform a specific range of tasks.[17] Recast in social terms, we can think of groups as embedded within larger social entities, such as organizations, communities, cultures, or nations. These larger systems depend on the groups within them, because the group's behavior can shape the character of the larger system. In turn, each group generally has a limited range of objectives, and its members even begin with a set of loose rules and instructions analogous to software. Those directives and guidelines, in turn, come from the larger systems within which the group finds itself embedded.[18]

Figure 2.2. The embedded system theoretical framework for studying small groups
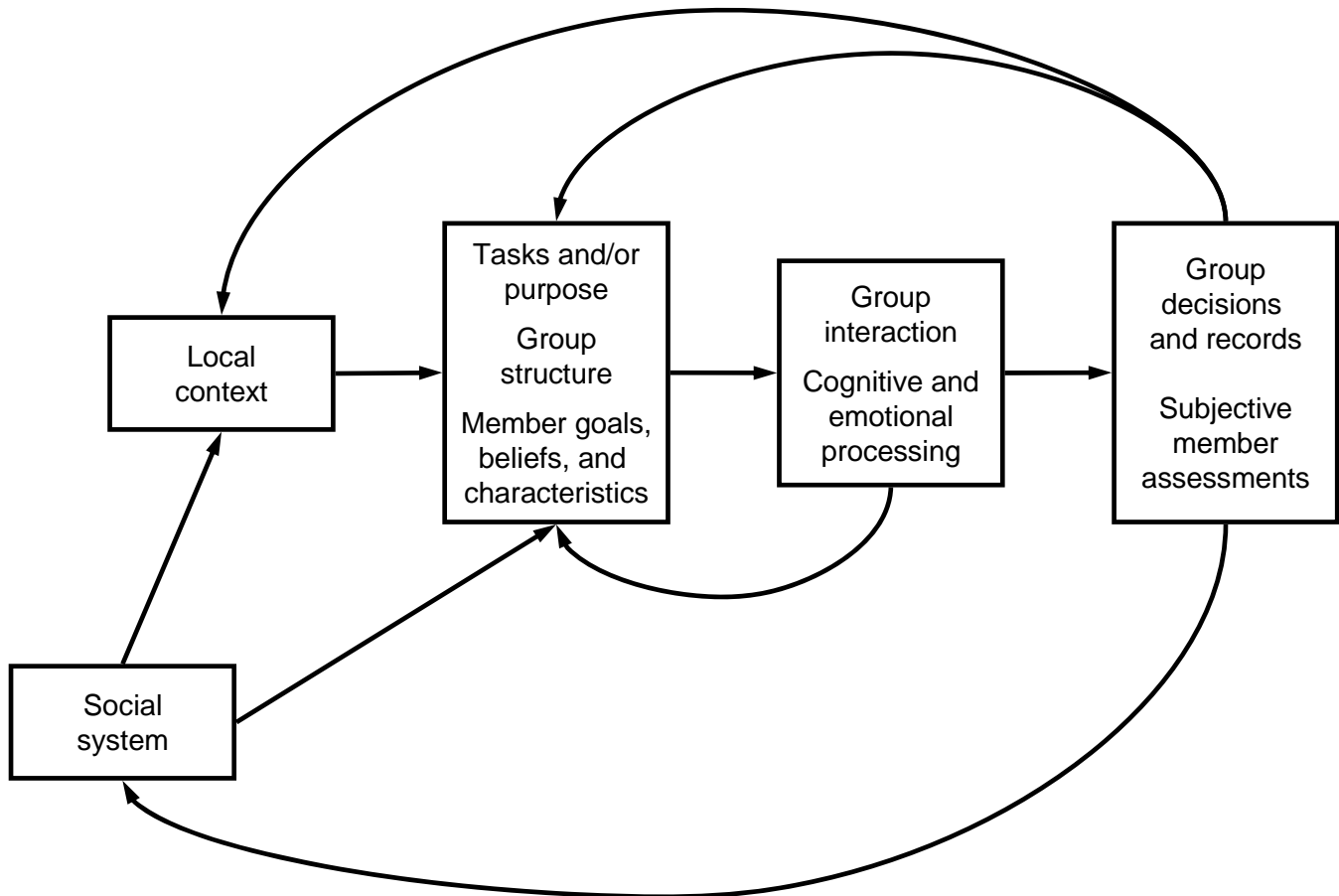
As explained earlier when describing theoretical frameworks, the *relationships* (arrows) shown in Figure 2.2 represent basic axioms. They serve as straightforward assumptions, already established as empirically valid and requiring no further investigation when presented at this level of abstraction. Also note that this figure, and others like it, draws causal arrows from one *set* of variables to another. In formal theory, it is necessary to specify more precise relationships among individual variables, whereas this framework aims to simplify the graphic representation of complex theories to better enable us to see their general features—the direction the river flows, rather than the precise course of its tributaries.[19] Throughout this book, the embedded system framework will be used to display sets of more specific empirical theories that *have* required more precise formulation and direct empirical testing.

Aside from the relationships among variable sets, such as social system and local context, it helps to consider briefly what *constitutes* those elements of embedded system theory. Each of these individual concepts will receive greater attention later in this text, but reviewing them now makes it easier to see how they fit into the larger theoretical frame.   Proceeding from left to right, the *social system* consists of

regularized structures of meaning (e.g., language, symbol systems, discourses), power (e.g., economic and political institutions, patterns of domination), and norms (e.g., legal institutions, morality, etiquette).[20] In conjunction with these rules, social systems also structure the distribution of resources, from information to job titles to physical materials and capital (tractors, buildings, water, etc.).

A given individual can live within a single social system, but in this era of globalization and cultural diversity, a person typically feels the pull of multiple social systems operating simultaneously. Jess Bahmra, the heroine in Gurinder Chadha's film *Bend It Like Beckham,* joins a football (soccer) team, driven by Britain's national convention of equal-opportunity athleticism and football worship, but at the same time, her parents' transmission of Indian heritage pulls Jess away from the team and back toward the obligations of family. In this example, two different social systems impinge on the success of two groups—Jess' family and her football team. In turn, how those groups resolve their conflicts will, in its own small way, feed back into both systems.

All groups embed themselves within one or more social systems, but most groups embed much more precisely into a *local context.* Typically, a group emerges in an organizational setting: A construction company assembles a work team, a governor authorizes a commission, a union organizes a local shop, a nonprofit opens a new chapter, a tribe elects its council, and jurors assemble in response to a summons. Like a social system, these commercial, political, civic, and legal organizations all have characteristics analogous to social systems. They have their own rules of meaning, power, and norms, and they allocate resources in conjunction with those rules.

Not every group forms within a coherent organization. In response to a viral text-message invitation, for instance, a spontaneous group may form as a small "flash mob" without any significant organizational properties.[21] The most significant instance of a group forming outside an organizational context might be an immediate family. Imagine that two gay men form a civil union and adopt two ten-year-old boys. They live as a group unto themselves, but unless separated by death or separation from all of their relatives, they still exist within a larger family network. This larger unit does not consist of a formal organization, but it does stand as an intermediary between the four-person family and the vast society. Compared to the larger social system, one can expect the network of relatives to have a more direct and powerful influence on the new family's choices about how to raise the sons or where to live. Owing to situations like these, we can say that groups always exist embedded in a *local* context, but not necessarily within an organizational one.

The next part of Figure 2.2 encompasses features of the group and its members that earlier fell into the loose category of "inputs." As defined in chapter 1, every group has some kind of *shared purpose,* which often (but not always) entails the completion of specific *tasks,* which range from solving engineering problems to scoring goals. Like larger social systems and the local organizational contexts, groups also have their *structure*—their own set of rules and allocation of resources. These structures locate authority (i.e., with a formal group leader or equally across all group members), identify and assign the different group roles, establish the medium of communication (online or face-to-face) and discussion procedures, distribute information, and more. Finally, at the individual level of analysis, the groups consist of individual agents, the individuals who make up its membership. How the group ultimately behaves will depend not only on its task and structure but also on these individuals' conscious goals and unconscious drives, their *beliefs* about group, organizational, and societal structures, and their many other *characteristics*—personality, skills, knowledge, background, and so on. Taken together, these individual characteristics return us to the group level to note the group's *composition,* the size and diversity of the group that the combination of its members yields.

All of these features feed into a group's process, which manifests itself in the *interaction* of the group members. These interactions consist principally of communication; the broader term *interaction* can also encompass physical behaviors relevant to the group, such as a sailor tying a sail when told to do so by a ship's captain. While the group visibly interacts, *cognitive and emotional processing* takes place within the minds of each group member. Individuals each interpret what is said, take offense or feel encouraged, consider arguments, daydream, change their opinions of other members, rethink the group's task, and so on. These often surface in new suggestions, emotional outbursts, observations, and the like, but even through the

group member who sits silently through a two-hour planning flows a river of cognitive and emotional material.

Every group encounter yields what we once called "outcomes," though the chain of cause and effect flows through them, rather than ending with them. The most self-evident outcome for groups may be decisions, which signal the completion of a specific decision-making task, as in the case of a jury's verdict. Even when a group reaches no decision, however, it may also produce formal and informal records of its meeting. These help to define what it is the group did during its time together, and this can have ramifications for the group. For instance, a task force's meeting minutes can shape how the group members think about their future work, or (once interpreted by a manager) the group's minutes might affect how its superiors assess its performance.

In addition, any kind of group also produces a more ambiguous and difficult-to-trace outcome, the individual group members' *subjective assessments* of what the group accomplished. Some of the most important subjective assessments include members' satisfaction with the group's discussion, sense of group cohesion, judgments of the skills and motivations of other members, and commitment to the group and its larger organization. All of these impinge on future group interaction and can even potentially reshape the structure of the group's organization or, in subtle ways, the social system itself. In this way, microscopic social experiences, such as playing soccer with a squad of multiracial teammates, can make a small contribution toward reducing prejudice at the macrosocial level.[22]

Small-Group Archetypes

In addition to presenting the embedded system framework, this chapter also provides a way of managing the dizzying variety of group types and contexts. After all, the definition of small group presented in chapter 1 allows for such a wide range of small groups that it is necessary to organize and categorize them in a way that helps us see their most significant commonalities and differences. To accomplish this task, we can pull out of the pool of small groups a manageable number of *group archetypes* and arrange them in relation to sets of related empirical theories.

Archetypes Defined

In any given society, there exist more or less coherent institutions and routine sets of practices characteristic of that social system. If a member of Australian society wants to invite some friends to play a game of Australian-rules football, everyone knows what this entails. It means somebody brings an egg-shaped ball, and they will play by a specific set of rules for kicking, hitting, and catching that ball. It implies many other informal cultural practices—from the coarseness of each player's language to what the players will drink during and after the game.

Practices like these follow routine patterns and, therefore, lend themselves to systematic description. Thus, researchers have developed apt descriptions and explanations of many complicated but patterned features of social life, from how marital relationships affect parent-child bonds[23] to the intricacies of exchanging ritualized insults.[24]

In the case of small groups, there exist specific archetypical groups in any given society. The archetypes are those group forms that regularly occur in a society with a broadly recognized set of meanings, power relations, and norms. An archetypical group is an image or model of a particular kind of group, idealized in the sense that members of a society imagine the group in a form that has coherence and regularity in its members' behavior, though not necessarily stability in its likely outcomes or trajectories. Moreover, these group archetypes do not constitute *universal* group types that transcend time and space; rather, they are the product of a particular pattern of development that has occurred in one or more specific societies.[25]

Returning to the metaphor of an embedded system, these group archetypes are the particular forms of group behavior that have found a particular niche in a society; they fit into society and, more tightly, into its particular subsidiary institutions, such as educational, professional, legal, and social associations and

organizations. Time and again, these groups form as a matter of routine practice or to serve particular needs; whether helpful or harmful, the particular group forms continue to appear and reappear across the full expanse of the society for long enough stretches of time that they secure their status as social archetypes.

One indication that a group has achieved the status of social archetype is that it has a name in the vernacular by which we categorize instances of group life that fall within its boundaries. In the context of the United States, straightforward examples of archetypical groups include the support group, athletic team, and jury. Each of these arise in a particular local (often organizational) context and come with a set of conventional meanings, authority relations, and norms. When we become a member of one of these groups, we use social conventions to govern our behavior in the group. Any such group may ultimately diverge from these regularized patterns of behavior, and for its deviance, it may earn either a derogatory label, as in the case of the "runaway jury" or the "dysfunctional family," or accolades, as in the case of a "dream team" or simply "exceptional support group."[26]

Juxtaposing Theories and Archetypes

The validity of small-group theories probably varies considerably as we move from one set of archetypes to another. To the extent that theories describe behavioral patterns and regularities, they may prove apt only in the particular social contexts that give rise to particular kinds of groups. Thus, a theory built to explain jury behavior may prove useless when studying support groups—even when looking exclusively at decision-making practices in both group settings. By contrast, those theories that describe and explain systematic relationships between contextual variables and group processes may be able to account for a wider range of group practices, since variation in context can correspond to variation in group archetype. Even those theories, however, may encompass a relatively restricted range of social contexts. A theory may, for instance, prove powerful at explaining differences in the outcomes of project groups in hierarchical versus egalitarian workplaces but not provide a coherent or predictive account of differences in authority relationships within families. In the language introduced in chapter 1, it will likely prove to be the case that most small-group theories have sufficient validity only when their scopes narrow to encompass a set of closely related group archetypes.

The power of social archetypes reaches even farther. As a matter of social convention, people routinely invoke specific group archetypes as metaphors in systematic ways that link particular concepts and theories with unduly specific contexts.[27] Thus, when we talk of leadership, we routinely draw on the metaphor of a military unit with a strict internal chain of command. As is normally the case with metaphors, we may not mean to make a *strong* comparison between our workplace and a platoon of soldiers, but the invocation of the military unit archetype carries with it unintended associations. After repeated invocations, a particular group archetype can become linked more generally to particular group features and processes, as the military group has become stuck to the very *idea* of leadership. In similar ways, we have tethered the bonds of family to group cohesion, the jury to group deliberation, and group therapy to personal growth.[28]

These patterns of language and behavior can extend the explanatory and predictive power of theories built to understand particular kinds of groups. Thus, when a group imagines itself in a different social and organizational context than its "real" present setting, the group's behavior may be captured best by a theory built to account for groups in the *imagined* context. When an expeditionary team, for example, begins to think of itself as a family, theories of family behavior may provide relatively apt descriptions of its emerging behavioral patterns. Those same accounts of family-group life might also capture some of the reality of a small business that also starts to think of itself as an extended family. The ease with which group members draw on a group archetype outside their present context may even constitute one indicator of the *potency* of that archetype as a social force.[29]

Table 2.1 The distribution of group archetypes and their distinctive contextual features in relation to the theoretical foci of small group theories in each chapter

Chapter	Group archetypes	Distinctive contextual features of the archetype(s)	Theoretical foci
2	self-managing work team	quasi-independent group in complex organization seeking efficiency	group competence and task effectiveness
3	deliberative jury	zero-history groups seeking unanimity on specific legal questions	social influence and decision making
4	groupthink (in committee), consensual democracy, and parliamentary council	committees/councils with ongoing decision-making responsibility	effective discussion procedures
5	task force, heist team, and X-team	ad-hoc groups subject to external forces demanding innovation	diversity, creativity, and information flows
6	athletic team	teams with well-established role conventions pursuing narrow goals	teamwork, leadership, roles, and status
7	harmonious/acrimonious family, (music) band, social and criminal gang	intimate and relationally charged entities with pressure toward unity	relational communication, cohesion, and interpersonal conflict
8	consciousness raising group and activist group	counter-cultural sites of identity invention and/or affirmation	norms, socialization, symbolic convergence, and social identity
9	support group, play group, therapeutic group, and collaborative learning group	safe, exploratory spaces promoting personal growth	unconscious behavior, individual learning, and group development

Systematically identifying a comprehensive set of archetypes and synching those with corresponding sets of theories would constitute a worthwhile journey in itself. At this point, we hope only to launch such an undertaking by making some straightforward connections. Table 2.1 shows how this book arranges archetypes and theories from the present chapter to the ninth. The archetype introduced in the final section of this chapter provides a further explication of the embedded system framework and the archetype concept. Thereafter, each of the next seven chapters mixes discussions of theories with the introduction of various archetypes, from how juries make decisions to how athletic teams deploy leadership to how support groups promote personal growth. In each case, we will be able to see how particular small-group contexts dovetail with particular lines of theory and research. By the end, we will both have a better appreciation of these diverse group forms and a deeper knowledge of how those groups behave and interact with their local contexts and larger societies.

Illustration: Self-Managed Work Teams

The first body of research presented within the embedded system framework offers a glimpse of how its different elements can be specified more concretely to organize a testable, explanatory theory of group behavior in a specific context. The "self-managed work team" provides this first exercise in theory building. This modern corporate group form also constitutes the first kind of archetype described herein. Also called "autonomous work groups," "self-directed work teams," "employee involvement teams," "quality circles," and many other quasi-technical terms, these groups consist of roughly three to fifteen members who are responsible for both accomplishing particular tasks and planning and monitoring their group performance.[30] In its archetypical form, managers or administrators in a larger (typically hierarchical) organization establish a self-managed work team to accomplish particular tasks that serve the organization's broader goals. In the terms of our theoretical framework, we could say that managers draw on their understanding of the work team archetype to create and embed a new group within their organizational structure.

These self-managed work teams appear with ever-increasing frequency in the largest companies in the United States and have attained tremendous popularity owing to their potential gains in productivity, innovation, and employee morale.[31] Just as no two snowflakes are alike, so are no two self-managed work teams identical. There are real differences, for instance, in the nature of many self-managed groups' tasks (e.g., serving a meal versus building a laptop), and it would be foolish to make precise predictions about these teams that do not take such factors into account. Within the embedded system framework, some of these differences can be built into our theory, such as by taking into account differences in the nature of the work teams' organizational environment. To sustain sufficient theoretical scope without undue complexity, however, we can set aside some finer distinctions to develop generalizations about self-managed work team behavior.[32] After all, even snowflakes have more in common than the aphorism admits.

Health Care Team Success (and Failure)

When one thinks of the range of tasks that self-managed work teams undertake, medical care may not come to mind. In the United States, the corporate model of service delivery has spread rapidly to encompass not only commercial health care providers but also public hospitals, which routinely fashion themselves on corporate principles.[33] In the modern practice of medicine, health maintenance organizations and other providers have come to recognize the power of bringing together doctors, nurses, and other specialists to form interdisciplinary teams that simultaneously treat every facet of an illness. Numerous societal-level influences have led to the team emphasis, ranging from consumer advocates who press for more comprehensive and effective medical care to new legal regulations designed to promote efficient, systematic care delivery.[34]

To study self-managed work teams in the health care industry, a team of communication scholars headed up by Randy Hirokawa recently surveyed a diverse array of providers and obtained 137 accounts of teams that succeeded or failed to work effectively. Whether these work teams were making a medical assessment, conducting an organ transplant, or providing geriatric care, common themes emerged in their surveys. Hirokawa and his colleagues used these reports to build a *grounded* theory, a tentative theory built from a set of exploratory observations (as opposed to a theory deduced from past research and validated using original data).[35]

Army orthopedic surgeons and a nurse work together to repair a patient's congenital hand deformity. Credit: Air Force photo by Tech. Sgt. Sonny Cohrs.

Hirokawa and his colleagues found that a range of factors appeared frequently in the success stories, with effective group structure being the most frequent theme. For instance, one survey respondent wrote that team success "was based on the fact that each one of us had a very specific job with clearly specified responsibilities and assignments." With clear group roles delineated, "We could move in, set up, and be performing surgery within a day."

The survey respondents most often traced team failure back to the attributes of the team members. The main reason given for failure was "member incompetence." Regardless of the particular medical team, the interviews suggested that team effectiveness depended on member expertise being at least as advanced as the complexity of the medical challenges teams faced.

Both success and failure depended, in part, on the quality of the team's interaction process. Those teams that exchanged information easily, conducted honest and thoughtful discussions, and put considerable effort into their group tasks typically reported successful outcomes. By contrast, medical providers who reported team failure often saw its roots in poorly distributed information, hasty and haphazard meetings, and a general lack of group effort. The two other common predictors of success or failure included the quality of

personal relationships and group cohesion among the team members and the extent to which administrators gave the group useful feedback and necessary resources.

Figure 2.3 summarizes these findings and shows how readily the embedded system framework can organize this study's findings into a more coherent model of effective health care teamwork. In this figure, the most critical variables and relationships appear in bold. In addition, the figure enumerates the paths between each factor, and we shall consider each briefly, starting with number "1."

