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LECTURE

From The Tiny Pond To The Big Ocean:
*Studying Communication And
Group Decision-Making Effectiveness
From A Functional Perspective*

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From The Tiny Pond To The Big Ocean: Studying Communication And Group Decision-Making Effectiveness From A Functional Perspective

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It is safe to say groups pervade virtually all facets of our everyday lives. From work teams to church committees, whatever we do seems to involve group work. Our society would probably

come to a grinding halt if groups were suddenly banned!

Our reliance on groups, however, must be tempered by the realization that they are not "magic bullets." Asking groups to solve problems or make decisions involves risk. Groups can make dreadfully "bad" decisions as easily as they can make wonderfully "good" ones. This is perhaps why scholars from a variety of academic disciplines have been captivated by the deceptively simple question: "Why do some groups make better decisions than others?"

Early Beginnings

My interest in the group effectiveness question began as a graduate student at the University of Washington. While taking a course in organizational behavior, we discussed a case study involving the B. F. Goodrich Tire Company.² Briefly, members of the B. F. Goodrich company made a series of "bad" engineering and management decisions involving the design and testing of a brake system for the U.S. Navy's "A7-D" jet fighter airplane. These faulty decisions ultimately led to the failure of the brakes during field tests of the A7-D, the near death of its test pilot, and the subsequent

convening of a congressional committee to investigate the problem.

As we were discussing the case, someone commented that "it was all about poor communication." At that point, the professor turned to me and said, "Randy, as a communication person, what can you tell us about the role communication plays in group decision-making success or failure?" As many of you know, I am seldom at a loss for words. But at the moment, I had no idea what to say!

The embarrassment of the moment, however, motivated me to focus my seminar paper on the role that communication plays in group decision-making performance. What I discovered in researching this paper was the surprising fact that little was known about the relationship between group communication and group decision-making performance. Hackman and Morris (1975) summarized the paltry state of research best when they concluded:

Although there is substantial agreement among researchers and observers of task-oriented groups that something important happens in group interaction that can affect performance outcomes . . . there is little agreement about just what that "something" is, when it will enhance (or when it will impair) group effectiveness, and how it can be monitored, analyzed, and altered (p. 49).

The paper I ended up writing for the course was entitled, "Group Communication and Problem-solving Effectiveness: A Critical

¹ The author wishes to thank Samuel Becker and Robert Newman for their helpful comments and suggestions.

² From the Hearing before the Subcommittee on Economy in Government of the Joint Economic Committee of the Congress of the United States, Ninety-first Congress, August 13, 1969.

Review of Inconsistent Findings" (Hirokawa, 1982). It argued that scholars failed to identify a consistent relationship between communication and group decision-making performance because they were not guided by a sufficient understanding of how group communication affects group decision-making outcomes. I further maintained that the discovery of meaningful relationships between group communication behaviors and group decision-making efficacy are unlikely to occur unless researchers focus their attention on those behaviors which are relevant to, and necessary for, successful group decision-making performance. I concluded that it is imperative that researchers develop a theoretical perspective that explains precisely how the communicative behaviors of group members influence the quality of decisions they reach.

Emergence of the Functional Perspective

The development of a theoretical perspective that links group communication to group decision-making performance was the primary objective of my subsequent dissertation (Hirokawa, 1980). The major task of that project was to explain how the communication behaviors of group members directly influenced the quality of a group's eventual decision. Perhaps because systems theory and structural-functionalism were popular at the time, it seemed obvious to me that the establishment of a theoretical link between group communication and group performance was best accomplished by recognizing that:

Verbal behaviors produced by group members during the course of interaction are functional in nature—that is, the statements and questions produced by group members have the capacity to perform or serve specific purposes essential for successful group performance. (p. 24)

Although unbeknown to me at the time, this was a pivotal assumption. It committed me to a way of thinking about the relationship between group communication and group decision-making performance that would influence and guide my thinking and research for the next twenty years.

