CHAPTER 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.
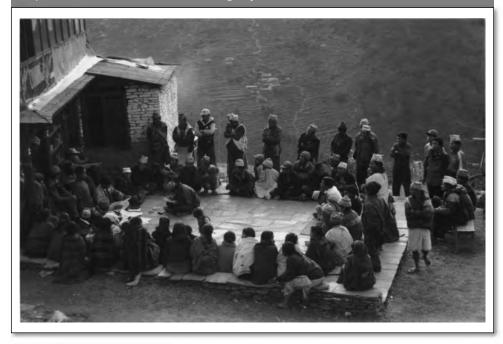
Group Size, Copresence, and Boundaries

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.

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

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.

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.
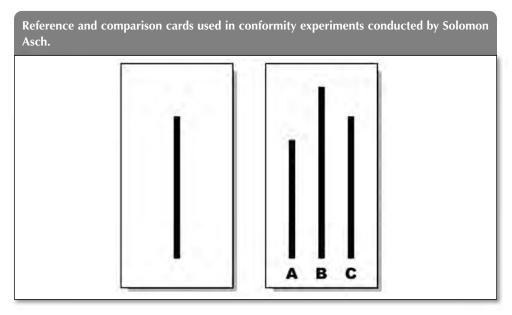
A variation on the case study is the field study in which the investigator looks at a relatively large number of groups in their natural setting. Because of the larger sample, the researcher's focus usually narrows to a particular set of questions, such as how variations in one group characteristic might 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.

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

Reference and comparison cards used in conformity experiments conducted by Solomon Asch.

Credit: Wikimedia Commons.

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]

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

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 test
Validity	Passes many of its tests
Parsimony	Simplicity of theory's statements
Scope	Sufficiently broad generalizations

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.

The final instructions conveyed to the September 11 hijackers read, "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 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 liaison, owing to his inability to get a visa when U.S. officials came to suspect that he intended to reside permanently in the United States.

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 timeline 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.jurydemoc racy.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).