Figure 2.3. The embedded system theoretical framework for studying small groups
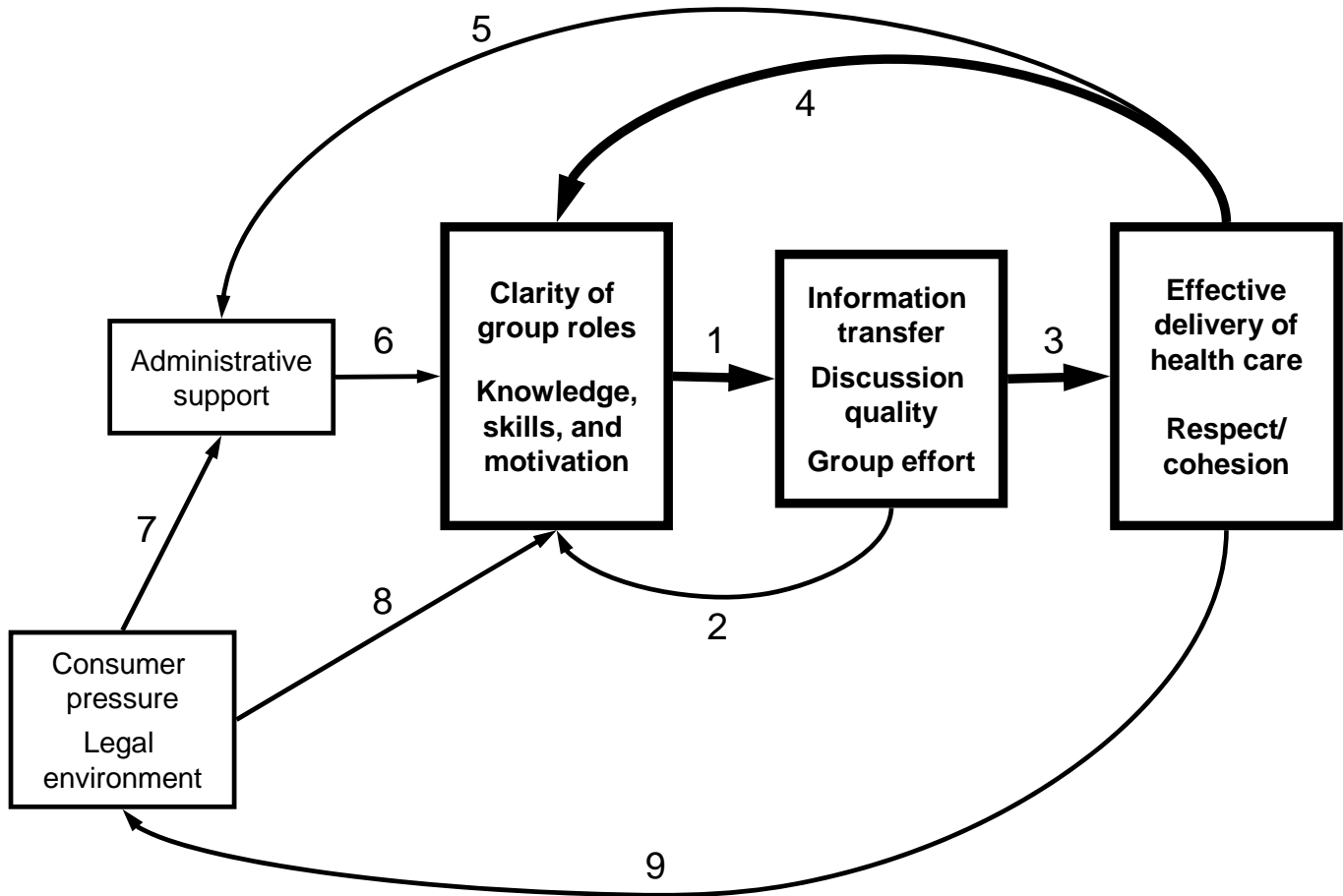
The first path shows that a key predictor of effective group process is a combination of group structure (clarity of member roles and responsibilities) and member characteristics (medical knowledge and skills, plus motivation). The group's timely and careful processing of information and ideas, along with effortful coordination of members' physical tasks, feeds back into member characteristics by building up the team's knowledge and skill base (path 2). More importantly, effective group process ultimately yields effective medical care, along with a heightened sense of group cohesion (path 3). As members' develop a mutual respect, that feeds back along path 4 to reinforce their motivation to work with the team.

The foregoing relationships represent the strongest relationships Hirokawa and his colleagues discovered, but others are apparent in their research. Path 5 suggests that effective performance can increase the likelihood of administrative support, which, in turn, provides necessary training and other forms of support (path 6). Though not the focus of their study, Hirokawa and his colleagues noted at the outset that administrators' interest in building teams came in response to larger social forces, such as consumer

advocacy groups (path 7). It is also likely that these external forces could motivate (or de-motivate) the individual team members themselves (path 8), depending on whether they felt moved in response to external pressure or resentful of outside intrusion into their organization's internal process. Finally, one can hope that, over time, the relative success or failure of these medical teams would feed back into the larger social system, possibly resulting in legal refinements (e.g., amending malpractice statutes or Medicare coverage) to ensure that medical providers can work most effectively together.

　　　　Research from widely divergent organizational settings parallels the results shown in Figure 2.3. One such study examined five different organizations in the Western United States, ranging from banks to public utilities. This investigation collected confidential surveys from fifty-nine employees situated in ten different task groups, which included all but *one* of the persons initially contacted by the researchers.[36] Researchers distinguished among three types of outcomes: accomplishing the task on time and to specification, achieving the highest quality in the team's work, and producing a decision acceptable to all relevant stakeholders outside the group. The quality of the outcome flowed directly from the rigor of the group's process, leadership (role specialization), and member skill. The task accomplishment and acceptability assessments, however, could be traced back to organizational factors, such as the project managers' commitment to and support of the group and its work on the task.

How Organizations Train Work Teams

　　　　There exists an even larger body of research consistent with the basic relationships presented in Figure 2.3.[37] Many of these concepts resurface in much greater detail later in this volume, such as the dynamics and impacts of group discussion (chapter 3), structure (chapter 4), and cohesion (chapter 7). Given the present chapter's emphasis on how larger social units connect with the small group, the remainder of this chapter explores two ways in which self-managed work teams are embedded in their organizational contexts.

　　　　Recall that one predictor of a self-managed work team's success was the degree to which the larger organization gives the team the resources it needs to succeed. Since a self-managed work team's success often depends on the capabilities and cohesion of its membership, team training constitutes an important way an organization can offer support. After all, employee burnout flows not from being overworked so much as from failing to receive the training necessary to work effectively on a team with clear roles and responsibilities.[38]

　　　　Industrial/organizational psychologist Dana Sims and her colleagues inventoried the range of training methods and found sixteen different approaches in use. Team building and cross training represent two of the more effective training methods used in organizations. Sims explains that the team-building approach to group training "focuses on the processes of teamwork to assist individuals and groups in examining their own behavior and inter-relationships."[39] In the popular imagination, the "ropes course" epitomizes the spirit of team building. In such a training exercise, team members work through acrobatic challenges, like an aerial obstacle course, to learn better how to communicate and coordinate their actions, ideally developing a sense of accomplishment and trust in the end. Fostering stronger team bonds may seem like an indulgence, like taking a Friday afternoon off for a company barbeque, but without strong member ties, external pressures can cause teams to disintegrate, which can prove catastrophic for firefighters or other teams that work in extreme circumstances.[40]

　　　　Research on team building shows that these exercises do, indeed, change individual member attitudes, social skills, and problem-solving abilities,[41] but the more important question is their impact on overall group productivity. A meta-analysis of eleven different studies of team building—in contexts from mining and manufacturing to research and development—found that team building did have a clear and strong effect on both subjective member assessments of performance and objective measures thereof.[42]

Outdoor Adventure Challenge Course high ropes element at the University of Central Florida. Credit: Public Domain.

At this point, it is helpful to introduce an additional methodological convention in social science—that of the *effect size.* Individual studies and meta-analyses typically report not simply *whether* one independent variable could predict a dependent variable but also *to what degree.* Effect sizes estimate the strength of association between two variables, such that we can get past vague generalities and begin to compare relative impacts. Statistician Jacob Cohen did the world a favor when he developed conventions that allow us to distinguish systematically small, medium, and large effect sizes across a wide range of different statistics, and we will use his conventions herein.[43] In Cohen's terms, it turns out that most small-group effects turn out to be of medium size.[44] Roughly speaking, this means that the presence or absence of a dichotomous independent variable (e.g., male vs. female group leader) might increase or decrease the dependent variable's value by 10% (e.g., raising or lowering discussion time by so many minutes). At times, it will be necessary to use such conventions, but whenever possible, we can find straightforward ways of translating statistical indicators into plain English.

In the case of the present meta-analysis, we can say that the typical team-building training regimen made the average trained group outperform three-quarters of the untrained groups.[45] Though the average effects of training were significant across the board, results did vary depending on a few key moderating variables, with the best combination of circumstances raising the average group to the ninetieth percentile or higher compared to untrained comparison groups. The strongest effects came from targeted interventions designed to address group-level problems in a smaller, participatory organization. Additional benefits accrued if a consultant provided the impetus for the training, with the support of the work team's immediate supervisor.

The preceding meta-analysis also found that team building's effectiveness increased when combined with other interventions, and a second, complementary educational strategy identified by Sims and her colleagues was *cross training.* Sims explains that this entails "training each individual member on the tasks of all other team members."[46] When given this form of training, work teams experienced 12–40% increases in their productivity owing to members' better ability to work as a cooperative, coordinated team.

To see more clearly the power of these interventions, consider the series of experiments conducted by a team of scholars from psychology, business, and industrial administration. In a controlled laboratory setting, the researchers gave three-person groups different types of training to teach them how to work as a team to build an AM radio from component parts. All the different groups could produce something that looked like a radio in roughly the same amount of time, but only one kind of team did so with a low error rate. One set of groups arrived at the radio-assembly session having been trained only as individuals. A

second set received training as individuals but then took part in a team-building exercise before moving to the team-assembly stage. A third set received their training in a group, only to be reassigned to a new team when the day came to assemble the radio. The fourth set of groups, who went through both their training and the assembly task as a stable group, produced AM radios with *half* as many errors as the other work teams.

Led by psychologist Richard Moreland and organizational behaviorist Linda Argote, the investigators in this study produced evidence consistent with their *transactive memory system* explanation:

> Training coworkers together not only provides each person with the information needed to perform tasks well, but it also helps him or her to discover what everyone else in the group knows about those tasks. . . . When group members know more about each other, they can plan their work more sensibly, assigning tasks to the people who will perform them best.[47]

Having been trained together, members of a group not only have access to their own memories but also benefit from other group members' stored memories. Thus, we may not know which cable to attach to the blue transistor, but we *do* recall which team member demonstrated that knowledge during our training session. We can exchange individual memories to produce a more accurate and complete shared memory of how to do our task.

Once again, the most effective course of action for supervisors building work teams appears to be designing multidimensional, realistic training exercises that keep intact the same groups that will have to manage themselves in the real workplace. In this way, groups not only develop trust and cohesion but also an accurate understanding of one another's competencies. Placed back into the embedded system framework, we can expect self-managing work teams to demonstrate significant increases in the quality of their work when the organization that creates them takes responsibility for developing not only team members' task competencies but also their ability to effectively coordinate roles, responsibilities, and information. In Figure 2.3, this amounts to a significant elaboration on the claim that administrative support improves the clarity of group roles, member skills, knowledge, and transactive memory.

How Teams Reshape Organizations

Whereas the organization can influence the success of work teams, the same embedded groups can have a reciprocal influence on their host's overall performance. Returning to the original context of health care, nursing teams play a critical role as a hospital's front-line employees. They see the operational details of the organization in a way that doctors and managers do not, and if the organization hopes to improve, much of its insight into the scope and nature of its deficiencies must come from the observations and feedback these nurses provide.

According to management scholar Zhike Lei, the unfortunate reality is that many hospitals fail to encourage long-term problem solving among their self-managing work teams. Too often, the scope of a team's responsibilities remains localized such that their members solve the problems at hand and do not have the time or incentive to step back and think about how to prevent or mitigate these problems by changing larger organizational rules and resource allocations. The catch is that work teams like these nursing squads are only likely to begin engaging in long-term problem solving when the larger organization takes the initiative to redefine their jobs such that this becomes a normal part of their regular, paid working lives, rather than simply one more burden on their already overloaded workday.[48]

Small teams also serve a critical role in any organization as a site where workers develop their perceptions about the larger organization. For instance, if one asks an employee at a large corporation whether his company promotes basic principles of fairness within its workplace, he probably will answer with reference to his own experience in his *part* of the organization, which for many employees will mean their immediate work team. Moreover, the employee's perception of team-level fairness probably depends on not only his own assessment but also his perceptions of how other team members would answer the question.

That is, he may consider his workplace unfair simply because he knows and respects a teammate who feels that way.

A survey of employees at Taiwanese manufacturing and service companies found precisely this result.[49] Translated into the terminology used in business and management, work team members reported on their perceptions of the "procedural justice climate" within their groups. Each employee's justice ratings, *along with those of his or her closest workmates,* predicted employees' commitment to the larger organization and their "organizational citizenship behavior"—employee actions taken for the good of the organization without any expectation of reward.

The effect was even stronger, though, when employees and their fellow team members believed that their supervisors should give them latitude and treat them as equals. In other words, those employees who expected a more democratic work environment were most strongly influenced by the procedural justice perceptions of their work team. Thus, an organization made up of self-managing work teams can expect that it is in these teams that employees will develop their judgments about the larger organizations' fairness, which, in turn, will either spark or dampen their commitment and service to the organization.

Viewed within the embedded system framework, this conclusion makes perfect sense. Organizations, the teams within them, and the individuals who make up those teams interconnect so powerfully that the effective development of a self-managing work team requires that everyone from front-line employees to top management work together. Finally, moving up to the level of the social systems in which these organizations operate, it is important to remember that the cultural context itself shapes the prospects of self-management. To take the example of the Taiwanese companies, cultures promoting a more egalitarian outlook toward work life will raise the stakes even higher for companies developing self-managing teams, for these new teams will quickly judge the fairness of their company based on their local experience as teammates. In a more hierarchical cultural setting, commitment to the organization will not rise and fall so quickly based on the fortunes of their individual teams. Thus, in the end, to understand what makes for a successful group requires simultaneously understanding the behavior of the organization and the larger norms and practices of the culture, or cultures, in which it exists.

Discussion Questions

1. There are specific archetypical groups in any given society. Where do you see archetypical groups functioning in your own social world? What other archetypes might you identify at work, on campus, or in the larger community?

2. Using the embedded system theoretical framework as a template, try drawing the connections to and from any single group "outcome," such as the quality of a group's decision or the level of member satisfaction the group produces. Trace possible connections among social structures to the local context to group inputs and process variables.

Notes
1. Some would say we could do without the Yankees, but that is beside the point. In any case, even a cultural anthropologist who *hates* the Yankees would have to admit that they provide a harmless ritual means of displacing our internal and collective frustrations.
2. Caporael et al. (2005), pp. 374–75. For a very readable introduction to evolution, particularly as it applies to social life, see Wilson (2007). Hermann (1998) provides a more academic application of sociobiology to political life, including such small-group processes as "study circles."
3. Caporael et al. (2005), pp. 375, 377. One approach to looking into early human history is to study contemporary nomadic or hunter-gatherer communities; Dunbar (1993), for instance, found these populations to gather in groups of thirty to fifty, which could qualify as a kind of small group, as defined in chapter 1.

4. These and the quotes that follow are from Caporael et al. (2005), pp. 382, 384, 386–87.

5. See Richerson and Boyd (2005). Their argument stresses the advantage of these instincts for *the group,* more than particular individuals. Thinking about the genetic survival of a group, as opposed to individuals, may sound unusual, but debates about levels of analysis are common in evolutionary theory (see Caporael et al., 2005).

6. Small-group scholars, and social scientists generally, use *theoretical framework* loosely. Unlike *hypothesis* or *methodology*, researchers use the term only occasionally and to convey varying meanings. Contractor and Seibold (1993), for instance, use *framework* to refer to theories that yield concrete hypotheses but have connections back to more abstract metatheory or even *grand theory*, such as Giddens' (1984) structuration theory.

7. See, for example, Pavitt (1999). For an earlier version, see McGrath (1964).

8. In the mid-twentieth century, one of the earliest pioneers in systems theory, Ludwig von Bertalanffy (1976), advanced a systems perspective that could apply across a range of disciplines. Mabry (1999) provides an overview of the systems perspective applied to small groups. He refers to this approach as the "systems metaphor" to emphasize that small groups have system-like qualities but are not literally systems in a strict and exclusive sense. It is in that sense that I incorporate the systems perspective herein. For a treatment of the systems perspective on groups from a more social psychological perspective, see Agazarian and Gantt (2005).

9. Arrow, McGrath, and Berdahl (2000), esp. 39, 207–8, 250–51, ultimately draw out this theory far beyond the elements included here. Among the most radical implications is the push to use computational models, simulations, and nonlinear analyses more regularly in small-group research. For more on these methods, see Wheelan and Williams (2005), Guastello (2005), and Arrow (2005).

10. Jamie Moshin points out that "this mirrors the co-orientational approach to argumentation, which discusses how a claim can be accepted by the audience, thus dropping below the level of dispute and becoming evidence itself." Thus, "arguments vary depending on how they are accepted by their audience" (personal communication, March 12, 2008). On the co-orientational approach, see Inch, Warnick and Endres (2005).

11. The original formulation of this perspective appeared in Putnam and Stohl (1990) but has been elaborated since then, such as in Putnam and Stohl (1996) and Stohl and Putnam (2003).

12. Stohl and Walker (2002), pp. 241, 243.

13. Giddens (1984) provides a comprehensive account of structuration, which he admits is an "unlovely term at best" (p. xvi). For a thorough and somewhat sympathetic description and critique of his theory, see Cohen (1989) and Craib (1992). It is important to stress that structuration is not a *theory* in the sense described in chapter 1 of this volume. It clearly exists at a higher level of abstraction, as a framework. One indirect form of evidence supporting this view is that frustration about the ultimate utility of structuration comes from its extreme level of abstraction (a necessary feature of a framework)—not problems with its logic or clarity (solidified with Giddens' 1984 book), validity (it is largely axiomatic), scope (universal), or parsimony (remarkable, given its scope and depth). Even concerns about its falsifiability really stem from the fact that it doesn't make more *specific* predictions; its empirical claims (e.g., that the details of human history do not follow a logical evolutionary path; Giddens, 1984, pp. 236–43) simply have widely accepted validity (i.e., are axiomatic at this point).

14. Giddens (1984), p. xxi. Giddens' theory is certainly a theory of social *systems,* but he does not present it in the terminology of systems theory. For an account of small groups that interlaces structurational and systems theories, see Salazar (2002), esp. pp. 188–92.

15. Giddens (1984), pp. 28, 79.

16. Giddens (1984), p. 24, acknowledges that societies "are not necessarily unified collectives," but let's leave that detail aside for the moment. The point is that there exist relatively stable social systems that span across time and space, even if they do not conform to simple political-geographic borders.

17. See Vahid (2003). The link here to engineering and software is to imbue the term with a stronger metaphoric power, which is helpful to make this level of theoretical abstraction more comprehensible.

18. This framework has its most immediate roots in structuration theory (Giddens, 1984), rather than systems theory. Both approaches use the notion of "embeddedness" and emphasize the systemic qualities of social units, from small groups to large-scale societies, but the structurational approach eschews concepts and language that ascribe intentionality or requirements to social entities (Giddens, 1984, p. xxxi). See, for example, Fuchs' (2003) structurational critique of contemporary notions of "self-organizing" systems. To be clear, though, small-group theorists created models including the basic elements of the embedded system framework *decades ago*; see, for example, McGrath and Altman (1966), p. 38, or Hare (1976), pp. 8–9.

19. Thus, Sutton and Staw (2003) admonish that "diagrams are not theory" and that "the least theoretical representations are ones that simply list categories of variables" (p. 25). The embedded system approach is a *theoretical framework,* not a precise theory, and hopefully it avoids the higher-level abstraction of, say, structuration theory, thereby making it more useful for researchers as an aid to building their own concrete causal models.

20. This understanding parallels that of structuration theory; for a clear overview of these concepts, see Craib (1992), pp. 50–58.