Having made the intellectual commitment to employ a functional approach in explaining how group communication affects group decision-making and problem-solving performance, the crucial next step was to identify the functions essential for effective group decision-making. Drawing on a variety of scholars from John Dewey (1910) to Irving Janis (1972), I initially identified five major functions necessary for successful decision-making (Hirokawa, 1980, p. 38):

1. The group must establish a set of effective operating procedures;
2. The group must understand and analyze the problem presented to it;
3. The group must decide on a specific set of criteria for evaluating the worth of a given alternative solution;
4. The group must generate as many ideas, suggestions, and solutions to solving the problem as possible; and
5. The group must carefully weigh and evaluate each suggestion or alternative before deciding on a final decision or solution.

In 1983, Dennis Gouran and I introduced terminology, concepts, and a general theoretical framework for understanding the relationship between communication and group decision-making effectiveness from a functional perspective. In that essay, we argued that communication variables, per se, are not what distinguish effective from ineffective decision-making groups. Rather, it is how group communication facilitates or impedes the group's efforts to satisfy the crucial requirements of the decision-making task that ultimately determines group performance.

Briefly, from the functional perspective group "decisions" are the culmination of a

series of smaller "sub-decisions" made by the group in response to four general questions: (a) Does the present situation require us to make a choice of some kind? (b) What do we want to achieve or accomplish in making a choice? (c) What choices are available to us? and (d) What are the desirable and undesirable aspects of each choice? (Hirokawa & Scheerhorn, 1986).

The functional perspective asserts that group members collectively arrive at "answers" to these four questions by interacting with each other. These answers constitute the group's "decision logic system," and it is from this "logic system" that a group's overall decision emerges (Hirokawa & Keyton, 1990).

It is important to emphasize that, although the four aforementioned issues are presented in a seemingly logical order, the functional perspective does not assume that the order in which members address them is crucial for group decision-making effectiveness. Actually, consistent with Marshall Scott Poole's developmental theory of group decision-making (e.g., Poole, 1983b; Poole & Baldwin, 1996; Poole & Doelger, 1986; Poole & Roth, 1989), the functional perspective acknowledges that groups display a great deal of variability and idiosyncrasy in the way they address these four issues during their decision-making interaction.

In addition to conceptualizing the group decision-making process as a series of sub-decisions contributing to the selection and justification of an overall choice, the functional perspective identifies four ways group communication can affect group decision-making performance (Gouran & Hirokawa, 1983).

First, group interaction can *influence sub-decisions group members collectively make about the decisional context*. One common error occurring at this point in the group decision-making process is the failure to recognize the existence of a problem that could be remedied by an appropriate decision. An example of this can be drawn from the Human Rights Committee I

currently serve on at my university. This group is charged with the task of investigating and recommending solutions to human rights problems on campus. Just before I came to deliver this lecture, we received a letter from a young man who claimed that the University Hospital discriminated against gays and lesbians. The

evidence he provided to support this allegation was a document given to all patients at the time they are admitted to the hospital detailing

their rights as a patient. In detailing the hospital's non-discriminatory policies, the document omitted the words "gays" and "lesbians."

Several of the committee argued for the dismissal of the complaint on the grounds that no human rights problems exist in the University Hospital. They contended that the omission of the terms "gays" and "lesbians" from the hospital's admissions papers was a simple oversight and in no way reflected discrimination toward those two groups of people. Other members of the committee were less generous in their assessment of the potential problem. One committee member argued that the omission of "gays" and "lesbians" from the admissions document could be read as an outright exclusion of those two groups from the non-discriminatory practices of the hospital.

The point here is a simple one. If there is no human rights problems at the University Hospital, but we wrongly conclude that they exist, we are likely to make a bad decision by calling for unnecessary changes to the hospital's admissions policies. On the other hand, if there are human rights problems at the hospital, but we wrongfully conclude that none exist, we are equally likely to make a bad decision by recommending no changes be made to the hospital's admissions policies. In short, bad decisions often result from faulty analysis of the decisional context.

A second way group communication can

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affect decision-making performance is by *influencing the criteria the group employs in reaching a final decision*. As suggested earlier, group members usually are cognizant of specific outcomes they hope or expect to realize as a result of their choice-making. These objectives generally serve as the criteria (or standards) the group employs in evaluating alternative choices. Breakdowns in this facet of the decision-making process can have detrimental effects on the final decisions made by a group.

The quality of a group's final decision obviously depends on the quality of options available to it .

