Leadership as the Orchestration and Improvisation of Dialogue:

Cognitive and Communicative Skills in Conversations Among Leaders and Subordinates

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Leadership as Cognitive-Communicative Interaction

Communication is not simply a medium through which leadership happens to be exercised; it is part of its substance. Leaders must communicate – and be seen to communicate – in order to influence the beliefs, actions, and emotions of others in pursuit of organizational goals. Even when communication is not an objective, leader actions often lead to expectations and commitments for both the leader and others in the organization to whom the action becomes known (Weick, 2001). Nevertheless, most theories of leadership pay little explicit attention to communication (Bass, 1990; Yukl, 1998), and communication specialists have not systematically studied features of everyday discourse that might characterize effective leadership (e.g., Drew & Heritage, 1992; van Dijk, 1997). The strategy in leadership theory has been to hypothesize broad leadership traits (e.g., intelligence, sociability, self-confidence) or leadership styles (e.g., directive, participative, transformational) and the conditions under which the traits or styles tend to be effective (e.g., subordinates with high vs. low motivation or competence). This macro level of analysis tells us little about the expression of traits or styles in concrete social action, how they affect team performance in real-world contexts, or the underlying cognitive skills (Barge, 1994; Northouse, 2001). Measures of traits or styles are usually based on global subjective impressions averaged across subordinates rather than observed behaviors in specific situations. Relatively static traits and styles distract attention from the cognitive processes that are responsible for flexibility, improvisation, and tradeoffs in dynamic situations (Barge, 1994). The measures rely on prior identification of leaders by their formal position in a hierarchy rather than by their actual

behavior and influence or by their knowledge and mastery of specific cognitive skills and communicative strategies. Not surprisingly, findings are often too general and ill-defined to provide the concrete guidance we need for leader development.

The purpose of this chapter is to investigate what an approach to leadership might look like that is based on the cognitive and communicative skills underlying leaders' interactive behavior. It focuses on a specific approach, *cognitive dialogue theory*, whose fundamental data are real-world sequences of communicative actions in interactive exchanges among participants (or potential participants) in group activity. The theory characterizes the cognitive competencies (e.g., knowledge representations, processing strategies, and preferences) that enable individuals to adapt their individual actions to the intentions of others, develop shared intentions, and thereby participate in and lead collective action (Blumer, 1969, pp. 109-110). Cognitive dialogue theory integrates three sources of concepts from the study of communication: transaction knowledge structures (or dialogues), relationship-oriented strategies, and conversational devices: (a) Individuals in the same culture or organization create, adapt, and share knowledge structures that represent the goals and essential components of communicative exchanges. These structures serve as plans for different types of *dialogues*, that is, characteristic, recognizable, multiperson conversational transactions such as negotiation, deliberation, information exchange, expert consultation, or resolution of disagreement, which leaders use to orchestrate group activity. (b) Participants must often improvise during a dialogue in order to accomplish their objectives under conditions of social risk. In constructing and navigating a dialogue, leaders use strategies that balance task efficiency against the need to protect themselves and their interlocutors against encroachments on privacy and positive regard. (c) A language community makes available a variety of conversational devices that dialogue participants can use to control the flow of talk.

Skilled communicators creatively exploit such techniques to anticipate, influence, and respond to others' speech, both to increase efficiency and to minimize social risk.