21. Rheingold (2003).

22. Gaertner, Rust, Dovidio, Bachman, and Anastasio (1996).

23. Erel and Burman (1995).

24. Hecht, Jackson, and Ribeau (2003).

25. In this sense (and many others), the social archetypes described herein differ from the personality archetypes described by Jung (1981/1934). It is striking that the idea of *group* archetypes has not been developed very well in the social sciences. In the organizational literature, the notion of archetypes has had some attention (e.g., Mitroff, 1983), and chapter 6 of this volume describes Moxnes' (1998, 1999a, 1999b) work on the archetypal *roles* people play in groups.

26. This volume does not attempt to develop a systematic inventory of the group archetypes in any one society, but this surely is an element of the theory subject to exploration, development, and testing. One approach could begin inductively, generating a large list of potential archetypes from popular and scholarly writings on groups, complemented by interviews and surveys. A follow-up survey could then assess the degree to which members of a given society could consistently recognize and recount in detail how different archetypical groups typically behave, based solely on the archetype's name (and, perhaps, a six- to ten-word label). It could prove revealing, indeed, to see how the set of archetypes—and their expected behaviors—varied across different cultures. (Strong inconsistencies *within* a society would indicate that a shared archetype did not exist, or that one needs to look more closely at the subculturally distinct archetypes within that society.)

27. The inspiration for this argument is Bormann's (1996), pp. 101–4, notion of "special theories" emerging in a larger society as a result of patterns of regularized convergence across many groups.

28. This may hold as true for researchers as for group members, in that these group metaphors likely inform the theories we construct in a way that limits our vision beyond the periphery of that implicit metaphor (see Morgan, 1986, who makes this argument in relation to organizations).

29. It follows that theories built to account for behavior within the most potent archetypical group settings may be the most robust and useful theories, as their scope can safely extend into any social setting where groups invoke the theory's original archetypical setting.

30. Yeatts and Seward (2000), p. 359.

31. For a review of the popularity of these groups, see Moreland, Argote, and Krishnan (1998), pp. 37–38. For their history, particularly from the Total Quality Management perspective, see Sexton (1994). More generally, see Hirokawa (2003), p. 125.

32. For instance, there may be important differences between groups performing service versus assembly tasks (Spreitzer, Cohen, & Ledford, 1999).

33. Wolper (2004).

34. See Miccolo and Spanier (1993). Yeatts and Seward (2000) provide an example of research that advocates the expansion of self-managed work teams in health care organizations, particularly in nursing homes.

35. This section references Hirokawa, DeGooyer, and Valde (2003), esp. pp. 151–55.

36. Bushe and Johnson (1989). Such a high response rate is unusual in any research setting; this one owes its thanks to the researchers coordinating their study with the managers overseeing the employees they contacted. In large-scale survey research, a conventional response rate might be as low as 20%, though rates approaching 50% can be obtained through more steadfast (and expensive) recruiting of participants. On designing surveys for optimal response rates, see Dillman (2000).

37. In the organizational context, relevant contemporary research can be accessed quickly in Thompson (2003).

38. Elloy, Terpening, and Kohls (2001).

39. Sims, Salas, and Burke (2005), p. 421.

40. Weick (1993).

41. Sims, Salas, and Burke (2005), p. 421, summarize studies showing individual effects, as well as some showing mixed results for group productivity. Svyantek, Goodman, Benz, and Gard (1999), however, provide stronger multistudy evidence of an overall positive effect.

42. Svyantek et al. (1999). More generally, when an organization creates self-managed teams, their success (and member commitment and satisfaction) depends on receiving necessary expertise along with the new responsibilities (Kuipers & Vallas, 2007). On the satisfaction benefit of self-managing work teams generally, see van Mierlo, Rutte, Kompier, and Doorewaard (2005).

43. Cohen (1988).

44. Across twenty-seven meta-analyses, the average group research effect size is $r = .32$, $SD = .15$ (Richard, Bond, & Stokes-Zoota, 2003, p. 337 [Table 1]). The same source shows a slightly lower average effect size for social psychological findings in general (avg. $r = .21$, $SD = .15$).

45. Svyantek et al. (1999), pp. 277–78.

46. Sims, Salas, and Burke (2005), pp. 419–20.

47. Moreland, Argote, and Krishnan (1998), p. 41. For a broader overview of this line of research, see Moreland (2006). Research outside the laboratory has clarified the role of transactive memory in established groups (Austin, 2003) and groups that form quickly in the field, as in disaster relief settings (Majchrzak, Jarvenpaa, & Hollingshead, 2007). Also, see chapter 5 of this volume.

48. Lei (2007).

49. Yang, Mossholder, and Peng (2007).

REFERENCES

1992: LA in flames after "not guilty" verdict. (1992, April 29). *BBC: On This Day.* Retrieved March 16, 2009, from http://news.bbc.co.uk/onthisday/hi/dates/stories/april/29/newsid_2500000/2500471.stm

Abrams, D., Hogg, M. A., Hinkle, S., & Otten, S. (2005). The social identity perspective on small groups. In M. S. Poole & A. B. Hollingshead (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 99–138). Newbury Park, CA: Sage.

Adamic, L., & Glance, N. (2005). *The political blogosphere and the 2004 U.S. election: Divided they blog.* Paper presented at the ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (LinkKDD-2005), Chicago, IL. Retrieved March 4, 2008, from http://www.webcitation.org/5RPjg9Qcs

Adelman, M. B., & Frey, L. R. (1997). *The fragile community: Living together with AIDS.* Mahwah, NJ: Lawrence Erlbaum.

Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality.* New York: W. W. Norton.

Agazarian, Y., & Gantt, S. (2005). The systems perspective. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 187–200). Newbury Park, CA: Sage.

Aldag, R. J., & Fuller, S. R. (1993). Beyond fiasco: A reappraisal of the groupthink phenomenon and a new model of group decision processes. *Psychological Bulletin, 113,* 533–552.

Alexander, S. C., Peterson, J. L., & Hollingshead, A. B. (2003). Help at your keyboard: Support groups on the Internet. In L. R. Frey (Ed.), *Group communication in context: Studies of bona fide groups* (pp. 309–334). Mahwah, NJ: Lawrence Erlbaum.

Allen, T. H., & Plax, T. (1999). Group communication in the formal educational context. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 493–515). Thousand Oaks, CA: Sage.

Allport, G. W. (1954). The nature of prejudice. Cambridge, MA: Addison-Wesley.

Amiot, C., Sablonniere, R., Terry, D., & Smith, J. (2007). Integration of social identities in the self: Toward a cognitive-developmental model. *Personality and Social Psychology Review, 11,* 364–388.

Ancona, D. G. (1990). Outward bound: Strategies for team survival in an organization. *Academy of Management Journal, 33,* 334–365.

Ancona, D. G., & Bresman, H. (2007). *X-Teams: How to build teams that lead, innovate, and succeed.* Boston: Harvard Business School Press.

Ancona, D. G., Bresman, H., & Kaeufer, K. (2002). The comparative advantage of X-Teams. *MIT Sloan Management Review, 43,* 33–40.

Ancona, D. G., & Caldwell, D. F. (1992). Bridging the boundary: External activity and performance in organizational teams. *Administrative Science Quarterly, 37,* 634–665.

Anderson, C. M., Riddle, B. L., & Martin, M. M. (1999). Socialization processes in groups. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 139–163). Thousand Oaks, CA: Sage.

Anderson, K., & Nolan, M. (2004). Lay participation in the Japanese justice system: A few preliminary thoughts regarding the lay assessor system (saiban-in seido) from domestic and historical and international psychological perspectives. *Vanderbilt Journal of Transnational Law, 37,* 935–992.

Anzieu, D. (1984). *The group and the unconscious* (B. Kilborne, Trans.). London: Routledge.

Arndt, M. (2006). *Little Miss Sunshine* [Screenplay]. New York: Newmarket Press.

Arrow, H. (2005). Chaos, complexity, and catastrophe: The nonlinear dynamics perspective. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 201–219). Newbury Park, CA: Sage.

Arrow, H., Henry, K. B., Poole, M. S., Wheelan, S., & Moreland, R. (2005). Traces, trajectories, and timing: The temporal perspective on groups. In M. S. Poole & A. B. Hollingshead (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 313–368). Newbury Park, CA: Sage.

Arrow, H., McGrath, J. E., & Berdahl, J. L. (2000). *Small groups as complex systems: Formation, coordination, development, and adaptation.* Thousand Oaks, CA: Sage.

Asch, S. E. (1955). Opinions and social pressure. *Scientific American, 193,* 31–35.

Ashmore, R. D., Deaux, K., & McLaughlin-Volpe, T. (2004). An organizing framework for collective identity: Articulation and significance of multidimensionality. *Psychological Bulletin, 130,* 80–114.

Austin, J. R. (2003). Transactive memory in organizational groups: The effects of content, consensus, specialization, and accuracy on group performance. *Journal of Applied Psychology, 88,* 866–878.

Ayers, J. (2006). *Voyages of imagination: The Star Trek fiction companion.* New York: Pocket Books.

Baggini, J. (2003). *Atheism: A very short introduction.* Oxford: Oxford University Press.

Bales, R. F. (1950). *Interaction process analysis: A method for the study of small groups.* Cambridge, MA: Addison Wesley.

Bales, R. F. (1968). Interaction process analysis. In D. L. Sills (Ed.), *International Encyclopedia of the Social Sciences, Volume 7* (pp. 465–471). New York: Macmillan and Free Press.

Bales, R. F. (1970). *Personality and interpersonal behavior.* New York: Holt, Rinehart & Winston.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* New York: Prentice-Hall.

Bargal, D. (2004). Structure and process in reconciliation-transformation workshops: Encounters between Israeli and Palestinian youth. *Small Group Research, 35,* 596–616.

Barge, J. K. (2002). Enlarging the meaning of group deliberation: From discussion to dialogue. In L. R. Frey (Ed.), *New directions in group communication* (pp. 159–178). Thousand Oaks, CA: Sage.

Barge, J. K. (2003). Leadership as organizing. In R. Y. Hirokawa, R. S. Cathcart, L. A. Samovar, & L. D. Henman (Eds.), *Small group communication: Theory and practice, an anthology* (8th ed., pp. 199–213). Los Angeles: Roxbury.

Barilari, F., Hamuy, E., Grazarain, R., & Matte, I. (1958). Contribution al studio de las relaciones sociometricas: Su influencia en la suggestion ejercida por el grupo. *Sociologia, 20*(1), 18–26.

Barnlund, D. C. (1959). A comparative study of individual, majority and group judgment. *Journal of Abnormal and Social Psychology, 58,* 55–60.

Baron, R. S., Vandello, J. A., & Brunsman, B. (1996). The forgotten variable in conformity research: Impact of task importance on social influence. *Journal of Personality and Social Psychology, 71,* 915–927.

Baxter, L. A. (1988). A dialectical perspective on communication strategies in relationship development. In S. Duck (Ed.), *Handbook of personal relationships: Theory, research and interventions* (pp. 257–273). New York: John Wiley & Sons.

Beal, D. J., Cohen, R. R., Burke, M. J., & McLendon, C. L. (2003). Cohesion and performance in groups: A meta-analytic clarification of construct relations. *Journal of Applied Psychology, 88,* 989–1004.

Berdahl, J., & Henry, K. (2005). Contemporary issues in group research: The need for integrative theory. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 187–200). Newbury Park, CA: Sage.

Berger, J., & Conner, T. L. (1969). Performance expectations and behavior in small groups. *Acta Sociologica, 12,* 186–198.

Bernstein M. (1997). Celebration and suppression: The strategic uses of identity by the lesbian and gay movement. *American Journal of Sociology, 103,* 531–565.

Bettenhausen, K. L. (1991). Five years of groups research: What we have learned and what needs to be addressed. *Journal of Management, 17,* 345–381.

Bion, W. R. (1961). *Experiences in groups.* London: Tavistock.

Black, L. (2008). Deliberation, storytelling, and dialogic moments. *Communication Theory, 18,* 93–116.

Bond, R., & Smith, P. B. (1996). Culture and conformity: A meta-analysis of studies using Asch's (1952b, 1956) line judgment task. *Psychological Bulletin, 119,* 111–137.

Bongar, B., Brown, L. M., Beutler, L. E., Breckenridge, J. N., & Zimbardo, P. G. (2006). *Psychology of terrorism.* Oxford: Oxford University Press.

Bonito, J. A. (2000). The effect of contributing substantively on perceptions of participation. *Small Group Research, 31,* 528–553.

Bonito, J. A., & Hollingshead, A. B. (1997). Participation in small groups. In B. R. Burleson, *Communication Yearbook 20* (pp. 227–261). Newbury Park, CA: Sage.

Bormann, E. G. (1996). Symbolic convergence theory and communication in group decision making. In R. Y. Hirokawa & M. S. Poole, *Communication and group decision making* (2nd ed., pp. 81–113). Beverly Hills, CA: Sage.

Bormann, E. G., Cragan, J. F., & Shields, D. C. (2001). Three decades of developing, grounding, and using symbolic convergence theory (SCT). *Communication Yearbook, 25,* 271–313.

Boston Women's Health Book Collective. (2005). *Our bodies, ourselves: A new edition for a new era.* New York: Simon & Schuster.

Bowers, C. A., Pharmer, J. A., & Salas, E. (2000). When member homogeneity is needed in work teams: A meta-analysis. *Small Group Research, 31,* 305–327.

Braithwaite, D. O. (1995). Ritualized embarrassment at "coed" wedding and baby showers. *Communication Reports, 8,* 145–157.

Brashers, D. E., & Meyers, R. A. (1999). Influence processes in group interaction. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 288–312). Thousand Oaks, CA: Sage.

Brauer, M., Judd, C. M., & Gilner, M. (2006). The effects of repeated expressions on attitude polarization during group discussions. In J. M. Levine & R. L. Moreland (Eds.), *Small groups: Key readings* (pp. 265–287). New York: Psychology Press.

Breast cancer: Fears and facts. (1974, November 4). *Time.* Retrieved March 16, 2008, from http://www.time.com/time/magazine/article/0,9171,945077-1,00.html

Breast cancer: Statistics on incidence, survival, and screening. (2008, January 23). *Imaginis Newsletter.* Retrieved April 10, 2008, from http://imaginis.com/breasthealth/statistics2.asp#5

Breines, W. (2002). What's love got to do with it? White women, black women, and feminism in the movement years. *Signs, 27,* 1095–1133.

Brown, B., Mounts, N., Lamborn, S., & Steinberg, L. (1993). Parenting practices and peer group affiliation in adolescence. *Child Development, 64,* 467–482.

Brown, N. W. (2005). Psychoeducational groups. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 511–529). Newbury Park, CA: Sage.

Brownmiller, S. (1999). *In our time: Memoir of a revolution.* New York: Dial Press.

Burke, S. M., Carron, A. V., Patterson, M. M., Estabrooks, P. A. H. J. L., Loughead, T. M., Rosenfranz, S. R., et al. (2005). Cohesion as shared beliefs in exercise classes. *Small Group Research, 36,* 267–288.

Burkhalter, S., Gastil, J., & Kelshaw, T. (2002). A conceptual definition and theoretical model of public deliberation in small face-to-face groups. *Communication Theory, 12,* 398–422.

Burleson, B. R., Levine, B. J., & Samter, W. (1984). Decision-making procedure and decision quality. *Human Communication Research, 10,* 557–574.

Burlingame, G. M., Kapetanovic, S., & Ross, S. (2005). Group psychotherapy. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 387–406). Newbury Park, CA: Sage.

Burnstein, E., & Zajonc, R. B. (1965). The effects of group success on status incongruence in task-oriented groups. *Sociometry, 28,* 349–362.

Bushe, G. R., & Johnson, A. L. (1989). Contextual and internal variables affecting task group outcomes in organizations. *Group & Organization Studies, 14,* 462–482.

Bytwerk, R. L. (1998). The propagandas of Nazi Germany and the German Democratic Republic. *Communication Studies, 49,* 158–171.

Cady, S. H., & Valentine, J. (1999). Team innovation and perceptions of consideration: What difference does diversity make? *Small Group Research, 30,* 730–750.

Caldwell, D. F., & O'Reilly, C. A., III. (2003). The determinants of team-based innovation in organizations: The role of social influence. *Small Group Research, 34,* 497–517.

Calhoun, C. (Ed.). (1992). *Habermas and the public sphere.* Cambridge, MA: MIT Press.

Caporael, L., Wilson, D. S., Hemelrijk, C., & Sheldon, K. M. (2005). Small groups from an evolutionary perspective. In M. S. Poole & A. B. Hollingshead (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 369–397). Newbury Park, CA: Sage.

Carroll, J. L., & Carolin, P. M. (1989) Relationship between game playing and personality. *Psychological Reports, 64,* 705–706.

Carron, A. V., Brawley, L. R., Eys, M. A., Bray, S., Dorsch, K., Estabrooks, P., et al. (2003). Do individual perceptions of group cohesion reflect shared beliefs? An empirical analysis. *Small Group Research, 34,* 468–496.

Carron, A.V., Colman, M. M., Wheeler, J., & Stevens, D. (2002). Cohesion and performance in sport: A meta-analysis. *Journal of Sport and Exercise Psychology, 24,* 168–188.

Carson, L., & Martin, B. (1999). *Random selection in politics.* Westport, CT: Praeger.

Carter, D., Bennets, C., & Carter, S. (2003). "We're not sheep": Illuminating the nature of the adolescent peer group in effecting lifestyle choice. *British Journal of Sociology of Education, 24,* 225–241.

Case, J., & Taylor, R. C. R. (Eds.) (1979).*Co-ops, communes, and collectives: Experiments in social change in the 1960s and 1970s.* New York: Pantheon.

Cathcart, R. S., & Samovar, L. A. (1979). Group leadership: Concepts and performance. In R. S. Cathcart & L. A. Samovar (Eds.), *Small group communication: A reader* (3rd ed., pp. 391–394). Dubuque, IA: William C. Brown.

Center for Conflict Resolution. (1977). *A manual for group facilitators.* Madison, WI: Author.

Center for Conflict Resolution. (1981). *Building united judgment: A handbook for consensus decision making.* Madison, WI: Author.

Centola, D. M., & Macy, M. W. (2005). Social life in *Silico:* The science of artificial societies. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 273–281). Newbury Park, CA: Sage.

Chambers, S. (2003). Deliberative democratic theory. *Annual Review of Political Science, 6,* 307–326.

Chen, X. P., Lam, S. S. K, Naumann, S., & Schaubroeck, J. (2005). Group citizenship behaviour: Conceptualization and preliminary tests of its antecedents and consequences. *Management and Organization Review, 1,* 273–300.

Chesebro, J. W., Cragan, J. F., & McCullough, P. (1973). The small group technique of the radical revolutionary: A synthetic study of consciousness raising. *Speech Monographs, 40,* 136–146.

Chirumbolo, A., Mannetti, L., Pierro, A., Areni, A., & Kruglanski, A. W. (2005). Motivated closed-mindedness and creativity in small groups. *Small Group Research, 36,* 59–82.

Christiano, T. (1990). Freedom, consensus, and equality in collective decision making. *Ethics, 101,* 151–181.

Chuang, Y.-C. (2005). Effects of interaction pattern on family harmony and well being: Test of interpersonal theory, relational-models theory, and Confucian ethics. *Asian Journal of Social Psychology, 8,* 272–291.

Chun, W.-Y., & Lee, H.-K. (1999). Effects of the difference in the amount of group preferential information on illusory correlation. *Personality & Social Psychology Bulletin, 25,* 1463–1475.

Clark, C. C., & Sline, R. W. (2003). Teaming with emotion: The impact of emotionality on work-team collaboration. In R. Y. Hirokawa, R. S. Cathcart, L. A. Samovar, & L. D. Henman (Eds.), *Small group communication: Theory & practice, an anthology* (8th ed., pp. 158–68). Los Angeles: Roxbury.

Cline, R. J. W. (1999). Communication in social support groups. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 516–538). Thousand Oaks, CA: Sage.

Cohen, I. (1989). *Structuration theory: Anthony Giddens and the constitution of social life.* New York: St. Martin's Press.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Cohen, J. (1989). Deliberation and democratic legitimacy. In P. Pettit & A. Hamlin (Eds.), *The good polity* (pp. 17–34). New York: Basil Blackwell.

Collins, B. E., & Guetzkow, H. (1964). *A social psychology of group processes for decision making.* New York: Wiley.

Conquergood, D. (1994). Homeboys and hoods: Gang communication in cultural space. In L. R. Frey (Ed.), *Group communication in context: Studies of natural groups* (pp. 23–55). Hillsdale, NJ: Lawrence Erlbaum.