The space shuttle *Challenger* accident provides a tragic example of how inappropriate criteria can lead to highly regrettable group decisions. On the morning of January 28, 1986, the *Challenger* lifted majestically off its launching pad at the Kennedy Space Center. A mere 73 seconds into its flight, in full view of millions of horrified observers, the space craft exploded, killing all seven of its crew, including an elementary school teacher named Christa McAuliffe. Almost immediately, President Reagan appointed a special commission, headed by former Secretary of State and Attorney General William P. Rogers, to determine the actual or probable cause or causes of the accident. After a grueling five-month investigation, highlighted by a number of public hearings, the commission uncovered disturbing evidence the decision to launch the *Challenger* was made in the presence of information questioning the safety of the mission. It thus concluded that "flawed decision-making" contributed to the tragic accident.

Many have debated whether the decision-making process involved in the *Challenger* disaster was as flawed as the Rogers Commission indicated. What is unquestioned is the fact that NASA decision-makers appeared to employ decisional criteria inconsistent with historical precedents involving manned space flights (Vaughan, 1996). Traditionally, decisions involving manned space flights were governed by the "safety first" criterion. That is, a launch

should be cancelled if there is any doubt regarding the success of the mission or the safety of the crew. In the case of the *Challenger*, however, it appears different criteria were operating during the decision-making process. Several participants testified in public hearings that they felt "pressured" to maintain the ambitious schedule that NASA had established for the shuttle program (Gouran, Hirokawa, and Martz, 1986). This pressure was further exacerbated by some participants' desire not to disappoint or inconvenience the national media which had focused significant attention on this particular launch because it involved a civilian crew member whose job it was to symbolize the inseparability of space exploration and science education. In short, it appears the decision-makers responsible for the *Challenger* launch, while still concerned with safety, were also influenced by the objective of maintaining their launch schedule. This concern may have overridden the long-standing "safety first" criterion and contributed to the ill-advised decision to launch the *Challenger*.

A third way group communication can affect group decision-making performance is by *influencing the range of choices a group considers in reaching a final decision*. The quality of a group's final decision obviously depends on the quality of options available to it. Simply stated, a group cannot be expected to make a "good" choice if it does not possess "good" options to choose from. The choices a group generates through its brainstorming interaction thus play a crucial role in effective decision-making.

To illustrate this point, consider the unthinkable: Rick Majerus leaves the University of Utah to coach another college or professional basketball team. Immediately, a search committee is created to find a suitable replacement for Coach Majerus. For the sake of this example, suppose the committee was unable to entice any well-qualified individuals to apply for the job. At this point, the committee would either have to postpone making a

choice until at least one well-qualified individual applied, or select a candidate who lacked the expertise and experience necessary to continue the success Coach Majerus' teams had achieved. Suppose further the president or athletic director of the University of Utah was unwilling to extend the search and thus the committee was forced to choose from an inferior list of candidates. There is no reason to expect such a group to make a "good" decision. This example may seem absurd to you, but groups often feel compelled to make decisions even when they do not have a good set of alternatives from which to choose (Gouran, 1982).

A fourth way group communication can affect decision-making performance is by *influencing the group's assessment of the desirable and undesirable features of alternative choices*. Since a group usually relies on its evaluation of the positive and negative aspects of available choices to make a final decision, breakdowns at this stage of the decision-making process can directly affect a group's ability to make a high quality choice. There are at least four types of evaluation errors that can adversely affect group decision-making performance: (a) under-estimation of the positive qualities of available choices, (b) under-estimation of the negative qualities of available choices, (c) over-estimation of the positive qualities of available choices, and (d) over-estimation of the negative qualities of alternative choices.

Often these four types of evaluation errors co-occur in different combinations. The Churchill Falls hydroelectric project in Labrador/Newfoundland provides an example of unfortunate group decision-making resulting from the over-estimation of benefits, as well as the under-estimation of negative consequences.

In a remote, harsh wilderness area on the Labrador plateau, the British-Newfoundland Company (Brinco) built a hydroelectric dam at a site called Churchill Falls. At the time it was completed, the Churchill Falls hydroelectric plant was the largest single source of energy in

the western world. At the official inauguration of the project, it was heralded by Canadian Prime Minister Pierre Elliott Trudeau as "a construction achievement which will rank with any in history . . . (and) begs comparison with the pyramids but with a usefulness which promises the benefits of the Nile" (Smith, 1975, p. vii).