A leadership paradigm centered on cognitive and communicative skills has methodological, theoretical, and practical implications: (a) Methodologically, it can provide descriptive tools for a more bottom-up, data-driven approach to complement the top-down strategy that currently prevails. It invites existing theories to spell out more precisely how traits and styles are embodied in knowledge structures, cognitive processes, and behavior and allows theories to be tested by means of careful and precise naturalististic observation (Barge, 1994). (b) It should also help us progress beyond current theories. Cognitive analysis of discourse among leaders, subordinates, and others is consistent with an emerging view of the way cognitive and social processes shape one another on evolutionary (Whitten & Byrne, 1997), cultural (Sperber, 1996), developmental (Rogoff & Lave, 1999), and adult practioner (Hutchins, 1995) time scales. A cognitive-communicative framework for leadership should draw from and contribute to an emerging cognitive-social paradigm (Turner, 2001). (c) The approach should have an immediate practical payoff in the development of better leaders. For example, cognitive dialogue theory defines leadership as (in large part) *the skillful adaptation and implementation of different types of dialogue to achieve group objectives.* Precise characterization of cognitive competencies associated with dialogue roles, interactive strategies, and conversational devices helps trainers identify objectives in leader development, design appropriate training exercises, and provide meaningful feedback. There is already evidence that methods of this kind are effective in training leadership and critical thinking by battlefield officers (Cohen et al., 2003). Recipients of such training acquire reflective awareness and control over skills that are ordinarily left to chance (see Day & Lance, Chap. 3, this volume). Training enables them to practice, adapt, and create

communicative transactions that bring leadership into being.

Leadership in (Inter)Action: An Example

This chapter uses examples to explore the application to leadership of some core concepts and methods of a cognitive-communicative framework. Table 8.1 contains a conversation with a superior that occurred while Robert Mason (1983) was on an aircraft carrier headed for his first deployment in Vietnam as an Army helicopter pilot. Although this is a military example, the ideas developed in this chapter draw significantly from work in other domains, such as business, government, counseling, education, and everyday conversation.

The exchange in Table 8.1 is deceptively simple. It exemplifies a process by which participants *negotiate* the type of dialogue transaction that is to be conducted and the roles that are to be played while protecting one another's freedom of action and self-regard (Brown & Levinson, 1987). We will take a line by line tour of this exchange to discover both the basic competencies and the more subtle leadership skills that it displays. Table 8.2 is a less successful exchange that gives us a glimpse of what can happen when such skills are not employed.

Sources of Cognitive Dialogue Theory

Cognitive dialogue theory draws on and integrates three approaches to the analysis of communicative interaction.

Pragmatics: Pragmatics starts from the premise that speech is a form of action. Like other actions, utterances must be understood in terms of the intentions of the agent; unlike other actions, part of the intention of a communicative act is that its intention be recognized (Levinson, 1983). These intentions need not be visibly displayed by the content or structure of a sentence but may depend on knowledge of the context and speaker. Unlike traditional *syntax* (how words combine to make a sentence) and traditional *semantics* (how word meanings combine to

determine the truth conditions of a sentence), pragmatic concepts apply in principle to non-linguistic gestures, intonations, pictures, and sounds. Pragmatics has produced elegant and useful theoretical concepts that explain how shared assumptions about rational cooperation and mutual knowledge are used to convey intent (e.g., Brown & Levinson, 1987; Sperber & Wilson, 1995). It has been flawed, however, by its focus on individual utterances rather than multiperson extended exchanges, reliance on hypothetical examples rather than empirical data, emphasis on the linguistic form of sentences rather than background knowledge and context, and overemphasis on deliberative cognitive processes rather than more rapid recognition-based processes. Recent work in pragmatics, however, has begun to take account of findings from conversation analysis and from cognitive psychology (e.g., Brown & Levinson, 1987; Geis, 1995; Sperber & Wilson, 1995).

Conversation analysis: This work, like pragmatics, emphasizes what people *do* in conversational interaction, but it is intensely empirical in its focus on real-world data. An individual utterance is never analyzed by itself but always in the context of utterances that come before and after. A conclusion about the use of a communicative device to achieve a specific effect must be based on regularities in multiperson interactive behavior that are observed across many instances in a large corpus of transcribed exchanges (Pomerantz & Fehr, 1997; Sacks, 1995). Conversation analysts resist premature macro-level theorizing common in many branches of social science (e.g., about the role of power and status), cognitive presuppositions (e.g., that deliberative reasoning underlies the use of conversational devices), and prior assumptions about the features of real-world conversations that will turn out to be significant. Despite or because of these constraints, conversation analysis has proven to be an extremely productive research paradigm (Silverman, 1998). Conversation analysis ultimately may supply a body of well-

substantiated empirical generalizations that call for theoretical explanation. Like Geis (1995), cognitive dialogue theory extends cognitive concepts from pragmatics to help organize, explain, and clarify empirical findings and concepts in conversation analysis.