Consolini, P. (1992). *Learning by doing justice: Private jury service and political attitudes.* Doctoral dissertation, University of California at Berkeley.

Contractor, N. S., & Seibold, D. R. (1993). Theoretical frameworks for the study of structuring processes in group decision support systems: Adaptive structuration theory and self-organizing systems theory. *Human Communication Research, 19,* 528–563.

Coon, A. M. (1957). Brainstorming: A creative problem-solving technique. *Journal of Communication, 7*(3), 111–118.

Coover, V., Deacon, E., Esser, C., & Moore, C. (1977). *Resource Manual for a Living Revolution.* Philadelphia: New Society Publishers.

Cowan, C. L., Thompson, W. C., & Ellsworth, P. C. (1984). The effects of death qualification on jurors' predisposition to convict and on the quality of deliberation. *Law and Human Behavior, 8,* 53–79.

Cox, T. H., Lobel, S. A., & McLeod, P. L. (1991). Effects of ethnic group cultural differences on cooperative and competitive behavior on a group task. *Academy of Management Journal, 34,* 827–847.

Coy, P. G. (Ed.). (2003). *Consensus decision making, Northern Ireland and indigenous movements, Vol. 24. Research in social movements, conflicts and change.* Oxford: Elsevier.

Coyne, J. C., Stefanek, M., & Palmer, S. C. (2007). Psychotherapy and survival in cancer: The conflict between hope and evidence. *Psychological Bulletin, 133,* 367–394.

Craib, I. (1992). *Anthony Giddens.* London: Routledge.

Curseu, P. L., Schruijer, S., & Boros, S. (2007). The effects of groups' variety and disparity on groups' cognitive complexity. *Group Dynamics: Theory, Research, and Practice, 11,* 187–206.

Dahl, R. A. (1989). *Democracy and its critics.* New Haven: Yale University Press.

Dahl, R. A., & Tufte, E. R. (1973). *Size and democracy.* Stanford, CA: Stanford University Press.

Dahlberg, L. (2005). The Habermasian public sphere: Taking difference seriously. *Theory and Society, 34,* 111–136.

Dandelion, P. (2008). *The Quakers: A very short introduction.* Oxford: Oxford University Press.

Davis, J. H. (1973). Group decision and social interaction: A theory of social decision schemes. *Psychological Review, 80,* 97–125.

Davis, J. H., Stasson, M., Ono, K., & Zimmerman, S. K. (1988). Effects of straw polls on group decision making: Sequential voting pattern, timing, and local majorities. *Journal of Personality and Social Psychology, 55,* 918–926.

Dawkins, R. (2006). *The God delusion.* Boston: Houghton Mifflin.

De Cremer, D. (2003). How self-conception may lead to inequality: Effect of hierarchical roles on the equality rule in organizational resource-sharing tasks. *Group & Organization Management, 28,* 282–302.

De Dreu, C. K. W. (2007). Cooperative outcome interdependence, task reflexivity and team effectiveness: A motivated information processing approach. *Journal of Applied Psychology, 92,* 628–638.

De Dreu, C. K. W., & Carnevale, P. J. (2003). Motivational bases of information processing and strategy in conflict and negotiation. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 35, pp. 235–291). New York: Academic Press.

De Dreu, C. K. W., & Weingart, L. R. (2003). Task versus relationship conflict and team effectiveness: A meta-analysis. *Journal of Applied Psychology, 88,* 741–749.

Deess, E. P. (1997). *The socialist ethic and the spirit of revolution: Institutional practices and the collapse of East Germany in 1989.* Doctoral dissertation, University of California, San Diego.

Deess, E. P., & Gastil, J. (2005, June). *Political discussion and the self-destructing state: An historical account of state-sanctioned talk in the German Democratic Republic from 1980–1985.* Paper presented at the annual conference of the International Communication Association, Dresden, Germany.

Derber, C. (1979). *The pursuit of attention: Power and individualism in everyday life.* Oxford: Oxford University Press.

DeRenard, L. A., & Kline, L. M. (1990). Alienation and the game Dungeons and Dragons. *Psychological Reports, 66,* 1219–1222.

DeSanctis, G., & Poole, M. S. (1994). Capturing the complexity in advanced technology: Adaptive structuration theory. *Organization Science, 5*(2), 121–147.

Devine, D. J. (2002). A review and integration of classification systems relevant to teams in organizations. *Group Dynamics: Theory, Research, and Practice*, 6, 291–310.

Devine, D. J., Clayton, L. D., Dunford, B. B., Seying, R., & Pryce, J. (2001). Jury decision making: 45 years of empirical research on deliberating groups. *Psychology, Public Policy and Law, 7,* 622–727.

Devine, P. G., Monteith, M. J., Zuwerink, J. R., & Elliot, A. J. (1991). Prejudice with and without compunction. *Journal of Personality and Social Psychology, 60,* 817–830.

DeVreede, G.-J., Niederman, F., & Paarlberg, I. (2002). Towards an instrument to measure participants' perceptions on facilitation in group support systems meetings. *Group Decision and Negotiation, 11,* 127–144.

Diamond, S., Rose, M. R., Murphy, B., & Smith, S. (2006). Juror questions during trial: A window into juror thinking. *Vanderbilt Law Review, 59,* 1927–1972.

Diamond, S., Vidmar, N., Rose, M. R., Ellis, L., & Murphy, B. (2003). Inside the jury room: Evaluating juror discussions during trial. *Judicature, 87,* 54–58.

Diehl, M., & Stroebe, W. (1991). Productivity loss in idea-generating groups: Tracking down the blocking effect. *Journal of Personality and Social Psychology, 61,* 392–403.

Dillman, D. A. (2000). *Mail and Internet surveys: The tailored design method.* New York: Wiley.

DiSalvo, V. S., Nikkel, E., & Monroe, C. (1989). Theory and practice: A field investigation and identification of group members' perceptions of problems facing natural work groups. *Small Group Behavior, 20,* 551–567.

Dollar, N. J., & Merrigan, G. M. (2002). Ethnographic practices in group communication research. In L. R. Frey (Ed.), *New directions in group communication* (pp. 59–78). Thousand Oaks, CA: Sage.

Douglas, M., & Wildavsky, A. B. (1982). *Risk and culture: An essay on the selection of technical and environmental dangers.* Berkeley: University of California Press.

Downey, G. L. (1986). Ideology and the clamshell identity: Organizational dilemmas in the anti-nuclear power movement. *Social Problems, 33,* 357–373.

Driskell, J. E., & Mullen, B. (1990). Status, expectations, and behavior: A meta-analytic review and test of the theory. *Personality and Social Psychology Bulletin, 16,* 541–553.

Driskell, J. E., Olmstead, B., & Salas, E. (1993). Task cues, dominance cues, and influence in task groups. *Journal of Applied Psychology, 78,* 51–60.

Dubriwny, T. N. (2005). Consciousness-raising as collective rhetoric: The articulation of experience in the Redstockings' abortion speak-out of 1969. *Quarterly Journal of Speech, 91,* 395–422.

Dukehart, M. (2002). *Psychology and the decline in social capital.* Unpublished honor's thesis, University of Washington, Seattle.

Dunbar, R. I. M. (1993). Coevolution of neocortical size, group size and language in humans. *Behavioural and Brain Sciences, 16,* 681–735.

Dutton, M. R. (2005). *Policing Chinese politics: A history.* Durham, NC: Duke University Press.

Dwyer, W. L. (2002). *In the hands of the people*. New York: St. Martin's.

Eagly, A. H., & Carli, L. L. (2007). *Through the labyrinth: The truth about how women become leaders.* Boston: Harvard Business School Press.

Eagly, A. H., Johannesen-Schmidt, M. C., & van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin, 129,* 569–591.

Eagly, A. H., & Johnson, B. T. (1990). Gender and leadership style: A meta-analysis. *Psychological Bulletin*, *108*, 233–256.

Eagly, A. H., & Karau, S. J. (1991). Gender and the emergence of leaders: A meta-analysis. *Journal of Personality and Social Psychology, 60,* 685–710.

Eby, L. T., Cader, J., & Noble, C. L. (2003). Why do high self-monitors emerge as leaders in small groups? A comparative analysis of the behaviors of high versus low self-monitors. *Journal of Applied Social Psychology, 33,* 1457–1479.

Edgar, A. (2005). *The philosophy of Habermas.* Montreal: McGill-Queen's Press.

Edley, P. P. (2000). Discursive essentializing in a women-owned business: Gendered stereotypes and strategic subordination. *Management Communication Quarterly, 14,* 271–306.

Elfenbein, H. A., & O'Reilly, C. A., III. (2007). Fitting in: The effects of relational demography and person-culture fit on group process and performance. *Group Organization Management, 32,* 109–142.

Elloy, D. F., Terpening, W. D., & Kohls, J. (2001). The correlates of burnout among self-managed work team members. *Journal of Psychology, 135,* 321–334.

Englund, M. M., Levy, A. K., Hyson, D. M., & Sroufe, L. A. (2000). Adolescent social competence: Effectiveness in a group setting. *Child Development, 71,* 1049–1060.

Erel, O., & Burman, B. (1995). Interrelatedness of marital relations and parent-child relations: A meta-analytic review. *Psychological Bulletin, 118,* 108–132.

Erffmeyer, R. C., & Lane, I. M. (1984). Quality and acceptance of an evaluative task: The effects of four group decision-making formats. *Group and Organization Studies, 9,* 509–529.

Esposito, J. (2000). *Oxford history of Islam.* Oxford: Oxford University Press.

Estabrooks, P. A., & Carron, A. V. (1999). Group cohesion in older adult exercisers: Prediction and intervention effects. *Journal of Behavioral Medicine, 22,* 575–588.

Estes, C. (1990). Consensus ingredients. In Fellowship for Intentional Community & Communities Publications Cooperative (Eds.), *Intentional communities: A guide to cooperative living* (pp. 78–81). Steele, IL: Communities Publications Cooperative.

Evans, J. (2006). *Game on! How women's basketball took Seattle by storm.* Seattle: Sasquatch Books.

Evans, S. M., & Boyte, H. C. (1992). *Free spaces: The sources of democratic change in America.* Chicago: University of Chicago Press.

Falk, G. (1982). An empirical study measuring conflict in problem-solving groups which are assigned different decision rules. *Human Relations, 35,* 1123–1138.

Falk, G., & Falk, S. (1981). The impact of decision rules on the distribution of power in problem-solving teams with unequal power. *Group & Organization Studies, 6,* 211–223.

Farwell, H. W. (1988). *The majority rules* (2nd ed.). Pueblo, CO: High Publishers.

Fatkhullin, N. S. (1989). *Malaia sotsial'naia gruppa kak forma obschestvennogo razvitiia* [Small groups as forms of development of society]. Kazan, USSR: Kazan University.

Fiedler, F. E. (1964). A contingency model of leadership effectiveness. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 149–190). New York: Academic Press.

Finlayson, J. G. (2005). *Habermas: A very short introduction.* New York: Oxford University Press.

Firestein, R. L. (1990). Effects of creative problem solving training on communication behaviors in small groups. *Small Group Research, 21,* 507–521.

Fisher, B. A., & Hawes, L. C. (1971). An interact system model: Generating a grounded theory of small groups. *Quarterly Journal of Speech*, *57*, 445–453.

Fisher, J. D., Silver, R. C., Chinsky, J. M., Goff, B., Klar, Y., & Zagieboylo, C. (1989). Psychological effects of participation in a large group awareness training. *Journal of Consulting and Clinical Psychology, 57,* 747–755.

Fisher, R. J. (1998). Applying group processes to international conflict analysis and resolution. In R. S. Tindale et al. (Eds.), *Theory and research on small groups* (pp. 107–126). New York: Plenum.

Fishkin, J. S. (1991). *Democracy and deliberation: New directions for democratic reform.* New Haven: Yale University Press.

Foels, R., Driskell, J. E., Mullen, B., & Salas, E. (2000). The effects of democratic leadership on group member satisfaction. *Small Group Research, 31,* 676–701.

Folb, E. (1979) The consciousness-raising group: An alternative structure. In R. S. Cathcart & L. A. Samovar (Eds.), *Small group communication: A reader* (3rd ed., pp. 182–197). Dubuque, IA: William C. Brown.

Freeman, J. (1972–1973). Tyranny of structurelessness [Electronic version]. *Berkeley Journal of Sociology, 17,* 151–165. Retrieved March 16, 2009, from http://struggle.ws/pdfs/tyranny.pdf

French, D. C., Wass, G. A., Stright, A. L., & Baker, J. A. (1986). Leadership asymmetries in mixed-age children's groups. *Child Development*, 57, 1277-1283.

French, S. (2007). Web-enabled strategic GDSS, e-democracy, and Arrow's theorem: A Bayesian perspective. *Decision Support Systems, 43,* 1476–1484.

Frey, J. H., & Fontana, A. (1991). The group interview in social research. *Social Science Journal, 28,* 175–187.

Frey, L. R. (Ed.). (1994). *Group communication in context: Studies of natural groups.* Hillsdale, NJ: Lawrence Erlbaum.

Frey, L. R. (1994). The naturalistic paradigm: Studying small groups in the postmodern era. *Small Group Research, 25,* 551–577.

Frey, L. R. (Ed.). (1995). *Innovations in group facilitation: Applications in natural settings.* Cresskill, NJ: Hampton Press.

Frey, L. R. (Ed.). (2003). *Group communication in context: Studies of bona fide groups.* Mahwah, NJ: Lawrence Erlbaum.

Frey, L. R. (Ed.). (2006). *Facilitating group communication in context: Innovations and applications with natural groups* (2 Vols.). Cresskill, NJ: Hampton Press.

Frey, L., & Sunwolf. (2005). The symbolic-interpretive perspective of group life. In M. S. Poole & A. B. Hollingshead (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 185–240). Newbury Park, CA: Sage.

Froomkin, M. (2003). Habermas@Discourse.Net: Toward a critical theory of cyberspace. *Harvard Law Review, 116,* 749–853.

Fuchs, C. (2003). Structuration theory and self-organization. *Systemic Practice and Action Research, 16,* 133–167.

Fulk, J., & McGrath, J. E. (2005). Touchstones: A framework for comparing premises of nine integrative perspectives on groups. In M. S. Poole & A. B. Hollingshead (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 397–425). Newbury Park, CA: Sage.

Fuller, J. B., Patterson, C. E. P., Hester, K., & Stringer, S. Y. (1996). A quantitative review of research on charismatic leadership. *Psychological Reports, 78,* 271–287.

Gaertner, S. L., Rust, M. C., Dovidio, J. F., Bachman, B. A., & Anastasio, P. A. (1996). The contact hypothesis: The role of a common ingroup identity on reducing intergroup bias among majority and minority group members. In J. L. Nye & A. M. Brower (Eds.), *What's social about social cognition?* (pp. 230–260). Thousand Oaks, CA: Sage.

Gall, A., & Gastil, J. (2006). The magic of Raymond Burr: How jury orientation prepares citizens for jury service. *Court Manager, 21*(2), 27–31.

Gallupe, R. B., Bastianutti, L. M., & Cooper, W. H. (1991). Unblocking brainstorms. *Journal of Applied Psychology, 76,* 137–142.

Gastil, J. (1993). *Democracy in small groups: Participation, decision-making, and communication.* Philadelphia: New Society Publishers.

Gastil, J. (1994a). A definition and illustration of democratic leadership. *Human Relations, 47,* 953–975.

Gastil, J. (1994b). A meta-analytic review of the productivity and satisfaction of democratic and autocratic leadership. *Small Group Research, 25,* 384–410.

Gastil, J. (2000). *By popular demand: Revitalizing representative democracy through deliberative elections*. Berkeley: University of California Press.

Gastil, J. (2008). *Political communication and deliberation.* Thousand Oaks, CA: Sage.

Gastil, J., Black, L., Deess, E. P, & Leighter, J. (2008). From group member to democratic citizen: How deliberating with fellow jurors reshapes civic attitudes. *Human Communication Research, 34,* 137–169.

Gastil, J., Black, L., & Moscovitz, K. (2008). Ideology, attitude change, and deliberation in small face-to-face groups. *Political Communication, 25,* 23–36.

Gastil, J., Burkhalter, S., & Black, L. (2007). Do juries deliberate? A study of deliberation, individual difference, and group member satisfaction at a municipal courthouse. *Small Group Research, 38,* 337–359.

Gastil, J., Deess, E. P., & Weiser, P. (2002). Civic awakening in the jury room: A test of the connection between jury deliberation and political participation. *Journal of Politics,* 64, 585–595.

Gastil, J., Deess, E. P., Weiser, P., & Meade, J. (2008). Jury service and electoral participation: A test of the participation hypothesis. *Journal of Politics, 70,* 1–16.

Gastil, J., & Levine, P. (Eds.). (2005). *The deliberative democracy handbook: Strategies for effective civic engagement in the twenty-first century.* San Francisco: Jossey-Bass.

Gastil, J., & Weiser, P. (2006). Jury service as an invitation to citizenship: Assessing the civic value of institutionalized deliberation. *Policy Studies Journal, 34,* 605–627.

Geller, M. H. (2005). The psychoanalytic perspective. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 87–105). Newbury Park, CA: Sage.

Gero, A. (1985). Conflict avoidance in consensual decision processes. *Small Group Behavior, 16,* 487–499.

Gershenoff, A. B., & Foti, R. J. (2003). Leader emergence and gender roles in all-female groups: A contextual examination. *Small Group Research, 34,* 170–196.

Gersick, C. J. G. (1988). Time and transition in work teams: Toward a new model of group development. *Academy of Management Journal, 31,* 9–41.

Gibb, C. A. (1951). An experimental approach to the study of leadership. *Occupational Psychology, 25,* 233–248.

Gibb, C. A. (1954). Leadership. In G. Lindzey (Ed.), *Handbook of social psychology* (pp. 877–920). Cambridge, MA: Addison-Wesley.

Gibbons, J. (2003). *Forensic linguistics: An introduction to language in the justice system.* New York: Blackwell.

Giddens, A. (1984). *The constitution of society.* Berkeley: University of California Press.

Gilbert, N., & Troitzsch, K. G. (2005). *Simulation for the social scientist* (2nd ed.) New York: Oxford University Press.

Gillies, R. M. (2002). The residual effects of cooperative learning experiences: A two-year follow-up. *The Journal of Educational Research, 96,* 15–20.

Gillies, R. M. (2003).The behaviors, interactions, and perceptions of junior high school students during small group learning. *Journal of Educational Psychology, 95,* 137–147.

Gintis, H., Bowles, S., Boyd, R., & Fehr, E. (2003). Explaining altruistic behavior in humans. *Evolution and Human Behavior, 24,* 153–172.

Gladstein, D. L. (1984). Groups in context: A model of task group effectiveness. *Administrative Science Quarterly, 29,* 499–517.

Goldman, J. A. (1981). Social participation of preschool children in same- versus mixed-age groups. *Child Development, 52,* 644–650.

Goodin, R. E. (2003). *Reflective democracy*. Oxford: Oxford University Press.

Gopal, A., & Prasad, P. (2000). Understanding GDSS in symbolic context: Shifting the focus from technology to interaction. *MIS Quarterly, 24,* 509–546.

Gordon, J. (1992). Work teams: How far have they come? *Training, 29*(10), 59–65.

Gordon, L. (2002). Social movements, leadership, and democracy: Toward more utopian mistakes. *Journal of Women's History, 14,* 102–117.

Gouran, D. S., & Hirokawa, R. Y. (1983). The role of communication in decision-making groups: A functional perspective. In M. S. Mander (Ed.), *Communication in transition: Issues and debates in current research* (pp. 168–185). New York: Praeger.

Gouran, D. S., & Hirokawa, R. Y. (1996). Functional theory and communication in decision-making and problem-solving groups: An expanded view. In R. Y. Hirokawa & M. S. Poole, *Communication and group decision making* (2nd ed., pp. 55–80). Beverly Hills, CA: Sage.

Graham, C. R. (2003). A model of norm development for computer-mediated teamwork. *Small Group Research, 34,* 322–352.

Green, D. P., & Shapiro, I. (1994). *Pathologies of rational choice theory.* New Haven, CT: Yale University Press.

Green, E. H. (1933). Group play and quarreling among pre-school children. *Child Development, 4,* 302–307.

Greenbaum, H. H., & Query, J. L. (1999). Communication in organizational work groups: A review and analysis of natural work group studies. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 539–564). Thousand Oaks, CA: Sage.

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review, 102,* 4–27.