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Prior to building the dam, Brinco negotiated a 40-year contractual agreement with Hydro-Quebec (the government-owned utility

company of Quebec) to provide them with 32.2 billion kilowatt-hours of energy per year at a rate of .00025 cents per kilowatt-hour (Smith, 1970, p. 242). At first, many believed that Brinco had negotiated a very shrewd deal that greatly favored Newfoundland/Labrador (Smith, 1970, p. 249). However, by the time the Churchill Falls hydroelectric project was fully completed in 1974, the combination of the Middle East induced energy crisis, and runaway inflation, had changed the world and its economy in ways unforeseen during the planning and building of the Churchill Falls dam. In effect, Brinco found itself selling hydroelectric power to Hydro-Quebec at far less than market value, and not much greater than the cost of producing it. In short, the dam proved far less profitable than the project's decision-makers had originally envisioned (Froschauer, 1999).

To make matters worse, the dam flooded nearly 4,000 square miles of the Labrador plateau previously occupied by the Innu and other Native American tribes. This flooding destroyed valuable hunting and trapping territory, campsites and equipment, burial grounds, sacred sites, and important gathering locations. It also destroyed nearly ten percent of Labrador's nesting area for migratory waterfowls, drowned or displaced countless numbers of caribou and other wildlife, and produced mercury contamination of the fish in the area,

making them unsafe for human consumption (Walden, 1991). Most recently, it has been discovered that the rotting vegetation of the marshlands and forests submerged by the flooding is now releasing huge amounts of methane gas into the atmosphere .

In many respects, the decision to build the Churchill Falls hydroelectric dam is a regrettable one. In his

definitive historical account of the planning and building of the dam, Phillip Smith (1975) reveals an

extremely complex group decision-making process played out over a fourteen-year period and influenced by a multitude of political, cultural, social, economic, and legal factors. What is important for our purposes is the fact that the decision-makers appeared to consistently (a) overestimate the economic profitability of the hydroelectric project, while also (b) severely underestimating the environmental harms that would result from building the dam. Had either (or both) of those errors not occurred, there is a good chance the dam would not have been built.

Functional Perspective Research

Empirical tests of the functional perspective have yielded general support for the theory. Someone once said, "there are lies, damn lies, and statistics." If you believe statistics, however, they indicate the functional perspective is quite effective in accounting for group decision-making performance. Specifically, a recent meta-analysis of empirical studies testing the functional perspective (Orlitzky & Hirokawa, 1997) found the theory able to explain about 60% of the total variance. A less technical way of understanding this is to imagine a trip to Las Vegas to gamble. We walk into a casino and discover they have a game called "Predict how well the group will do." The game

is simple: We are shown a video tape of a group making a decision, and right before they make a decision, we are asked to bet whether the decision will turn out to be a "good" or "bad" one. To say the functional perspective accounts for 60% of the variance means if we were to place our bets on the basis of knowledge of how well the groups fulfilled the four function-

al requisites identified by the theory, we would win roughly 60% of the time. Moreover, if we based our bets on the basis of just the knowledge of how effectively the groups (a) *evaluated alternative choices and* (b) *assessed the choice-making situa-*

tion, we would still win about 52% of the time. If we bet the same amount of money every time, we would be one of the few who leave Las Vegas a winner.

Surprisingly, despite the purported value of brainstorming and other idea-generation techniques for effective group decision-making, tests of the functional perspective have found the number of choices considered by a group to be largely unrelated to group decision-making performance. Graham, Papa, and McPherson (1997) offer two explanations for this counter-intuitive finding: First, groups often do not have to generate choices in order to make sound decisions because the range of plausible choices is dictated to them. Second, there is no inherent relationship between the quantity of choices considered by a group, and the *quality* of those choices.

Y2K Problems

In their extensive review of the small group communication literature, John Cragan and David Wright (1990) identify the functional perspective as one of the three most influential theories shaping the landscape of small group communication in the 1980s. If recent publications by Propp and Nelson (1996), and Graham, Papa, and McPherson (1997), are any indication, the functional perspective continues

to influence the study of group communication and group decision-making performance well into the 1990s.