Grossman, A. (2007). *Soon I will be invincible.* New York: Pantheon.

Gruenfeld, D. H. (2006). Status, ideology, and integrative complexity on the U.S. Supreme Court: Rethinking the politics of political decision making. In J. M. Levine & R. L. Moreland (Eds.), *Small groups: Key readings* (pp. 133–156). New York: Psychology Press.

Guastello, S. J. (2005). Nonlinear methods for the social sciences. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 251–272). Newbury Park, CA: Sage.

Guinier, L. (1994). *Tyranny of the majority.* New York: Free Press.

Gully, S. M., Devine, D. J., & Whitney, D. J. (1995). A meta-analysis of cohesion and performance: Effects of levels of analysis and task interdependence. *Small Group Research, 26,* 497–520.

Gunaratna, R. (2003, May). *Al Qaeda's trajectory in 2003* [Research Unit on International Security and Cooperation (UNISCI) Discussion Papers]. Retrieved February 20, 2008, from http://www.ucm.es/BUCM/revistas/cps/16962206/articulos/UNIS0303230007A.PDF

Gutmann, A., & Thompson, D. F. (1996). *Democracy and disagreement.* Cambridge, MA: Harvard University Press.

Gutmann, A., & Thompson, D. F. (2004). *Why deliberative democracy?* Princeton: Princeton University Press.

Habermas, J. (1975). *Legitimation crisis.* Boston: Beacon Press.

The Hamburg connection. (2005, August 19). *BBC News.* Retrieved February 20, 2008, from http://news.bbc.co.uk/1/hi/world/europe/2349195.stm

Hanisch, C. (2006). *The personal is political* [Electronic version, with new introduction by author]. Retrieved April 10, 2008, from http://scholar.alexanderstreet.com/pages/viewpage.action?pageId=2259. (Original work published 1970)

Hans, V. P. (2000). *Business on trial: The civil jury and corporate responsibility*. New Haven: Yale University Press.

Hanson, P. (1977). The activity patterns of elderly households. *Geografiska Annaler, 59,* 109–124.

Hare, A. P. (1962). *Handbook of small group research.* New York: Free Press.

Hare, A. P. (1976). *Handbook of small group research* (2nd ed.). New York: Free Press.

Hare, A. P. (1996). Roles and relationships. In A. P. Hare, H. H. Blumberg, M. F. Davies, & M. Valerie Kent (Eds.), *Small groups: An introduction* (pp. 81–95). Westport, CT: Praeger.

Hare, A. P. (1999). Understanding Paul Moxnes (1999). *Group Dynamics: Theory, Research, and Practice, 3,* 116–117.

Haslett, B. B., & Ruebush, J. (1999). What differences do individual differences in groups make? The effects of individuals, culture, and group composition. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 115–138). Thousand Oaks, CA: Sage.

Hastie, R., Penrod, S. D., & Pennington, N. (1983). *Inside the jury.* Cambridge, MA: Harvard University Press.

Hastie, R., Schkade, D. A., & Payne, J. W. (1998). A study of juror and jury judgments in civil cases: Deciding liability for punitive damages. *Law and Human Behavior*, *22,* 287–314.

Hattwick, L. A. (1940). Group life of the young child. *Journal of Educational Sociology, 14,* 205–216.

Hawkins, K. W., & Power, C. B. (1999). Gender differences in questions asked during small decision-making group discussions. *Small Group Research, 30,* 235–256.

Hecht, M. L., Jackson, R. L., & Ribeau, S. A. (2003). *African American communication: Exploring identity and culture* (2nd ed.). Mahwah, NJ: Erlbaum.

Hegedus, D. M., & Rasmussen, R. V. (1986), Task effectiveness and interaction process of a modified nominal group technique in solving an evaluation problem. *Journal of Management, 12,* 545–560.

Helwig, C. C. (1998). Children's conceptions of fair government and freedom of speech. *Child Development, 69,* 518–531.

Helwig, C. C., & Kim, S. (1999). Children's evaluations of decision-making procedures in peer, family, and school contexts. *Child Development, 70,* 502–512.

Henman, L. D. (2003). Groups as systems. In R. Y. Hirokawa, R. S. Cathcart, L. A. Samovar, & L. D. Henman (Eds.), *Small group communication: Theory and practice, an anthology* (8th ed., pp. 3–7). Los Angeles: Roxbury.

Henrich, J., & Boyd, R. (1998). The evolution of conformist transmission and the emergence of between-group differences. *Evolution and Human Behavior, 19,* 215–241.

Henry, E., & Starr, B. (2006, April 18). *Bush: "I'm the decider" on Rumsfeld.* CNN [Electronic version]. Retrieved March 8, 2008, from http://www.cnn.com/2006/POLITICS/04/18/rumsfeld

Herbert, T. T., & Yost, E. B. (1979). A comparison of decision quality under nominal and interacting consensus group formats. *Decision Sciences, 10,* 358–370.

Hermann, H. (1998) *From biology to sociopolitics: Conceptual continuity in complex systems.* New Haven, CT: Yale University Press.

Hirokawa, R. Y. (1988). Group communication and decision-making performance: A continued test of the functional perspective. *Human Communication Research, 14,* 487–515.

Hirokawa, R. Y. (2003). Communication and group decision-making efficacy. In R. Y. Hirokawa, R.S. Cathcart, L. A. Samovar, & L. D. Henman (Eds.), *Small group communication: Theory and practice, an anthology* (8th ed., pp. 125–133). Los Angeles: Roxbury.

Hirokawa, R. Y., Cathcart, R. S., Samovar, L. A., & Henman, L. D. (Eds.). (2003). *Small group communication: Theory and practice, an anthology.* Los Angeles: Roxbury.

Hirokawa, R. Y., DeGooyer, D. H., & Valde, K. (2003). Characteristics of effective health care teams. In R. Y. Hirokawa, R. S. Cathcart, L. A. Samovar, & L. D. Henman (Eds.), *Small group communication: Theory and practice, an anthology* (8th ed., pp. 148–157). Los Angeles: Roxbury.

Hirokawa, R. Y., Erbert, L., & Hurst, A. (1996). Communication and group decision-making effectiveness. In R. Y. Hirokawa & M. S. Poole (Eds.), *Communication and group decision making* (2nd ed., pp. 269–300). Beverly Hills, CA: Sage.

Hirokawa, R. Y., Ice, R., & Cook, J. (1988). Preference for procedural order, discussion structure, and group decision performance. *Communication Quarterly, 36,* 217–226.

Hirokawa, R. Y., & Johnston, D. D. (1989). Toward a general theory of group decision making: Development of an integrated model. *Small Group Behavior, 20,* 500–523.

Hirokawa, R. Y., & Poole, M. S. (1996). Introduction: Communication and group decision making. In R. Y. Hirokawa & M. S. Poole, *Communication and group decision making* (2nd ed., pp. 3–18). Beverly Hills, CA: Sage.

Hirokawa, R. Y., & Salazar, A. J. (1999). Task-group communication and decision-making performance. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 167–191). Thousand Oaks, CA: Sage.

Hogg, M. A. (2005). The social identity perspective. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 133–157). Newbury Park, CA: Sage.

Hollander, E. P. (1961). Some effects of perceived status on response to innovative behavior. *Journal of Abnormal and Social Psychology, 63,* 247–250.

Hollingshead, A. B. (1975). *Elmtown's youth and Elmtown revisited.* New York: Wiley.

Hollingshead, A. B. (1996). Information suppression and status persistence in group decision making: The effects of communication media. *Human Communication Research, 23,* 193–219.

Hollingshead, A. B., & Fraidin, S. N. (2003). Gender stereotypes and assumptions about expertise in transactive memory. *Journal of Experimental Social Psychology, 39,* 355–363.

Hollingshead, A. B., Wittenbaum, G. M., Paulus, P. B., Hirokawa, R. Y., Ancona, D. G., Peterson, R. S., et al. (2005). A look at groups from the functional perspective. In M. S. Poole & A. B. Hollingshead (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 21–62). Newbury Park, CA: Sage.

Homan, A. C., & Greer, L. L. (2007, July). *Demographic faultlines and subgroup perception: The positive effects of diversity beliefs.* Paper presented at the annual conference of the Interdisciplinary Network for Group Research, Lansing, MI. RetrievedMarch 14, 2008, from http://comm.research.arizona.edu/ingroup/docs/Homan&Greer_INGRoup2007.doc

Homans, G. C. (1950). *The human group.* New York: Harcourt, Brace, & Co.

Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology, 63,* 597–606.

Howard, J. (2000). Social psychology of identities. *Annual Review of Sociology, 26,* 367–393.

Hoyle, R. H. (2005). Design and analysis of experimental research on groups. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 223–239). Newbury Park, CA: Sage.

Huizinga, J. (1938). *Homo Ludens: A study of the play element in culture.* Boston: Beacon.

Hutchison, R. (2005). Larp organizing and gender in Norway. Paper presented at the annual Nordic Larp conference (Knutepunkt). Retrieved April 18, 2008, from http://knutepunkt.laiv.org/kp05/Larp%20organizing%20and%20gender%20in%20Norway.pdf

Inch, E. S., Warnick, B., & Endres, D. (2005). *Critical thinking and communication: The use of reason in argument* (5th ed.). New York: Allyn & Bacon.

Infante, D. A., Rancer, A. S., & Womack, D. F. (2003). *Building communication theory* (4th ed.). Prospect Heights, IL: Waveland Press.

Isenberg, D. J. (1986). Group polarization: A critical review and meta-analysis. *Journal of Personality and Social Psychology, 50,* 1141–1151.

Jablin, F. M., & Sussman, L. (1978). An exploration of communication and productivity in real brainstorming groups. *Human Communication Research, 4,* 329–337.

Jahoda, M. (1956). Psychological issues in civil liberties. *American Psychologist, 11,* 234–240.

Janis, I. L. (1982). *Groupthink: Psychological studies of policy decision and fiascoes* (2nd ed.). Boston: Houghton Mifflin.

Janssens, M., & Brett, J. M. (2006). Cultural intelligence in global teams: A fusion model of collaboration. *Group & Organization Management, 31,* 124–153.

Jarboe, S. (1999). Group communication and creativity processes. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 335–368). Thousand Oaks, CA: Sage.

Jetten, J., Spears, R., & Postmes, T. (2004). Intergroup distinctiveness and differentiation: A meta-analytic integration. *Journal of Personality and Social Psychology, 86,* 862–879.

Johnson, D. W., & Johnson, R. T. (1998). Cooperative learning and social interdependence theory. In R. S. Tindale et al., *Theory and Research on Small Groups* (pp. 9–35). New York: Plenum.

Johnson, D. W., & Johnson, R. T. (2005). Learning groups. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 441–461). Newbury Park, CA: Sage.

Johnson, L. T. (1983). *Decision making in the church: A biblical model.* Philadelphia: Fortress.

Johnson, L. T. (1996). *Scripture and discernment: Decision making in the church.* Nashville: Abingdon.

Johnson, S. D., & Long, L. M. (2002). "Being a part and being apart": Dialectics in group communication. In L. R. Frey (Ed.), *New directions in group communication* (pp. 25–42). Thousand Oaks, CA: Sage.

Jonakait, R. N. (2003). *The American jury system.* New Haven, CT: Yale University Press.

Jones, I. (1995). *Ned Kelly: A short life.* Port Melbourne: Lothian.

Jung, C. G. (1981). *The archetypes and the collective unconscious* (M. Fordham & R. F. C. Hull, Eds., Vol. 9, Part 1). Princeton, NJ: Princeton University. (Original work published 1934)

Kahan, D., Braman, D., Gastil, J., & Slovic, P. (2007). Culture and identity-protective cognition: Explaining the white-male effect in risk perception. *Journal of Empirical Legal Studies, 4,* 465–505.

Kalven, H., & Zeisel, H. (1966). *The American jury.* Boston: Little, Brown.

Kamoche, K. (1995). Rhetoric, ritualism, and totemism in human resource management. *Human Relations, 48,* 367–385.

Kanter, R. M. (2006). Some effects of proportions on group life: Skewed sex ratios and responses to token women. In J. M. Levine & R. L. Moreland (Eds.), *Small groups: Key readings* (37–54). New York: Psychology Press.

Kantor, D., & Lehr, W. (1975). *Inside the family.* San Francisco: Jossey-Bass.

Kaplan, M. F., & Miller, C. E. (1987). Group decision making and normative versus informational influence: Effects of type of issue and assigned decision rule. *Journal of Personality and Social Psychology, 53,* 306–313.

Kaplan, R. E. (1985). Some hidden elements of control in group facilitation: Appreciating the bounded and binding aspects of openness. *Small Group Behavior, 16,* 462–476.

Karakowsky, L., McBey, K., & Miller, D. L. (2004). Gender, perceived competence, and power displays: Examining verbal interruptions in a group context. *Small Group Research, 35,* 407–439.

Katz, A. H. (1981). Self-help and mutual aid: An emerging social movement? *Annual Review of Sociology, 7,* 129–155.

Katz, N., Lazer, D., Arrow, H., & Contractor, N. (2005). The network perspective on small groups: Theory and research. In M. S. Poole, & A. B. Hollingshead (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 277–312). Newbury Park, CA: Sage.

Keating, C. (2005). Building coalitional consciousness. *NWSA Journal, 17*(2), 86–103.

Keith, W. (2007). *Democracy as discussion: The American Forum Movement and civic education.* Lanham MD: Rowman & Littlefield.

Kelley, H. H., & Thibaut, J. W. (1954). Experimental studies of group problem solving. In L. Lindzey (Ed.), *Handbook of social psychology* (pp. 735–785). Cambridge: Addison-Wesley.

Kelly, N. (1879). [Jerilderie letter]. State Library of Victoria: Collections. Retrieved March 16, 2009, from http://www.slv.vic.gov.au/collections/treasures/jerilderie_letter/jerilderieletter1.html

Kemmis, D. (1990). *Community and the politics of place.* Norman: University of Oklahoma Press.

Kernberg, O. (1998). *Ideology, conflict, and leadership in groups and organizations.* New Haven: Yale University Press.

Kernberg, O. F. (1985). Regression in organizational leadership. In A. D. Colman & M. H. Geller (Eds.), *Group relations reader* (Vol. 2, pp. 89–107). Washington, DC: A. K. Rice Institute.

Kerr, N. L. (1981). Social transition schemes: Charting the group's road to agreement. *Journal of Personality and Social Psychology, 41,* 684–702.

Kerr, N. L. (1989). Illusions of efficacy: The effects of group size on perceived efficacy in social dilemmas. *Journal of Experimental Social Psychology, 25,* 287–313.

Kerr, N. L. (2006). Social transition schemes: Charting the group's road to agreement. In J. M. Levine & R. L. Moreland (Eds.) *Small groups: Key readings.* New York: Psychology Press.

Kerr, N. L., Atkin, R. S., Stasser, G., Meek, D., Holt, R. W., & Davis, J. H. (1976). Guilt beyond a reasonable doubt: Effects of concept definition and assigned decision rule on the judgments of mock jurors. *Journal of Personality and Social Psychology, 34,* 282–294.

Kerr, N. L., & Tindale, R. S. (2004). Group performance and decision making. *Annual Review of Psychology, 55,* 623–655.

Kesselman, A. V. (2001). Women's liberation and the left in New Haven, Connecticut 1968–1972. *Radical History Review, 81,* 15–33.

Kessler, R. C., Mickelson, K., & Zhao, S. (1997). Patterns and correlates of self-help group membership in the United States. *Social Policy, 27,* 27–46.

Ketrow, S. M. (1999). Nonverbal aspects of group communication. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 251–287). Thousand Oaks, CA: Sage.

Keyton, J. (1999). Relational communication in groups. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 192–222). Thousand Oaks, CA: Sage.

Keyton, J. (2000). Introduction: The relational side of groups. *Small Group Research, 31,* 387–396.

Keyton, J. (2003). Observing group interaction. In R. Y. Hirokawa, R.S. Cathcart, L. A. Samovar, & L. D. Henman (Eds.), *Small group communication: Theory and practice, an anthology* (8th ed., pp. 256–266). Los Angeles: Roxbury.

Khurana, R. (2002). *Searching for a corporate savior: The irrational quest for charismatic CEOs.* Princeton, NJ: Princeton University Press.

Kipnis, D. (2006). Does power corrupt? In J. M. Levine & R. L. Moreland (Eds.), *Small groups: Key readings* (177–186). New York: Psychology Press.

Kirk, J., & Miller, M. L. (1986). *Reliability and validity in qualitative research.* Beverly Hills, CA: Sage.

Kirton, M. J. (2003). *Adaption-innovation: In the context of diversity and change.* London: Routledge.

Kitetu, C. (2005, December). *Farmer groups as a way of mobilising citizen participation in development: An example from Kenya.* Presentation at the 11th General Assembly of the Council for the Development of Social Science Research in Africa, Maputo, Mozambique. Retrieved March 4, 2008, from www.codesria.org/Links/conferences/general_assembly11/papers/kitetu.pdf

Klaus, G. (1971). *Sprache der politik* [Language of politics]. Berlin: German democratic Republic VEB Deutscher Verlag der Wissenchaften.

Kline, W. (2005). "Please include this in your book": Readers respond to *Our Bodies, Ourselves. Bulletin of the History of Medicine, 79,* 81–110.

Kogon, M. M., Biswas, A., Pearl, D., Carson, R. W., & Spiegel, D. (1997). Effects of medical and psychotherapeutic treatment on the survival of women with metastatic breast carcinoma. *Cancer, 80,* 225–230.

Kohn, A. (1992). *No contest: The case against competition* (Rev. ed.). Boston: Houghton Mifflin.

Konrad, A. M. (2003). Special issue introduction: Defining the domain of workplace diversity scholarship. *Group & Organization Management, 28,* 4–17.

Kramer, J. R. (1985). *Family interfaces: Transgenerational patterns.* New York: Brunner/Mazel.

Kramer, M. W. (2002). Communication in a community theater group: Managing multiple group roles. *Communication Studies, 53,* 151–170.

Kramer, M. W. (2004). Toward a communication theory of group dialectics: An ethnographic study of a community theater group. *Communication Monographs, 71,* 311–332.

Kramer, M. W. (2006). Shared leadership in a community theater group: Filling the leadership role. *Journal of Applied Communication Research, 34,* 141–162.

Kramer, M. W., Kuo, C. L., & Dailey, J. C. (1997). The impact of brainstorming techniques on subsequent group processes. *Small Group Research, 28,* 218–242.

Kramer, R. M., & Brewer, M. B. (2006). Effects of group identity on resource use in a simulated commons dilemma. In J. M. Levine & R. L. Moreland (Eds.) *Small groups: Key readings* (119–132). New York: Psychology Press.

Krancberg, S. (1994). *A Soviet postmortem: Philosophical roots of the "Grand Failure."* Boston: Rowman & Littlefield.

Krebs, V. (2002). Uncloaking terrorist networks. *First Monday, 7*(4). Retrieved February 20, 2008, from http://www.firstmonday.org/issues/issue7_4/krebs

Kroll, B. S. (1983). From small group to public view: Mainstreaming the women's movement. *Communication Quarterly, 31,* 139–147.

Kuhn, T. S. (1996). *The structure of scientific revolutions* (3rd ed.).Chicago: University of Chicago Press.

Kuipers, B., & Vallas, S. (2007, July). *Management structures and team-based organizations: Understanding worker responsiveness to job redesign.* Paper presented at the annual conference of the Interdisciplinary Network for Group Research, Lansing, MI. Retrieved March 4, 2008, from http://comm.research.arizona.edu/ingroup/docs/Kuipers-Vallas.INGRoup2007.pdf.pdf

Kuklinski, J. H., & Luskin, R. C. (1991). Where is the schema? Going beyond the "S" word in political psychology. *American Political Science Review, 85,* 1341–1355.

Lam, S. S. K., & Schaubroeck, J. (2000). Improving group decisions by better pooling. information: A comparative advantage of group decision support systems. *Journal of Applied Psychology, 85,* 565–573.

Larey, T. S., & Paulus, P. B. (1995). Social comparison and goal setting in brainstorming groups. *Journal of Applied Social Psychology, 25,* 1579–1596.

Larkey, K. (1996). Toward a theory of communicative interactions in culturally diverse workgroups. *Academy of Management Review, 21,* 463–491.

Lasch, C. (1979). *The culture of narcissism: American life in an age of diminishing expectations.* New York: Norton.

Latané, B. (1996). Strength from weakness: The fate of opinion minorities in spatially distributed groups. In E. H. Witte & J. H. Davis, *Understanding group behavior: Consensual action by small groups,* (Vol. 1, pp. 193–219). Mahwah, NJ: Lawrence Erlbaum.