While the functional perspective is clearly past its incipient stage and, in fact, has moved to a state of relative stability (Gouran, Hirokawa, Julian, & Leatham, 1993), work on the theory is far from complete. In fact, I believe the functional perspective faces its most formidable challenges as we enter the 21st century. You might say the theory has its own set of "Y2K" problems to overcome! In the remainder of my talk, I would like to identify some of the noteworthy "Y2K" challenges the functional perspective must meet if it is to remain a major theoretical influence on the study of group communication and group decision-making performance in this new century.

Accounting For Task Contingencies

Interestingly, inconsistency has been a problem with tests of the functional perspective. Some investigations, for instance, have found a strong positive correlation between group decision performance and the group's assessment of positive qualities, but have found no corresponding correlation with the evaluation of negative qualities (see, e.g., Graham, Papa, & McPherson, 1997; Propp & Nelson, 1996). Other studies have found a strong positive correlation between group performance and the evaluation of negative qualities, but no corresponding correlation to the evaluation of positive qualities (see, e.g., Hirokawa, 1985, 1987). Still other studies have found a strong correlation between group decision performance and the evaluation of *both* positive and negative aspects of alternative choices (see, e.g., Hirokawa, 1985; Hirokawa & Rost, 1992).

Orlitzky and I (1997) account for these inconsistencies by arguing that the functional requirements faced by a group are mediated by a number of contingency factors. That is, cer-

tain functional requirements become more important to resolve than others in the presence of particular contingency factors if group decision-making is to be effective.

For example, Orlitzky and I speculate that the relationship between group decision-making performance and the evaluation of alternative choices is moderated by the *evaluation*

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demand of the task. Some tasks have a *positive bias*, whereby identifying the positive qualities of alternative

choices is more important for making a sound choice than identifying their negative qualities. The selection of an award recipient is an example of a "positive bias" task because evaluation emphasis is usually placed on the accomplishments of each candidate, rather than on his/her limitations. Other tasks have a *negative bias*, whereby identifying the negative qualities of alternative choices is more important than identifying their positive qualities in making a good decision. Pharmaceutical decisions made by the Food and Drug Administration (FDA) are a case in point. While the effectiveness of a drug (i.e., its positive quality) is certainly taken into account, the decision to approve its sale principally rests on the absence of harmful side effects (i.e., its negative qualities). Orlitzky and I maintain that when a task has a positive bias, we are likely to find a stronger correlation between group decision performance and the evaluation of positive qualities. However, when the task has a negative bias, we are likely to find a stronger relationship between group performance and the evaluation of negative qualities.

A major challenge facing the functional perspective in the 21st century is thus to make the theory more sensitive to task and other contextual variations. Poppy McLeod and I began developing this extension to the functional perspective a few years ago (Hirokawa & McLeod, 1993). Drawing directly on Poole's

(1983; also Poole & Baldwin, 1996; Poole & Doelger, 1986; Poole & Roth, 1989) developmental theory of group decision-making, we argue the functional requirements facing a group come from two main sources: (1) properties of the task, and (2) properties of the group. Properties of the task might include such variables as: how novel or difficult the task is, whether the decision to be made affects only the group or a wider constituency beyond the group, or how much time pressure the group is faced with in reaching a decision. *Properties of the group* would include such variables as the amount of cohesiveness or camaraderie present in the group, or the existence of conflict among group members.

McLeod and I posit that the combination of task and group properties determines the basic set of functional requirements a group must overcome in order to be successful. The health care teams I worked with at the University of Iowa can be used to illustrate this point.

Health care teams are usually presented with different degrees of ambiguity. Some patients have obvious problems, with correspondingly clear-cut solutions. For instance, a patient with *otitis media* ("inner ear infection") presents a set of obvious symptoms dictating a set of equally obvious treatments. Other patients, however, have less obvious problems. Geriatric patients, for instance, often present a health care team with a complex array of chronic and acute problems. (One team I worked with was presented with a patient who evidenced *eleven* identifiable problems!)

The point here is this: When a health care team is presented with a "simple" task (e.g., a patient with obvious and easily treatable problems), the team is *not* faced with the challenge of spending lots of time analyzing the problem, generating and developing a range of optional treatment choices, and evaluating alternative choices in order to make a good decision.

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However, when the team is faced with a "complex" task (e.g., a patient who presents the team with problems that are less obvious, or less clearly or easily treatable), effective decision-making may require far more problem analysis, solution development and evaluation, and the like. Now, if the health care team also possesses a history of conflict among its members, it faces the additional challenge of managing emotions and motivations in a way that facilitates cooperative and coordinated actions and attitudes among the conflicting individuals.

In sum, one of the "Y2K" challenges facing the functional perspective is the need to identify the crucial task and group factors which determine what functional requirements need to be fulfilled during group interaction in order for effective group decision-making to occur.

Linking Communication and Functional Requirements

Another crucial "Y2K" challenge facing the functional perspective concerns the heretofore-presumed relationship between group communication and the fulfillment of functional requirements. One of the basic assumptions of the functional perspective is that communication is *instrumental* – that is, it represents a means by which group members fulfill functional requirements. In a recent essay, Pavitt (1994) criticizes the functional perspective on the grounds that it fails to establish clear and unambiguous linkages between the communicative behaviors of group members and the fulfilling of functional requirements. Thoughtful as his critique may be, Pavitt's criticism of the functional perspective misses the point of the theory. There is a *huge* difference between saying something is "functional" and claiming it is "instrumental." To say something is functional means, in the strictest sense, to claim an inherent connection between that thing and some identifiable *purpose* or *conse-*

quence. To use an example from Pavitt's (1994) essay, to say the color of a grasshopper is *functional* means to say color is necessarily linked to some purpose such as "camouflage," or some consequence such as "survival." However, to say a grasshopper's color is *instrumental* means the grasshopper uses its color as a means to achieve some (presumably desired) end. Here there is *no inherent or necessary connection* between the color of a grasshopper and what it uses that color to achieve (e.g., protection). In fact, in some instances, a grasshopper's color may fail to protect it from predators, and in other instances, the grasshopper may use other means (e.g., its jumping ability) to protect itself.

The functional perspective clearly asserts that communication is *instrumental* – it represents a means by which group members attempt to fulfill the requisites for effective group decision-making. Hence to indict the functional perspective for not establishing inherent connections between group communication and the fulfillment of functional requisites is both unfair and inappropriate. What is fair and appropriate, however, is to hold the functional perspective accountable for explaining *how* group members fulfill functional requisites through communication. This represents another important "Y2K" challenge facing the functional perspective.

Identifying Constraints

To date, the functional perspective has been concerned primarily with how well communication serves to assure functional requirements are satisfied. The implicit assumption underlying this perspective is that groups are inherently capable of fulfilling existing functional requirements. However, my recent experiences with health care teams convince me group decision making is an activity frequently performed within powerful social and environ-

mental constraints which can, and often do, interfere with members' ability to satisfy the essential requirements of the decision-making task. Unfortunately, while advocates of the functional perspective acknowledge that problems in the social and relational domains of a group can affect its ability to fulfill functional

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requirements (e.g., Gouran & Hirokawa, 1986; Hirokawa & McLeod, 1993), they have not dealt with these constraints in any

systematic way. This represents the third major "Y2K" challenge facing the functional perspective.

In his book, *Crucial Decisions*, Irving Janis (1989) advances a constraints model that provides a structure and typology for systematically exploring how the relationship between group communication and the performance of functional requirements is hindered by various cognitive, affiliative, and egocentric constraints.

Cognitive constraints come into play when the members of a decision-making group confront a task for which little information is available, time is sharply limited, and/or the matter to be resolved is beyond the ordinary level of complexity. According to Janis, the presence of cognitive constraints can cause a group to resort to standard operating procedures in making choices rather than rigorously performing the essential requirements of the task. The health care teams I work with provide excellent examples of this. Sometimes, due to scheduling problems, or unanticipated delays, the teams must attend to patients in less time than they would like. In these "crisis" situations, the teams often rely on what I call "habits of mind"—that is, conventional wisdom about what a problem is, and what should be done about it—to make more efficient use of the limited time they have with these patients. In

doing so, they attend to various functional requirements in a cursory manner, rather than in the detailed, vigilant manner expected of them.