Lau, D., & Murnighan, J. K. (1998). Demographic diversity and faultlines: The compositional dynamics of organizational groups. *Academy of Management Review, 23,* 325–340.

Lau, D., & Murnighan, J. K. (2005). Interactions with groups and subgroups: The effects of demographic faultlines. *Academy of Management Journal, 48,* 645–659.

Laughlin, P. R., Zander, M. L., Knievel, E. M., & Tan, T. K. (2003). Groups perform better than the best individuals on letters-to-numbers problems: Informative equations and effective strategies. *Journal of Personality and Social Psychology, 85,* 684–694.

Le Bon, G. (1960/1896). *The crowd: A study of the popular mind.* New York: Viking. (Original work published 1896)

Leach, C. W., Spears, R., Branscombe, N. R., & Doosje, B. (2003). Malicious pleasure: Schadenfreude at the suffering of another group. *Journal of Personality and Social Psychology, 84,* 932–948.

Lee, E.-J. (2006). When and how does depersonalization increase conformity to group: Norms in computer-mediated communication? *Communication Research, 33,* 423–477.

Lei, Z. (2007, July). *Social influence of work teams on frontline problem solving: Initial evidence from hospital nurses.* Paper presented at the annual conference of the Interdisciplinary Network for Group Research, Lansing, MI. Retrieved February 20, 2008, from http://comm.research.arizona.edu/ingroup/docs/INGroup_Lei_7_10_2007.pdf

Leigh, L. J. (1984). A theory of jury trial advocacy. *Utah Law Review*, 763–806.

Leighninger, M. (2006). *The next form of democracy: How expert rule is giving way to shared governance and why politics will never be the same.* (pp. 48, 66, 143–147). Nashville, TN: Vanderbilt University Press.

Lesch, C. L. (1994). Observing theory in practice: Sustaining consciousness in a coven. In L. R. Frey (Ed.), *Group communication in context: Studies of natural groups* (pp. 57–84). Hillsdale, NJ: Lawrence Erlbaum.

Levine, J. M. (1999). Transforming individuals into groups: Some hallmarks of the SDS approach to small group research. *Organizational Behavior and Human Decision Processes, 80,* 21–27.

Levine, J. M., & Moreland, R. L. (1990). Progress in small group research. *Annual Review of Psychology, 41,* 585–634.

Levine, J. M., & Moreland, R. L. (2006). Small groups: An overview. In J. M. Levine & R. L. Moreland (Eds.), *Small groups: Key readings* (pp. 1–10). New York: Psychology Press.

Levine, P., & Lopez, M. H. (2004, January). *Young people and political campaigning on the Internet* [CIRCLE Fact Sheet]. Retrieved April 10, 2008, from http://www.civicyouth.org/research/products/National_Youth_Survey2004/CampaigningonInternet.pdf

Levine, R. V., Martinez, T. S., Brase, G., & Sorenson, K. (1994). Helping in 36 U.S. cities. *Journal of Personality and Social Psychology, 67,* 69–82.

Lewin, K. (1945). The research center for group dynamics. *Sociometry, 8,* 126–136.

Lewin, K., & Lippitt, R. (1938). An experimental approach to the study of autocracy and democracy: A preliminary note. *Sociometry, 1,* 292–300.

Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created "social climates." *Journal of Social Psychology, 10,* 271–279.

Lewis, M. (2005, October 2). The O.J. Simpson verdict, 10 years later: The impact and the aftermath. *BlackAmericaWeb*. Retrieved March 16, 2009, from http://web.archive.org/web/20080206165413/http://www.blackamericaweb.com/site.aspx/bawnews/ojverdict103

Lijphart, A. (1977). *Democracy in plural societies.* New Haven: Yale University Press.

Limayem, M., Banerjee, P., Ma, L. (2006). Impact of GDSS: Opening the black box. *Decision Support Systems, 42,* 945–957.

Lipman-Blumen, J., & Leavitt, H. J. (1999). *Hot groups: Seeding them, feeding them, and using them to ignite your organization.* New York: Oxford University Press.

Lonowski, D. (1994). A return to tradition: Proportional representation in tribal government. *American Indian Culture and Research Journal, 18*(1), 147–163.

Lou, Y, Abrami, P. C., & Spence, J. C. (2000). Effects of within-class grouping on student achievement: An exploratory model. *The Journal of Educational Research. 94,* 101–112.

Lovaglia, M., Mannix, E. A., Samuelson, C. D., Sell, J., & Wilson, R. K. (2005). Conflict, power, and status in groups. In M. S. Poole & A. B. Hollingshead (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 139–184). Newbury Park, CA: Sage.

Lovrin, M. (1995). Interpersonal support among 8–year–old girls who have lost their parents or siblings to AIDS. *Archives of Psychiatric Nursing, 9,* 92–98.

Lowry, P. B., Roberts, T. L., Romano, N. C., Cheney, P. D., & Hightower, R. T. (2006). The impact of group size and social presence on small-group communication: Does computer-mediated communication make a difference? *Small Group Research, 37,* 631–661.

Lun, V. M.-C., & Bond, M. H. (2006). Achieving relationship harmony in groups and its consequence for group performance. *Asian Journal of Social Psychology, 9,* 195–202.

Luvmour, J., & Luvmour, S. (2007). *Everyone wins!: Cooperative games and activities.* Gabriola Island, BC: New Society Publishers.

Mabry, E. A. (1999). The systems metaphor in group communication. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 71–91). Thousand Oaks, CA: Sage.

MacCoun, R. J., & Kerr, N. L. (1988). Asymmetric influence in mock jury deliberation: Jurors' bias for leniency. *Journal of Personality and Social Psychology, 54,* 21–33.

MacIntyre, P. D., Babin, P. A., & Clément, R. (1999). Willingness to communicate: Antecedents and consequences. *Communication Quarterly, 47,* 215–229.

Macy, G., & Neal, J. C. (1995). The impact of conflict-generating techniques on student reactions and decision quality. *Business Communication Quarterly, 58,* 39–45.

Magen, R. H., & Mangiardi, E. (2005). Groups and individual change. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 351–361). Newbury Park, CA: Sage.

Majchrzak, A., Jarvenpaa, S. L., & Hollingshead, A. B. (2007). Coordinating knowledge during emergent groups responding to disasters. *Organization Science, 18,* 147–161.

Majeski, S. (2008, March). *Small group dynamics and foreign policymaking: Empirical evidence from experiments of Repeated Prisoners Dilemma games.* Paper presented at the annual conference of the International Studies Association, San Francisco, CA.

Maltin, L., & Bann, R. W (1992). *The Little Rascals: The life and times of Our Gang* (Rev. ed.). New York: Three Rivers.

Mann, L., Tan, C., MacLeod-Morgan, C., & Dixon, A. (1984). Developmental changes in application of majority rule in group decisions. *British Journal of Developmental Psychology, 2,* 275–281.

Mann, R. D. (1959). A review of the relationships between personality and performance in small groups. *Psychological Bulletin, 56,* 241–270.

Mannix, E. A., Thompson, L. L., & Bazerman, M. H. (1989). Negotiation in small groups. *Journal of Applied Psychology, 74,* 508–517.

Mansbridge, J. J. (1983). *Beyond adversary democracy.* Chicago: University of Chicago Press.

Mansbridge, J. J. (1990). Feminism and democracy. *American Prospect, 1*(2), 126–139.

Mansbridge, J. J. (1992). A paradox of size. In C. G. Benello, *From the ground up* (pp. 159–176). Boston: South End.

Mansbridge, J. J., Hartz-Karp, J., Amengual, M., & Gastil, J. (2006). Norms of deliberation: An inductive study. *Journal of Public Deliberation, 2.* Retrieved March 12, 2008, from http://services.bepress.com/jpd/v2/iss1/art7

Marques, J. M., Abrams, D., & Serôdio, R. G. (2006). Being better by being right: Subjective group dynamics and derogation of in-group deviants when generic norms are undermined. In J. M.

Levine & R. L. Moreland (Eds.), *Small groups: Key readings* (pp. 157–176). New York: Psychology Press.

Marston, S. (2002). Making difference: Conflict over Irish identity in the New York City St. Patrick's Day parade. *Political Geography, 21,* 373–392.

Martins, L. L., Milliken, F. J., Wiesenfeld, B. M., & Salgado, S. R. (2003). Racioethnic diversity and group members' experiences: The role of the racioethnic diversity of the organizational context. *Group & Organization Management, 28,* 75–106.

McGlynn, R. P., Tubbs, D. D., & Holzhausen, K. G. (1995). Hypothesis generation in groups constrained by evidence. *Journal of Experimental Social Psychology, 31,* 64–81.

McGrath, J. E. (1964). *Social psychology: A brief introduction.* New York: Holt, Rinehart & Winston.

McGrath, J. E. (1984). *Groups: Interaction and performance.* Englewood Cliffs: Prentice-Hall.

McGrath, J. E., & Altman, I. (1966). *Small group research: A synthesis and critique of the field.* New York: Holt, Rinehart & Winston.

McKenna, K. Y. A., & Bargh, J. A. (2006). Coming out in the age of the Internet: Identity 'demarginalization' through virtual group participation. In J. M. Levine & R. L. Moreland (Eds.), *Small groups: Key readings* (433–452). New York: Psychology Press.

McLaughlin, C., & Davidson, G. (1986). B*uilders of the dawn: Community lifestyles in a changing world.* Shutesbury, MA: Sirius.

McLeod, P. L., & Kettner-Polley, R. (2005). Psychodynamic perspectives on small groups. In M. S. Poole & A. B. Hollingshead (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 63–98). Newbury Park, CA: Sage.

Mcleod, P. L., & Kettner-Polley, R. B. (2004). Contributions of psychodynamic theories to understanding small groups. *Small Group Research, 35,* 333–361.

McLeod, P. L., Lobel, S. A., & Cox, T. H. (1996). Ethnic diversity and creativity in small groups. *Small Group Research, 27,* 248–264.

McNulty, J. (2006, August 14–17). Social psychologist returns to South Africa 50 years later. *UC Santa Cruz Currents Online, 11*(4). Retrieved April 10, 2008, from http://currents.ucsc.edu/06–07/08–14/pettigrew.asp

McPherson, M., Smith-Lovin, L., & Brashears, M. (2006). Social isolation in America: Changes in core discussion networks over two decades. *American Sociological Review, 71,* 353–375.

Meier, C. (2003). Doing "groupness" in a spatially distributed work group : The case of videoconferences at technics. In L. R. Frey (Ed.), *Group communication in context: Studies of bona fide groups* (pp. 367–397). Mahwah, NJ: Lawrence Erlbaum.

Meindl, J. R., Ehrlich, S. B., & Dukerich, J. M. (2006). In J. M. Levine & R. L. Moreland (Eds.), *Small groups: Key readings* (pp. 401–420). New York: Psychology Press.

Mejias, R. J. (2007). The interaction of process losses, process gains, and meeting satisfaction within technology-supported environments. *Small Group Research, 38,* 156–194.

Meyers, R. A., Berdahl, J. L., Brashers, D. E., Considine, J. R., Kelly, J. R., Moore, C., et al. (2005). Understanding groups from a feminist perspective. In M. S. Poole & A. B. Hollingshead (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 241–276). Newbury Park, CA: Sage.

Meyers, R. A., & Brashers, D. E. (1998). Argument in group decision making: Explicating a process model and investigating the argument-outcome link. *Communication Monographs, 65,* 261–281.

Meyers, R. A., & Brashers, D. E. (2002). Rethinking traditional approaches to argument in groups. In L. R. Frey (Ed.), *New directions in group communication* (pp. 141–158). Thousand Oaks, CA: Sage.

Meyers, R. A., Brashers, D. E., & Hanner, J. (2000). Majority-minority influence: Identifying argumentative patterns and predicting argument-outcome links. *Journal of Communication, 50,* 3–29.

Meyers, R. A., Seibold, D. R., & Shoham, M. D. (2007, July). *Communicative influence in groups: A review and critique of theoretical perspectives and models.* Paper presented at the annual conference of the Interdisciplinary Network for Group Research, Lansing, MI. Retrieved February 20, 2008, from http://comm.research.arizona.edu/ingroup/docs/INGrouppaper,MeyersSeiboldShohamJuly18–07.doc

Miccolo, M.A., & Spanier, A.H. (1993) Critical care management in. the 1990s: Making collaborative practice work. *Critical Care Clinics, 9,* 443–453.

Mill, J. S. (1998). *On liberty and other essays.* Oxford: Oxford University Press. (Original work published 1859)

Miller, C. E. (1985). Group decision making under majority and unanimity decision rules. *Social Psychology Quarterly, 48,* 51–61.

Miller, K. (2002). *Communication theories: Perspectives, processes, and contexts.* Boston: McGraw-Hill.

Miller, K. I., & Monge, P. R. (1986). Participation, satisfaction, and productivity: A meta-analytic review. *Academy of Management Journal, 29,* 727–753.

Miller, N. R. (1983). Pluralism and social choice. *American Political Science Review, 77,* 734–747.

Mitroff, L. (1983). Archetypal social systems analysis: On the deeper structure of human systems. *Academy of Management Review, 8,* 387–397.

Miura, A., & Hida, M. (2004). Synergy between diversity and similarity in group-idea generation. *Small Group Research, 35,* 540–564.

Moran, C. D. (2007). The public identity work of evangelical Christian students. *Journal of College Student Development, 48*(4). Retrieved April 18, 2008, from http://muse.jhu.edu/journals/journal_of_college_student_development/v048/48.4moran.pdf

Moreland, R. L. (1996). Lewin's legacy for small-groups research. *Systems Practice, 9,* 7–26.

Moreland, R. L. (2006). Transactive memory: Learning who knows what in work groups and organizations. In J. M. Levine & R. L. Moreland (Eds.), *Small groups: Key readings* (pp. 327–346). New York: Psychology Press.

Moreland, R. L., Argote, L., & Krishnan, R. (1998). Training people to work in groups. In R. S. Tindale et al. (Eds.), *Theory and research on small groups* (pp. 37–60). New York: Plenum.

Moreland, R. L., & Levine, J. M. (2006). Socialization in organizations and work groups. In J. M. Levine & R. L. Moreland (Eds.), *Small groups: Key readings* (pp. 469–498). New York: Psychology Press.

Moreland, R. L., Levine, J. M., & Wingert, M. L. (1996). Creating the ideal group: Composition effects at work. In E. H. Witte & J. H. Davis, *Understanding group behavior: Consensual action by small groups,* (Vol. 2, pp. 11–35). Mahwah, NJ: Lawrence Erlbaum.

Morgan, G. (1986). *Images of organization.* Beverly Hills, CA: Sage.

Moxnes, P. (1998). Fantasies and fairy tales in groups and organizations: Bion's basic assumptions and the deep roles. *European Journal of Work and Organizational Psychology, 7*(3), 251–266.

Moxnes, P. (1999a). Deep roles: Twelve primordial roles of mind and organization. *Human Relations, 52,* 1127–1144.

Moxnes, P. (1999b). Understanding roles: A psychodynamic model for role differentiation in groups. *Group Dynamics: Theory, Research, and Practice, 3,* 99–113.

Mullen, B. (1991). Group composition, salience, and cognitive representations: The phenomenology of being in a group. *Journal of Experimental Social Psychology, 27,* 297–323.

Mullen, B., Anthony, T., Salas, E., & Driskell, J. E. (1994). Group cohesiveness and quality decision-making: An integration of tests of the groupthink hypothesis. *Small Group Research, 25,* 189–204.

Mullen, B., & Copper, C. (1994). The relation between group cohesiveness and performance: An integration. *Psychological Bulletin, 115,* 210–227.

Mullen, B., Driskell, J. E., & Salas, E. (1998). Meta-analysis and the study of group dynamics. *Group Dynamics, 2,* 1–17.

Mullen, B., & Hu, L. (1989). Perceptions of ingroup and outgroup variability: A meta-analytic integration. *Basic and Applied Social Psychology*, *10*, 233–252.

Mullen, B., Johnson, C., & Salas, E. (1991). Productivity loss in brainstorming groups: A meta-analytic integration. *Basic and Applied Social Psychology,12,* 3–23.

Mullen, B., Salas, E., & Driskell, J. E. (1989). Salience, motivation. and artifact as contributions to the relation between participation rate and leadership. *Journal of Experimental Social Psychology, 25,* 545–559.

Mullen, B., & Skitka, J. (2006). Exploring the psychological underpinnings of the moral mandate effect: Motivated reasoning, group differentiation, or anger? *Journal of Personality and Social Psychology, 90,* 629–643.

Murphy, M. (2004). Immodest witnessing: The epistemology of vaginal self-examination in the U.S. feminist self-help movement. *Feminist Studies, 30,* 115–147.

Murrell, A. J., Stewart, A. C., & Engel, B. T. (1993). Consensus versus devil's advocacy: The influence of decision process and task structure on strategic decision making. *Journal of Business Communication, 30,* 399–414.

Mutz, D. C. (2002). Cross-cutting social networks: Testing democratic theory in practice. *American Political Science Review, 96,* 111–126.

Nagda, B. A. (2006). Breaking barriers, crossing borders, building bridges: Communication processes in intergroup dialogues. *Journal of Social Issues, 62,* 553–576.

National Commission on Terrorist Attacks Upon the United States. (2004). *9/11 Commission report* [Electronic version]. Washington, DC: National Commission on Terrorist Attacks upon the United States.

Nemeth, C. (1977). Interactions between jurors as a function of majority vs. unanimity decision rules. *Journal of Applied Social Psychology, 7,* 38–56.

Nemeth, C. J. (1992). Minority dissent as a stimulant to group performance. In S. Worchel, W. Wood, & J. A. Simpson (Eds.), Group process and productivity (pp. 95–111). Newbury Park, CA: Sage.

Nemeth, C. J., & Staw, B. M. (1989). The tradeoffs of social control and innovation within groups and organizations. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 22, pp. 175–210). New York: Academic Press.

Nicotera, A. M. (1994). The use of multiple approaches to conflict: A study of sequences. *Human Communication Research, 20,* 592–621.

Nielsen, T., Sundstrom, E. D., & Halfhill, T. R. (2005). Group dynamics and effectiveness: Five years of applied research. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 285–311). Newbury Park, CA: Sage.

Niman, M. I. (1997). *People of the Rainbow: A nomadic utopia.* Knoxville: University of Tennessee Press.

O'Brien, S., & Bierman, K. (1988). Conceptions and perceived influence of peer groups: Interviews with preadolescents and adolescents. *Child Development, 59,* 1360–1366.

Oetzel, J. G. (2002). The effects of culture and cultural diversity on communication in work groups. In L. R. Frey (Ed.), *New directions in group communication* (pp. 121–137). Thousand Oaks, CA: Sage.

Oetzel, J. G., & Robbins, J. (2003). Multiple identities in teams in a cooperative supermarket. In L. R. Frey (Ed.), *Group communication in context: Studies of bona fide groups* (pp. 183–208). Mahwah, NJ: Lawrence Erlbaum.

Office of Circuit Executive. (2003). *Manual of model criminal jury instructions.* San Francisco: United States Courts for the Ninth Circuit. Retrieved March 16, 2009, from http://web.archive.org/web/20060924093348/http://www.ce9.uscourts.gov/web/sdocuments.nsf/crim

Olufowote, J. O. (2006). Rousing and redirecting a sleeping giant: Symbolic convergence theory and complexities in the communicative constitution of collective action. *Management Communication Quarterly, 19,* 451–492.

Orlitzky, M., & Hirokawa, R. Y. (2001). To err is human, to correct for it divine: A meta-analysis of research testing the functional theory of group decision-making effectiveness. *Small Group Research , 32,* 313–341.

Osborn, A. F. (1953). *Applied imagination.* New York: Scribner.

Oxley, N. L., Dzindolet, M. T., & Paulus, P. B. (1996). The effects of facilitators on the performance of brainstorming groups. *Journal of Social Behavior and Personality, 11,* 633–646.

Packer, D. J. (2008). On being both with us and against us: A normative conflict model of dissent in social groups. *Personality and Social Psychology Review, 12,* 50–72.

Paletz, S. B. F., Peng, K., Erez, M., & Maslach, C. (2004). Ethnic composition and its differential impact on group processes in diverse teams. *Small Group Research, 35,* 128–157.

Palmer, M. R., & Newsom, R. (1982). Paulo Freire's consciousness raising: Politics, education, and revolution in Brazil. *Educational Studies: A Journal in the Foundations of Education, 13,* 183–189.