Affiliative constraints usually occur when relationships among group members are a dominant concern; members fear either deterioration in such relationships or undue influence from one or more individuals whose thinking is not in line with majority sentiments. For example, I have noticed that the development of close friendships among health care team members sometimes hinders those individuals from engaging in "tough-minded" questioning of each other's assessments and recommendations. In post-rotation interviews, such individuals often admitted they deliberately refrained from "making an issue" of something because they wanted to preserve the camaraderie that had been fostered within the team. In short, the presence of "affiliative constraints" can hinder a group's efforts to effectively address functional requirements during group interaction.

Egocentric constraints are likely when at least one group member has a highly pronounced need for control, or is otherwise driven by personal motivations. In my experiences with health care teams, "egocentric constraints" are most likely to emerge when a team member perceives himself/herself to be of higher status than other group members. In these instances, the individual will attempt to "take over" the team by dominating the discussion and telling others what to do and how they should do it. In short, the presence of controlling group members often results in the ineffective performance of functional requirements because the group addresses only those functions the controlling member feels necessary for the team to address.

When any of the previously mentioned constraints becomes dominant, effective group

decision making is likely to be undermined. Understanding how these constraints affect the performance of functional requirements during group interaction, beyond the type of anecdotal evidence I have provided, represents a crucial step in the future development of the functional perspective.

When Does the Performance of Functions Make A Difference

One of the long-standing issues in the small group literature is the question of how much influence a group's communication has on its decision-making or problem-solving performance. In a provocative essay, Dean Hewes (1986, 1996) argues that

Too little care has been taken in testing claims concerning the ability of communication to constitute, guide, create, enhance, or inhibit small group decision-making. When the evidentiary base of this claim was examined closely, it was found to be very weak, yet the claim continues to be accepted as if it were firmly established. (pp. 288-289)

My work with interdisciplinary health care teams provides some anecdotal support for Hewes's suggestion that group communication, in general, and the performance of functional requisites, in particular, may not always make a difference in effective group decision-making and problem-solving. One of the most

vivid examples involved a geriatric patient named "Mary."

"Mary" was an 87-year old patient, who had lost her husband a few years earlier, and had recently been institutionalized in a nursing home because her grown children were too busy to provide her with adequate care. She had a multitude of complaints, including "indigestion," "insomnia," "lack of appetite," "exces-

sive bowl movements," and "depression." The team met with "Mary" on three separate occasions, spending as much as two hours at a time with her. They listened to her complaints, carefully diagnosed her problems, and formulated thoughtful recommendations for treating her. Despite their best efforts, "Mary's" health slowly deteriorated, and she quietly passed away in her sleep shortly after the team stopped seeing her.

In the exit interview following the completion of their clinical rotation, team members expressed disappointment they could not help "Mary" more than they did. One member described it as a "sad example of team failure." But was it?

When we analyzed videotapes of the team's discussions of "Mary," we discovered the team appeared to do a good job of fulfilling the functional requisites necessary for high-quality decision-making. Still, the decisions made by the group did not appear to have a positive impact on "Mary."

From a functional perspective, "Mary's" case is an anomaly. Given the quality of the team's performance of critical task functions, the decisions (recommendations) made by the group should have produced more positive outcomes than they did. Hewes, however, might say that "Mary's" case demonstrates the fact that in the "real world," group decision-making effectiveness cannot be adequately accounted for simply by the group's fulfillment of functional requisites. He would point out that in an "open system" (i.e., the "real world"), there are so many additional factors that could exert as much, or even greater, influence on group decision-making performance than the satisfaction of functional requisites. In short, the "failure" of the health care team may have had less to do with its inability to satisfy critical functional requisites, and more to do with other contextual and historical factors surrounding "Mary's" case. As Hackman (1990) concludes in his book, *Groups That Work (And Those That Don't)*:

A crucial challenge facing the functional perspective in the 21st century is to identify the parameters within which the functional perspective is valid and useful in accounting for group decision-making performance.

Influences on group effectiveness do not come in separate, easily distinguishable packages. They come, instead, in complex tangles that often are as hard to straighten out as a backlash on a fishing reel. (p. 8).

A crucial challenge facing the functional perspective in the 21st century is to identify the parameters within which the functional perspective is valid and useful in accounting for group decision-making performance. As indicated earlier, the

indication of relevant contingency variables is a set in the right direction. However, beyond the identification of contingency variables, it is essential to discover precisely when a group's performance of functional requisites yields effective group decisions and when it does not.

Final Comments

Despite its limitations, the value of the functional perspective for understanding group decision-making performance is undeniable. Proponents and opponents alike agree the functional perspective offers, for the moment, the most intuitive palatable explanation for why groups arrive at "satisfactory" or "regrettable" decisions. As Propp and Nelson put it:

[what] was most encouraging about this analysis was not simply finding support for the [functional perspective] in an applied setting, but the feed-back from management and workers who saw the tangible benefits that this approach to the study of small group communication had to offer them. Poole (1990) has argued that one prerequisite for a good theory is that it must address meaningful and important

concerns. On the basis of the reactions to the results of this study and what it revealed about the role of communication in effective [decision-making] to everyday practitioners, [it is clear that] the potential of this theory has just begun to be tapped. (p. 44)

Although much has been accomplished in the development and testing of the functional perspective, many formidable challenges remain as we approach the next century. The functional perspective has left the calm, protected waters of the "tiny pond" (i.e., the laboratory setting) and entered the rough, dangerous waters of the "big ocean" (i.e., field settings). Whether it survives in this big ocean will be determined by our ability to meet the "Y2K challenges" I identify in this paper. As David Depew, a delightful colleague with intellectual roots in philosophy, rhetoric, and evolutionary biology, explains to me, either evolution or extinction is the consequence of the failure of any functional system.

The "Mary" case presented earlier suggests the "functional perspective," in its present form, is in for some rough times in the complex and turbulent waters of the "big ocean." Its survival will depend on its ability to evolve into a better functional system. What that evolution will look like, however, is anyone's guess because evolved states are difficult, if not impossible, to predict. What is likely to be the case, however, is that the new species of the "functional perspective" will be more sensitive than the current system to task contingencies, historical contexts, and situational variations in accounting for group decision-making performance. There is also good reason to believe the evolved species will be more successful in accounting for, and predicting, group decision-making performance across a variety of different settings and contexts. Finally, the new functional perspective will likely be more effective than the current version in explaining how the symbolic behaviors of group members con-

tribute to the fulfillment of essential decision-making functions.

In closing, I am optimistic, not only of the survival of the "functional perspective," but also its evolution, in the 21st century. Aubrey Fisher was known for his loyalty and steadfast support of his graduate students. In that spirit, it is my fervent hope that one of my students, or perhaps even a student of one of my students, will facilitate the evolution of the functional perspective and discuss its nature in this prestigious forum.

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B. Aubrey Fisher

B. Aubrey Fisher served as a faculty member in the Department of Communication at the University of Utah from 1971 to 1986. He began his professional career as a high school teacher and radio announcer in South Dakota. After receiving his Master's and Ph.D. degrees from the University of Minnesota, he spent four years on the faculty at the University of Missouri.

Professor Fisher was a prominent scholar in interpersonal communication and communication theory. His published work includes three books and more than thirty-five articles and book chapters. He was considered one of the most notable and influential communication scholars of his time. He held numerous offices in professional organizations, including president of the Western Speech Communication Association, president of the International Communication Association, and editor of the *Western Speech Communication Journal*.

The B. Aubrey Fisher Memorial Lecture was established by the Department of Communication in 1986 to recognize Professor Fisher's outstanding achievements and to provide a forum for presenting original research and theory in communication.

Randy Y. Hirokawa

Randy Y. Hirokawa is Professor of Communication Studies at the University of Iowa. He joined the faculty at the University of Iowa in 1984, and presently serves as Chair of the Department. Professor Hirokawa received his B.A. degree from the University of Hawaii, and his M.A. and Ph.D. degrees from the University of Washington. He served on the faculty at the Pennsylvania State University from 1980 to 1984.

Professor Hirokawa is known for his expertise in the area of small group communication and decision-making processes. He has published more than 50 journal articles and book chapters in this area. He is coeditor of *Communication and Group Decision-Making*, and is currently working on a coauthored text, entitled *Interacting in Groups*.

Professor Hirokawa has given numerous invited lectures, among them the Van Zelst Lecture at Northwestern University and the Thomas M. Scheidel Distinguished Lecture at the University of Washington. He has served on the editorial boards of four communication journals and as referee for numerous others. He was editor of *Communication Studies*, the scholarly journal of the Central States Communication Association, from 1991 to 1994.

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