Park, W.-W. (1990). A review of research on groupthink. *Journal of Behavioral Decision Making, 3,* 229–245.

Pateman, C. (1989). *The disorder of women: Democracy, feminism, and political theory.* Cambridge: Polity Press.

Paulus, P. B. (2007). Fostering creativity in groups and teams. In J. Zhou & C. E. Shalley (Eds.), *The handbook of organizational creativity* (pp. 159–182). Boca Raton, FL: Taylor & Francis.

Paulus, P. B., & Dzindolet, M. T. (1993). Social influence processes in group brainstorming. *Journal of Personality and Social Psychology, 64,* 575–586.

Paulus, P. B., Dzindolet, M. T., Poletes, G., & Camacho, M. L. (1993). Perception of performance in group brainstorming: The illusion of group productivity. *Personality and Social Psychology Bulletin, 19,* 78–89.

Paulus, P. B., Larey, T. S., & Dzindolet, M. T. (2001). Creativity in groups and teams. In M. Turner (Ed.), *Groups at work: Theory and research (pp. 319–338).* Hillsdale, NJ: Lawrence Erlbaum.

Paulus, P. B., & Yang, H. C. (2000). Idea generation in groups: A basis for creativity in organizations. *Organizational Behavior and Human Decision Processes, 82,* 76–87.

Pavitt, C. (1999). Theorizing about the group communication-leadership relationship: Input-process-output and functional models. In L. R. Frey (Ed.), *The handbook of group communication theory and research* (pp. 313–334). Thousand Oaks, CA: Sage.

Pavitt, C., Zingerman, V., Towey, E., & McFeeters, C. (2006). Group communication during resource dilemmas: 2. Effects of harvest limit and reward asymmetry. *Communication Research, 33,* 64–91.

Pearce, W. B., & Littlejohn, S. W. (1997). *Moral conflict: When social worlds collide.* Thousand Oaks, CA: Sage.

Pearce, W. B., & Pearce, K. A. (2000). Extending the theory of the coordinated management of meaning (CMM) through a community dialogue process. *Communication Theory, 10,* 405–424.

Pena, J., Walther, J. B., & Hancock, J. T. (2007). Effects of geographic distribution on dominance perceptions in computer-mediated groups. *Communication Research, 34,* 313–331.

Peeters, M. A. G., Rutte, C. G., van Tuijl, H. F. J. M., & Reymen, I. M. M. J. (2006). The Big Five personality traits and individual satisfaction with the team. *Small Group Research, 37,* 187–211.

Percy, M., & Freeman, J. (1972). *Getting together* [Pamphlet originally distributed by Cape Cod Women's Liberation; electronic version now available in adapted form]. Retrieved March 16, 2009, from http://userpages.umbc.edu/~korenman/wmst/crguide2.html

Peterson, R. (2002). The group dynamics Q-sort in group communication research. In L. R. Frey (Ed.), *New directions in group communication* (pp. 79-96). Thousand Oaks, CA: Sage.

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology, 90,* 751–783.

Pettus, A. B. (1990). The verdict is in: A study of jury decision making factors, moment of personal decision, and jury deliberations--from the juror's point of view. *Communication Quarterly*, *38*, 83–97.

Philipsen, G., Mulac, A., & Dietrich, D. (1979). The effects of social interaction on group idea generation. *Communication Monographs, 46,* 119–125.

Phillips, G. M. (1984). Consensus as cultural tradition: A study of agreements between marital partners. In G. M. Phillips & J. T. Wood (Eds.), *Emergent issues in human decision making* (pp. 97–119). Carbondale: Southern Illinois University Press.

Polatnick, M. R. (1996). Diversity in women's liberation ideology: How a black and a white group of the 1960s viewed motherhood. *Signs, 21,* 679–696.

Polletta, F. (2002). *Freedom is an endless meeting: Democracy in American social movements.* Chicago: University of Chicago Press.

Polletta, F. (2006). *It was like a fever: Storytelling in protest and politics.* Chicago: University of Chicago Press.

Polletta, F., & Jasper, J. M. (2001). Collective identity and social movements. *Annual Review of Sociology, 27,* 283–305.

Pomerantz, E. M., Chaiken, S., & Tordesillas, R. S. (1995). Attitude strength and resistance processes. *Journal of Personality and Social Psychology, 69,* 408–419.

Poole, M. S. (1983). Decision development in small groups II: A study of multiple sequences in decision making. *Communication Monographs, 50,* 206–232.

Poole, M. S., & Baldwin, C. L. (1996). Developmental processes in group decision making. In R. Y. Hirokawa & M. S. Poole, *Communication and group decision making* (2nd ed., pp. 215–241). Beverly Hills, CA: Sage.

Poole, M. S., & DeSanctis, G. (1990). Understanding the use of group decision support systems: The theory of adaptive structuration. In J. Fulk & C. Steinfield (Eds.), *Organizations and communication technology* (pp. 175–195). Newbury Park, CA: Sage.

Poole, M. S., & DeSanctis, G. (1992). Microlevel structuration in computer-supported group decision making. *Human Communication Research, 19,* 5–49.

Poole, M. S., & Hollingshead, A. B. (Eds.). (2005). *Theories of small groups: Interdisciplinary perspectives.* Newbury Park, CA: Sage.

Poole, M. S., Hollingshead, A. B., McGrath, J. E., Moreland, R., & Rohrbaugh, J. (2005). Interdisciplinary perspectives on small groups. In M. S. Poole & A. B. Hollingshead (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 1–20). Newbury Park, CA: Sage.

Poole, M. S., Keyton, J., & Frey, L. R. (1999). Group communication methodology: Issues and considerations. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 92–112). Thousand Oaks, CA: Sage.

Poole, M. S., McPhee, R. D., & Seibold, D. R. (1982). A comparison of normative and interactional explanations of group decision-making: Social decision schemes versus valence distributions. *Communication Monographs, 49,* 1–19.

Poole, M. S., & Roth, J. (1989a). Decision development in small groups IV: A typology of group decision paths. *Human Communication Research, 15,* 323–356.

Poole, M. S., & Roth, J. (1989b). Decision development in small groups V: Test of a contingency model. *Human Communication Research, 15,* 549–589.

Poole, M. S., Seibold, D. R., & McPhee, R. D. (1985). Group decision-making as a structurational process. *Quarterly Journal of Speech, 71,* 74–102.

Poole, M. S., Seibold, D. R., & McPhee, R. D. (1996). The structuration of group decisions. In R. Y. Hirokawa & M. S. Poole, *Communication and group decision making* (2nd ed., pp. 115–142). Beverly Hills: Sage.

Popielarz, P. (1999). (In)voluntary association: A multilevel analysis of gender segregation in voluntary associations. *Gender and Society, 13,* 234–50.

Posluszny, D. M., Hyman, K. B., & Baum, A. (1998). Group interventions in cancer: The benefits of social support and education on patient adjustment. In R. S. Tindale et al., *Theory and research on small groups* (pp. 87–105). New York: Plenum.

Posner, R. (2004, March 1). The 9/11 Report: A dissent. *New York Times.* Retrieved March 1, 2009, from http://query.nytimes.com/gst/fullpage.html?res=9C07E6D81E3FF93AA1575BC0A9629C8B63

Postmes, T., Spears, R., Lee, A. T., & Novak, R. J. (2005). Individuality and social influence in groups: Inductive and deductive routes to group identity. *Journal of Personality and Social Psychology, 89,* 747–763.

Prentice, D., Miller, D., & Lightdale, J. R. (1994). Asymmetries in attachment to groups and to their members: Distinguishing between common identity and common-bond groups. *Personality and Social Psychology Bulletin, 20,* 484–493.

Priem, R. L., Harrison, D. A., & Muir, N. K. (1995). Structured conflict and consensus outcomes in decision making groups. *Journal of Management, 21,* 691–710.

Priem, R. L., & Price, K. H. (1991). Process and outcome expectations for the dialectical inquiry, devil's advocacy, and consensus techniques of strategic decision making. *Group & Organization Studies, 16,* 206–225.

Propp, K. M. (1995). An experimental examination of biological sex as a status cue in decision-making groups and its influence on information use. *Small Group Research, 26,* 451–474.

Propp, K. M. (1999). Collective information processing in groups. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 225–250). Thousand Oaks, CA: Sage.

Propp, K. M. (2003). In search of the assembly bonus effect: Continued exploration of communication's role in group memory. *Human Communication Research, 29,* 600–606.

Putnam, L. L. (1979). Preference for procedural order in task-oriented small groups. *Communication Monographs, 46,* 193–218.

Putnam, L. L., & Stohl, C. (1990). Bona fide groups: A reconceptualization of groups in context. *Communication Studies, 41,* 248–265.

Putnam, L. L., & Stohl, C. (1996). Bona fide groups: An alternative perspective for communication and small group decision making. In R. Y. Hirokawa & M. S. Poole (Eds.), *Communication and group decision making* (2nd ed., pp. 147–178). Beverly Hills, CA: Sage.

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community.* New York: Simon & Schuster.

Quadagno, J. S. (1979). Paradigms in evolutionary theory: The sociobiological model of natural selection. *American Sociological Review, 44,* 100–109.

Quaddus, M. A., Tung, L. L., Chin, L., Seow, P. P., & Tan, G. C. (1998). Non-networked group decision support systems: Effects of devil's advocacy and dialectical inquiry. *Proceedings of the Thirty-First Hawaii International Conference on Systems Sciences, 1,* 38–47.

Rawlins, W. K. (1984). Consensus in decision-making groups: A conceptual history. In G. M. Phillips & J. T. Wood (Eds.), *Emergent issues in human decision making* (pp. 19–39). Carbondale, IL: Southern Illinois University Press.

Reaves, J. (2007, September 4). *Little Miss Sunshine* [Movie review]. *Chicago Tribune.*

Reed, R. R. (1990). Are *Robert's Rules of Order* counterrevolutionary? Rhetoric and the reconstruction of Portuguese politics. *Anthropological Quarterly, 63,* 134–144.

Renz, M. A. (2006a). Paving consensus: Enacting, challenging, and revising the consensus process in a cohousing community. *Journal of Applied Communication Research, 34,* 163–190.

Renz, M. A. (2006b). The meaning of consensus and blocking for cohousing groups. *Small Group Research, 37,* 351–376.

Rheingold, H. (2003). *Smart mobs: The next social revolution.* New York: Basic Books.

Richard, F. D., Bond, C. F., Jr., & Stokes-Zoota, J. J. (2003). One hundred years of social psychology quantitatively described. *Review of General Psychology, 7,* 331–363.

Richard, O., McMillan, A., Chadwick, K., & Dwyer, S. (2003). Employing an innovation strategy in racially diverse workforces: Effects on firm performance. *Group Organization Management, 28,* 107–126.

Richerson, P., & Boyd, R. (2005). *Not by genes alone: How culture transformed human evolution.* Chicago: University of Chicago Press.

Ridgeway, C. L. (1991). The social construction of status value: Gender and other nominal characteristics. *Social Forces, 70,* 367–86.

Ridgeway, C. L. & Smith-Lovin, L. (1999). The gender system and interaction. *Annual Review of Sociology, 25,* 191–216.

Rietzschel, E. F., De Dreu, C. K. W., & Nijstad, B. A. (2007). Personal need for structure and creative performance: The moderating influence of fear of invalidity. *Personality and Social Psychology Bulletin, 33,* 855–866.

Riva, M. T., & Wachtel, M. (2005). Field studies. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 241–250). Newbury Park, CA: Sage.

Robert, H. M. (1990). *Robert's rules of order.* Glenview, IL: Scott, Foresman and Co. (Original work published 1876)

Rockett, T., & Valenti, M. A. (2007, July). When a good relationship goes bad: A theoretical examination of the impact of relational rifts on affect and group behavior and performance. Paper presented at the annual conference of the Interdisciplinary Network for Group Research, Lansing, MI. Retrieved April 7, 2008, from http://comm.research.arizona.edu/ingroup/docs/rockett-valenti4.doc.

Rogers, C. R. (1979). The process of the basic encounter group. In R. S. Cathcart & L. A. Samovar (Eds.), *Small group communication: A reader* (3rd ed., pp. 157–172). Dubuque, IA: William C. Brown.

Rosenthal, N. B. (1984). Consciousness raising: From revolution to re-evaluation. *Psychology of Women Quarterly, 8,* 309–326.

Rousseau, V., Aube, C., & Savoie, A. (2006). Teamwork behaviors: A review and an integration of frameworks. *Small Group Research, 37,* 540–570.

Rudman, L. A., Kilianski, S. E. (2000). Implicit and explicit attitudes toward female authority. *Personality and Social Psychology Bulletin, 26,* 1315–1328.

Rutan, J. S., Stone, W. N., & Shay, J. J. (2007). *Psychodynamic group psychotherapy* (4th ed.). New York: Guilford.

Ryan, B. (1992). *Feminism and the women's movement: Dynamics of change in social movement ideology and activism.* London: Routledge.

Ryan, K. M. (2007, July). The role of the leader in collective efficacy beliefs and adaptive team performance. Paper presented at the annual conference of the Interdisciplinary Network for Group Research, Lansing, MI. Retrieved March 21, 2008, from http://comm.research.arizona.edu/ingroup/docs/RoleoftheLeaderinCollectiveEfficacyandAdaptivePerformance_KRyan.doc

Ryfe, D. M. (2007). Toward a sociology of deliberation. *Journal of Public Deliberation, 3,* 1–27.

Sadowsky, E. (1992). Taking part: Democracy in the elementary school. In A. Garrod (Ed.), *Learning for life: Moral education theory and practice* (pp. 246–258). Westport, CT: Greenwood.

Safire, W. (2004, August 8). On language: Groupthink. *New York Times.* Retrieved March 16, 2009, from http://query.nytimes.com/gst/fullpage.html?res=9C01E2DD173CF93BA3575BC0A9629C8B63&sec=&spon=&pagewanted=2

Sager, K. L., & Gastil, J. (1999). Reaching consensus on consensus: A study of the relationships between individual decision-making styles and use of the consensus decision rule. *Communication Quarterly, 47,* 67–79.

Sager, K. L., & Gastil, J. (2002). Exploring the psychological foundations of democratic group deliberation: Personality factors, confirming interaction, and democratic decision making. *Communication Research Reports, 19,* 56–65.

Sager, K. L., & Gastil, J. (2006). The origins and consequences of consensus decision making: A study of the relationships among personality factors, decision rules, and group outcomes. *Southern Communication Journal, 71,* 1–24.

Salas, E., Sims, D. E., & Burke, C. S. (2005). Is there a "Big Five" in teamwork? *Small Group Research, 36,* 555–599.

Salazar, A. J. (1996). An analysis of the development and evolution of roles in the small group. *Small Group Research, 27,* 475–503.

Salazar, A. J. (2002). Self-organizing and complexity perspectives of group creativity: Implications for group communication. In L. R. Frey (Ed.), *New directions in group communication* (pp. 179–199). Thousand Oaks, CA: Sage.

Salen, K., & Zimmerman, E. (2004). *Rules of play: Game design fundamentals.* Cambridge, MA: MIT Press.

Sanders, K., & Nauta, A. (2004). Social cohesiveness and absenteeism: The relationship between characteristics of employees and short-term absenteeism within an organization. *Small Group Research, 35,* 724–741.

Sanders, L. M. (1997). Against deliberation. *Political Theory, 25,* 347–376.

Sandys, M., & Dillehay, R. C. (1995). First-ballot votes, predeliberation dispositions, and final verdicts in jury trials. *Law and Human Behavior*, *18*, 175–195.

Sapiro, V. (1990). The women's movement and the creation of gender consciousness: Social movements as socialization agents. In O. Ichilov (Ed.), *Political socialization, citizenship, education, and democracy* (pp. 266–280). New York: Teachers College.

Sarachild, K. (1978). Consciousness-raising: A radical weapon. In K. Sarachild (Ed.), *Feminist revolution: Redstockings of the women's liberation movement* (pp. 144–150). New York: Random House. Retrieved March 10, 2008, from http://scriptorium.lib.duke.edu/wlm/fem/sarachild.html

Saunders, C. S., & Ahuja, M. K. (2006). Are all distributed teams the same? Differentiating between temporary and ongoing distributed teams. *Small Group Research, 37,* 662–700.

Scheerhorn, D., Gesist, P., & Teboul, J. C. B. (1994). Beyond decision-making in decision making groups: Implications in the study of group communication. In L. R. Frey (Ed.), *Group communication in context: Studies of natural groups* (pp.247-262). Hillsdale, NJ: Lawrence Erlbaum.

Schiller, S. Z., & Mandviwalla, M. (2007). Virtual team research: An analysis of theory use and a framework for theory appropriation. *Small Group Research, 38,* 12–59.

Schkade, D., Sunstein, C. R., & Hastie, R. (2006). What happened on Deliberation Day? *U Chicago Law & Economics, Olin Working Paper No. 298* Retrieved March 16, 2009 from SSRN http://ssrn.com/abstract=911646

Scholl, W. (1996). Effective teamwork: A theoretical model and test in the field. In E. H. Witte & J. H. Davis, *Understanding group behavior: Consensual action by small groups,* (Vol. 2, pp. 127–146). Mahwah, NJ: Lawrence Erlbaum.

Schuerger, J. M., Zarrella, K. L., & Hotz, A. S. (1989). Factors that influence the temporal stability of personality by questionnaire. *Journal of Personality and Social Psychology, 56,* 777–783.

Schulz-Hardt, S., Brodbeck, F. C., Mojzisch, A., Kerschreiter, R., & Frey, D. (2006). Group decision making in hidden profile situations: Dissent as a facilitator for decision quality. *Journal of Personality and Social Psychology, 91,* 1080–1093.

Schutt, R. (2008). Consensus is not unanimity: Making decisions cooperatively. Retrieved March 5, 2008, from http://www.vernalproject.org/papers/process/ConsensusNotUnanimity.pdf

Schütz, H., & Six, B. (1996). How strong is the relationship between prejudice and discrimination? A meta-analytic answer. *International Journal of Intercultural Relations, 20,* 441–462.

Schütz, W. C. (1958). *FIRO: A three dimensional theory of interpersonal behavior.* New York: Holt, Rinehart & Winston.

Schwarz, A., & Schwarz, C. (2007). The role of latent beliefs and group cohesion in predicting group decision support systems success. *Small Group Research, 38,* 195–229.

Schweiger, D. M., Sandberg, W. R., & Rasan, J. W. (1986). Group approaches for improving strategic decision making: A comparative analysis of dialectical inquiry, devil's advocacy, and consensus. *Academy of Management Journal, 29,* 51–71.

Schweiger, D. M., Sandberg, W. R., & Rechner, P. (1989). Experiential effects of dialectical inquiry, devil's advocacy, and consensus approaches to strategic decision making. *Academy of Management Journal, 32,* 745–772.

Schwenk, C. (1989). A meta-analysis on the comparative effectiveness of devil's advocacy and dialectical inquiry. *Strategic Management Journal, 10,* 303–306.

Schwenk, C. (1990). Effects of dialectical inquiry on decision-making: A meta-analysis. *Organizational Behavior and Human Decision Processes, 47,* 161–176.

Schwenk, C. R., & Cosier, R. A. (1993). Effects of consensus and devil's advocacy on strategic decision-making. *Journal of Applied Social Psychology, 23,* 126–139.

Schwenk, C., & Valcich, J. S. (1994). Effects of devil's advocacy and dialectical inquiry on individuals versus groups. *Organizational Behavior and Human Decision Processes, 59*(2), 210–222.

Scott, C. R. (1999). Communication technology and group communication. In L. R. Frey (Ed.), *The handbook of group communication theory and research* (pp. 432–472). Thousand Oaks, CA: Sage.

Scott, C. R., Corman, S. R., & Cheney, G. (1998). Development of a structurational model of identification in the organization. *Communication Theory, 8,* 298–336.

Seibold, D. R., & Meyers, R. A. (1986). Communication and influence in group decision-making. In R. Y. Hirokawa & M. S. Poole (Eds.), *Communication and group decision-making* (pp. 133–155). Beverly Hills, CA: Sage.

Sexton, C. (1994). Self-managed work teams: TQM technology at the employee level. *Journal of Organisational Change Management, 7*(2), 45–52.

Seyfarth, B. (2000). Structuration theory in small group communication: A review and agenda for future research. In M. E. Roloff & G. D. Paulson, *Communication Yearbook 23* (pp. 341–379). Newbury Park, CA: Sage.

Shapcott, K. M., Carron, A. V., Burke, S. M., Bradshaw, M. H., & Estabrooks, P. A. (2006). Member diversity and cohesion and performance in walking groups. *Small Group Research, 37,* 701–720.

Sheeran, M. (1983). *Beyond majority rule: Voteless decisions in the Religious Society of Friends.* Philadelphia: Philadelphia Yearly Meeting.

Sgt. Pepper's Lonely Hearts Club Band. (2003, Nov. 1). *Rolling Stone*. Retrieved April 4, 2008, from http://www.rollingstone.com/news/story/6595610

Shimanoff, S. B., & Jenkins, M. M. (2003). Leadership and gender: Challenging assumptions and recognizing resources. In R. Y. Hirokawa, R. S. Cathcart, L. A. Samovar, & L. D. Henman (Eds.), *Small group communication: Theory and practice, an anthology* (8th ed., pp. 184–198). Los Angeles: Roxbury.

Shoemaker, H. J. (1991). Self-construction in a small group setting. *Small Group Research, 22,* 339–359.

Shreve, Anita. 1989. *Women together, women alone: The legacy of the consciousness raising movement.* New York: Viking Press.

Sigmund Freud Museum. (n.d.). Sigmund Freud chronology. Retrieved April 20, 2008, from http://www.freud-museum.at/freud/chronolg/1896-e.htm

Sims, D. E., Salas, E., & Burke, C. S. (2005). Promoting effective team performance through training. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 407–425). Newbury Park, CA: Sage.

Singh, R. (1997). Group harmony and interpersonal fairness in reward allocation: On the loci of the moderation effect. *Organizational Behavior and Human Decision Processes 72,* 158–182.

Smith, T. A. (1999). The delegates' experience. In M. McCombs & A. Reynolds (Eds.), *The poll with a human face: The National Issues Convention experiment in political communication* (pp. 39–58). Mahwah, NJ: Lawrence Erlbaum.

Smith-Lovin, L., & Brody, C. (1989). Interruptions in group discussions: The effects of gender and group communication. *American Sociological Review, 54,* 424–435.

Socha, T. J. (1999). Communication in family units: Studying the first "group." In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 475–492). Thousand Oaks, CA: Sage.

Socha, T. J., & Socha, D. M. (1994). Children's task-group communication: Did we learn it all in kindergarten? In L. R. Frey (Ed.), *Group communication in context: Studies of natural groups* (pp. 227–246). Hillsdale, NJ: Lawrence Erlbaum.

Spencer-Rodgers, J., Hamilton, D. L., & Sherman, S. J. (2007). The central role of entativity in stereotypes of social categories and task groups. *Journal of Personality and Social Psychology, 92,* 369–388.

Spiegel, D. (2001). Mind matters: Group therapy and survival in breast cancer. *New England Journal of Medicine, 345,* 1767–1768.

Spink, K. S., Nickel, D., Wilson, K., & Odnokon, P. (2005). Using a multilevel approach to examine the relationship between task cohesion and team task satisfaction in elite ice hockey players. *Small Group Research, 36,* 539–554.

Sprain, L. (2006, November). What constitutes deliberation? Norms and rules of deliberation expressed by jurors. Paper presented at the annual meeting of the National Communication Association, Chicago, IL. Revised version retrieved April 10, 2008, from http://depts.washington.edu/jurydem/WhatDoesItMean.pdf

Spreitzer, G. M., Cohen, S. G., Ledford, G. E., Jr. (1999). Developing effective self-managing work teams in service organizations. *Group & Organization Management, 24,* 340–366.

Springer, L., Stane, M. E., & Donovan, S. S. (1999). Effects of small-group learning on undergraduates in science, mathematics, engineering and technology: A meta-analysis. *Review of Educational Research. 1,* 21–51.

Starhawk. (1986). *Truth or dare.* New York: Harper & Row.

Stasser, G., Stella, N., Hanna, C., & Colella, A. (1984). The majority effect in jury deliberations: Number of supporters versus number of supporting arguments. *Law and Psychology Review*, *8*, 115–127.

Stasser, G., & Titus, W. (2003). Hidden profiles: A brief history. *Psychological Inquiry, 14,* 304–313.

Stein, A. (1996). *Sex and sensibility: Stories of a lesbian generation.* Berkeley: University of California Press.

Sterk, H. M. (1993). A womanly spiritual space within a patriarchal place. *Women and Language, 16,* 27–32.

Stewart, G. L. (2006). A meta-analytic review of relationships between team design features and team performance. *Journal of Management, 32,* 29–55.

Stewart, J. (1994). An interpretive approach to validity in interpersonal communication research. In K. Carter & M. Presnell, *Interpretive approaches to interpersonal communication* (pp. 45–81). Albany, NY: SUNY.

Stohl, C., & Putnam, L. (2003). Communication in bona fide groups: A retrospective and prospective account. In L. R. Frey (Ed.), *Group communication in context: Studies of bona fide groups* (pp. 399–414). Mahwah, NJ: Lawrence Erlbaum.

Stohl, C., & Walker, K. (2002). A bona fide perspective for the future of groups. In L. R. Frey (Ed.), *New directions in group communication* (pp. 237–252). Thousand Oaks, CA: Sage.

Storr, A. (2001). *Freud: A very short introduction.* Oxford: Oxford University Press.

Street, M. D. (1997). Groupthink: An examination of theoretical issues, implications, and future research suggestions. *Small Group Research, 28,* 72–93.

Strijbos, J.-W., Martens, R. L., Jochems, W. M. G., & Broers, N. J. (2004). The effect of functional roles on group efficiency: Using multilevel modeling and content analysis to investigate computer-supported collaboration in small groups. *Small Group Research, 35,* 195–229.

Sturgis, A. (1988). *Standard code of parliamentary procedure* (3rd ed.). New York: McGraw-Hill.

Sturmer, S., Snyder, M., & Omoto, A. M. (2005). Prosocial emotions and helping: The moderating role of group membership. *Journal of Personality and Social Psychology, 88,* 532–546.

Sunstein, C. R. (2002). The law of group polarization. *Journal of Political Philosophy, 10,* 175–195.

Sunwolf. (2004). *Practical jury dynamics.* Charlottesville, VA: Lexis Nexis.

Sunwolf, & Frey, L. R. (2005). Facilitating group communication. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 485–509). Newbury Park, CA: Sage.

Sunwolf, & Seibold, D. R. (1998). Jurors' intuitive rules for deliberation: A structurational approach to communication in jury decision making. *Communication Monographs, 65,* 282–307.

Sunwolf, & Seibold, D. R. (1999). The impact of formal procedures on group processes, members, and task outcomes. In L. R. Frey, D. S. Gouran, & M. S. Poole (Eds.), *The handbook of group communication theory and research* (pp. 395–431). Thousand Oaks, CA: Sage.

Surowiecki, J. (2005). *The wisdom of crowds.* New York: Anchor.

Susskind, L. E., & Cruikshank, J. L. (2006). *Breaking Robert's Rules: The new way to run your meeting, build consensus, and get results.* Oxford: Oxford University Press.

Sussman, S., Pokhrel, P., Ashmore, R., & Brown, B. (2007). Adolescent peer group identification and characteristics: A review of literature. *Addictive Behaviors, 32,* 1602–1627.

Sutton, R. I., & Hargadon, A. (1996). Brainstorming groups in context: Effectiveness in a product design firm. *Administrative Science Quarterly*, *41*, 685–718.

Sutton, R. I., & Staw, B. M. (1995). What theory is not. *Administrative Science Quarterly, 40,* 371–384.

Svyantek, D. J., Goodman, S. A., Benz, L., & Gard, J. A. (1999). The relationship between organizational characteristics and team building success. *Journal of Business and Psychology, 14,* 263–281.

Sykes, R. E. (1990). Imagining what we might study if we really studied small groups from a speech perspective. *Communication Studies, 41,* 200–211.

't Hart, P. (1994). *Groupthink in government: A study of small groups and policy failure.* Baltimore, MD: Johns Hopkins University Press.

Tajfel, H. (1978). Social categorization, social identity, and social comparison. In H. Tajfel (Ed.), *Differentiation between social groups: Studies in the social psychology of intergroup relations* (pp. 61–76). London: Academic Press.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Chicago: Nelson-Hall.

Tanford, S., & Penrod, S. (1984). Social influence model: A formal integration of research on majority and minority influence processes. *Psychological Bulletin, 95,* 189–225.

Tata, J., Anthony, T., Lin, H., Newman, B., Tang, S., Millson, M., et al. (1996). Proportionate group size and rejection of the deviate: A meta-analytic integration. *Journal of SocialBehavior and Personality, 11,* 739–752.

Taylor, C. (1992). *Multiculturalism and the Politics of Recognition.* Princeton, NJ: Princeton University Press.

Ten Velden, F. S., Beersma, B., & De Dreu, C. K. W. (2007). Majority and minority influence in group negotiation: The moderating effects of social motivation and decision rules. *Journal of Applied Psychology, 92,* 259–268.

Tétreault, M. A. (2003). Advice and dissent in Kuwait. *Middle East Report, 226,* 36–39.

Thatcher, S. M. B., Jehn, K. A., & Zanutto, E. (2003). Cracks in diversity research: The effects of diversity faultlines on conflict and performance. *Group Decision and Negotiation, 12,* 217–241.

Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups.* New York: Wiley.

Thomas, K. W., & Kilman, R. H. (1986). *Thomas-Kilman conflict mode instrument.* Tuxedo, NY: Xicom.

Thompson, L. L. (Ed.). (2003). *The social psychology of organizational behavior: Key readings.* New York: Psychology Press.

Thompson, L. L., Mannix, E. A., & Bazerman, M. H. (1988). Group negotiation: Effects of decision rule, agenda, and aspiration. *Journal of Personality and Social Psychology, 54,* 86–95.

Thompson, M. (2002, August 19). Inside the secret war council. *Time.* Retrieved February 20, 2008, from http://www.time.com/time/magazine/article/0,9171,338628,00.html

Thrasher, F. M. (1963). *The gang: A study of 1313 gangs in Chicago* (Rev. ed.). Chicago: University of Chicago. (Original work published 1927)

Tindale, R. S., Dykema-Engblade, A., & Wittkowski, E. (2005). Conflict within and between groups. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 313–28). Newbury Park, CA: Sage.

Tjosvold, D., Hui, C., Ding, D. Z., & Hu, J. (2003). Conflict values and team relationships: Conflict's contribution to team effectiveness and citizenship in China. *Journal of Organizational Behavior, 24,* 69–88.

Tjosvold, D., & Field, R. H. G. (1983). Effects of social context on consensus and majority vote decision making. *Academy of Management Journal, 26,* 500–506.

Tjosvold, D., Law, K. S., & Sun, H. F. (2003). Collectivistic and individualistic values: Their effects on group dynamics and productivity in China. *Group Decision and Negotiation, 12,* 243–263.

Tocqueville, A. de (1961). *Democracy in America.* New York: Schocken. Retrieved October 21, 2006, from http://xroads.virginia.edu/~HYPER/DETOC/ch3_02.htm

Tuckman, B. (1965). Developmental sequence in small groups. *Psychological Bulletin, 63,* 384–399.

Tuckman, B., & Jensen, M. (1977). Stages of small-group development revisited. *Group and Organization Studies, 2,* 419 427.

Tung, L. L., & Heminger, A. R. (1993). The effects of dialectical inquiry, devil's advocacy, and consensus inquiry methods in a GSS environment. *Information and Management, 25,* 33–41.

Tychsen, A., Hitchens, M., Brolund, T., & Kavakli, M. (2006). Live-action role playing games: Control, Communication, Storytelling, and MMORPG Similarities. *Games and Culture, 1,* 252–275.

Tziner, A., & Eden, D. (2006). Effects of crew composition on crew performance: Does the whole equal the sum of its parts. In J. M. Levine & R. L. Moreland (Eds.) *Small groups: Key readings* (55–64). New York: Psychology Press.

Uleman, G. F. (1996). The five hardest lessons from the O.J. trial [Electronic version]. *Issues in Ethics, 7,*1.

Vahid, F. (2003). The softening of hardware. *Computer, 36*(4), 27–34.

Valcich, J. S., & Schwenk, C. (1995a). Devil's advocacy and dialectical inquiry effects on face-to-face and computer-mediated group decision making. *Organizational Behavior and Human Decision Processes, 63,* 158–173.

Valcich, J. S., & Schwenk, C. (1995b). Structuring conflict in individual, face-to-face, and computer-mediated group decision making: Carping versus objective devil's advocacy. *Decision Sciences, 26,* 369–393.

Van Der Heide, B. L., Wittenbaum, G. M. (2007, November). *Why do high self-monitors emerge as group leaders?* Paper presented at the annual meeting of the National Communication Association, Chicago, IL.

Van Kleef, G. A., Homan, A. D., Beersma, B., Van Knippenberg, D., Van Knippenberg, B., & Damen, F. (2007, July). Searing sentiment or cold calculation? The effects of leader emotional displays on team performance depend on follower epistemic motivation. Paper presented at the annual conference of the Interdisciplinary Network for Group Research, Lansing, MI. Retrieved March 14, 2008, from http://comm.research.arizona.edu/ingroup/docs/VanKleefetal.-Leadership&Emotion.pdf

van Knippenberg, D., & Schippers, M. C. (2007). Work group diversity. *Annual Review of Psychology, 58,* 515–541.

van Mierlo, H., Rutte, C. G., Kompier, M. A. J., & Doorewaard, H. A. C. M. (2005). Self-managing teamwork and psychological well-being: Review of a multilevel research domain. *Group & Organization Management*, *30*, 211-235.

Verkuyten, M. (2005). Ethnic group identification and group evaluation among minority and majority groups: Testing the multiculturalism hypothesis. *Journal of Personality and Social Psychology, 88,* 121–138.

Vidmar, N., & Hans, V. P. (2007). *American juries: The verdict.* Amherst, NY: Prometheus.

von Bertalanffy, L. (1976). *General system theory: Foundations, development, applications.* New York: George Braziller.

von Cranach, M. (1996). Toward a theory of the acting group. In E. H. Witte & J. H. Davis, *Understanding group behavior: Consensual action by small groups,* (Vol. 2, pp. 147–187). Mahwah, NJ: Lawrence Erlbaum.

Waagen, C. (1984). Agreement on procedures: A functional approach. In G. M. Phillips & J. T. Wood (Eds.), *Emergent issues in human decision making* (pp. 80–93). Carbondale: Southern Illinois University Press.

Waldron, V. R., & Krone, K. J. (1991). The experience and expression of emotion in the workplace: A study of a corrections organization. *Management Communication Quarterly, 4,* 287–309.

Weaver, W., & Shannon, C. E. (1949). *The mathematical theory of communication.* Urbana: University of Illinois Press.

Webster, G. D. (2008). The kinship, acceptance, and rejection model of altruism and aggression (KARMAA): Implications for interpersonal and intergroup aggression. *Group Dynamics: Theory, Research, and Practice, 12,* 27–38.

Webster, M., & Hysom, S. J. (1998). Creating status characteristics. *American Sociological Review, 63,* 351–379.

Weick, K. E. (1993). The collapse of sensemaking in organizations: The Mann Gulch disaster. *Administrative Science Quarterly, 38,* 628–652.

Wellen, J. M., & Neale, M. (2006). Deviance, self-typicality, and group cohesion: The corrosive effects of the bad apples on the barrel. *Small Group Research, 37,* 165–187.

Wheelan, S. A. (2005). The developmental perspective. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 119–132). Newbury Park, CA: Sage.

Wheelan, S. A., & Williams, T. (2005). Mapping dynamic interaction patterns in work groups. *Small Group Research, 34,* 443–467. In S. A. Wheelan (Ed.), *The handbook of group research and practice* (pp. 133–157). Newbury Park, CA: Sage.

White, R., & Lippitt, R. (1960). *Autocracy and democracy.* New York: Harper & Bros.

Whyte, W. F. (1943). *Street corner society.* Chicago: University of Chicago Press.

Wilcox, C., & Williams, L. (1990). Taking stock of schema theory. *Social Science Journal, 27,* 373–393.

Wilke, H. A. M. (1996). Status congruence in small groups. In E. H. Witte & J. H. Davis, *Understanding group behavior: Consensual action by small groups* (Vol. 2, pp. 67–91). Mahwah, NJ: Lawrence Erlbaum.

Wilkins, D. E. (2006). *American Indian politics and the American political system.* Boston: Rowman & Littlefield.

Williams, K. Y., & O'Reilly, C. A. (1998). Demography and diversity in organizations: A review of 40 years of research. In B. Staw & R. Sutton (Eds.), *Research in Organizational Behavior* (Vol. 20, pp. 77–140). Greenwich, CT: JAI Press.

Wilson, D. S. (2007). *Evolution for everyone: How Darwin's theory can change the way we think about our lives.* New York: Delacorte.

Wittenbaum, G. M. (2000). The bias toward discussing shared information: Why are high-status group members immune? *Communication Research, 27,* 379–401.

Wittenbaum, G. M. (2003). Putting communication into the study of group memory. *Human Communication Research, 29,* 616–623.

Wittenbaum, G. M., & Bowman, J. M. (2004). A social validation explanation for mutual enhancement. *Journal of Experimental Social Psychology, 40,* 40–169.

Wittenbaum, G. M., Hollingshead, A. B., & Botero, I. C. (2004). From cooperative to motivated information sharing in groups: Moving beyond the hidden profile paradigm. *Communication Monographs, 71,* 286–310.

Wittenbaum, G. M., Hollingshead, A. B., Paulus, P. B., Hirokawa, R. Y., Ancona, D. G., Peterson, R. S., et al. (2004). The functional perspective as a lens for understanding groups. *Small Group Research, 35,* 17–43.

Wittenbaum, G. M., Hubbell, A. P., & Zuckerman, C. (1999). Mutual enhancement: Toward an understanding of the collective preference for shared information. *Journal of Personality and Social Psychology, 77,* 967–978.

Wittenbaum, G. M., Stasser, G., & Merry, C. J. (1996). Tacit coordination in anticipation of small group task completion. *Journal of Experimental Social Psychology, 32,* 129–152.

Wittenbaum, G. W., & Stasser, G. (1996). Management of information in small groups. In J. L. Nye & A. M. Brower, *What's social about social cognition?* (pp. 3–28). Thousand Oaks, CA: Sage.

Wolper, L. F. (2004). *Health care administration: Planning, implementing, and managing organized delivery systems* (4th ed.). Sudbury, MA: Jones & Bartlett.

Worchel, S. (1996). Emphasizing the social nature of groups in a developmental framework. In J. L. Nye & A. M. Brower (Eds.), *What's social about social cognition?* (pp. 261–282). Thousand Oaks, CA: Sage.

World Health Organization. (2009, February). *Cancer* [Fact sheet no. 297]. Retrieved April 10, 2008, from http://www.who.int/mediacentre/factsheets/fs297/en/index.html

Wuthnow, R. (1994a). *Sharing the journey: Support groups and America's new quest for community.* New York: Free Press.

Wuthnow, R. (Ed.) (1994b). *"I come away stronger": How small groups are shaping American religion.* Grand Rapids, MI: Eerdmans.

Wyatt, N. (2002). Foregrounding feminist theory in group communication research. In L. R. Frey (Ed.), *New directions in group communication* (pp. 43–56). Thousand Oaks, CA: Sage.

Yates, D. (1985). *The politics of management.* San Francisco: Jossey-Bass.

Ydstie, J. (2008, January 25). Economic woes test Bernanke's leadership. *NPR's All Things Considered..* Retrieved February 20, 2008, from http://www.npr.org/templates/story/story.php?storyId=18427603.

Yeatts, D. E., & Seward, R. R. (2000). Reducing turnover and improving health care in nursing homes: The potential effects of self-managed work teams. *The Gerontologist, 40,* 358–363.

Youniss, J., McLellan, J. A., & Yates, M. (1999). Religion, community service, and identity in American youth. *Journal of Adolescence, 22,* 243–253.

Yuki, M. (2003). Intergroup comparison versus intragroup relationships: A cross-cultural examination of Social identity theory in North America and East Asian cultural context. *Social Psychology Quarterly, 66,* 166–83.

Zaccaro, S. J., Foti, R. J., & Kenny, D. A. (2006). In J. M. Levine & R. L. Moreland (Eds.) *Small groups: Key readings* (357–367). New York: Psychology Press.

Zurcher, L. A. (2006). The "friendly" poker game: A study of an ephemeral role. In J. M. Levine & R. L. Moreland (Eds.) *Small groups: Key readings* (pp. 97–110). New York: Psychology Press.

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