Dialogue theory: Work on dialogues originated in logic but has been influenced by both pragmatics and conversation analysis. As a result, it is distinctive in having both a normative and a descriptive motivation. Dialogue theory studies reasoning and decision making as they actually occur in multiperson interactions rather than as a static set of logically related premises and conclusions (Hamblin, 1970; Rescher, 1977; van Eemeren & Grootendorst, 1983; van Eemeren et al., 1993). It seeks to identify the different types of argumentation (that is, the dynamic exchange of reasons for and against a conclusion) that are observed in conversation, when such exchanges are correctly accomplished, and the kinds of errors to which they are subject. Walton (1995, 1998) extended dialogue theory beyond argumentation to an array of other dialogue types, such as negotiation, deliberation, inquiry, information seeking, and even quarreling. The method is to start with observed types of interactive exchange as in conversation analysis but to build idealized models based on concepts from pragmatics. The idealized models show how each type of transaction should be conducted based on a mutual assumption that the participants will cooperate to achieve the goal of that particular type of dialogue. Dialogue theory promises an evaluative framework that directly maps descriptive and cognitive analyses of actual exchanges onto normative process models to identify where they diverge. If leadership skill is manifested through communicative transactions, then prescriptions for improving leadership must also be couched in transactional terms. Dialogue theory allows us to do this.

In the following sections, we will show how concepts from these areas combine in increasingly sophisticated ways to account not only for basic communicative competencies but

for the more advanced interactive skills needed for leadership.

Showing Facts

A company sergeant wants to alert the commander that the enemy is setting up positions on the next hill. To do so, the sergeant looks in that direction while she has the commander's attention. The commander follows her gaze and sees the enemy activity for himself. The sergeant could have *told* the commander about the enemy activity, but she was able to *show* him direct evidence instead (Sperber & Wilson, 1995, pp. 50-51). People often take action (which may be a mix of telling and showing) in order to produce cognitive responses in other people. The intended cognitive responses may include acquiring new *beliefs* (e.g., about enemy activity), forming *intentions* to do actions (e.g., to give the appropriate orders), or experiencing *emotions* (such as gratitude, alarm, anger, or amusement). I will call the intent to produce such a response a *cognitive intention* (generalizing the definition in Sperber & Wilson, 1995, pp. 54-60).

Communicative situations vary in the *accessibility* of the intended cognitive effects, that is, the degree to which the desired responses are primed by the context and shared background knowledge. Accessible cognitive responses may be successfully elicited even if the person in whom they are produced does not recognize the other person's intent to elicit them. In the example in the previous paragraph, because the enemy activity was visible and the sergeant's intent was simply to convey that information, the commander might have followed the sergeant's gaze and acquired the desired beliefs without realizing that the sergeant intended for him to do so. By contrast, when relatively inaccessible cognitive effects are intended, they typically depend for their success on more explicit linguistic encoding. For example, the sergeant would have had to say more if her intent was to produce a more complex belief based on non-shared knowledge, e.g., "The intel officer was wrong again about what the enemy would do."

Recognition of cognitive intent might be useful even when it is not necessary for success of the intent. For example, the manner of the sergeant's action might have indicated to the commander that she *meant* him to look in the same direction; such recognition might help focus the commander's attention and make the relevant facts more salient. Recognition of intent might be also be desirable as a sign that the relevant information is not simply known by each individual but mutually known. Future interaction and coordination can proceed with the assurance that each knows that the other knows it. In fully communicative interactions, the agent not only intends to produce a cognitive response, but also intends for the recipient to become aware of that intent (Grice, 1989). The intent to make one's cognitive intent known is called a *communicative intent* (Sperber & Wilson, 1995, p. 61).

There are situations in which recognition of a cognitive intent tends to work against success of the cognitive intent. Leaders sometimes take advantage of highly accessible information to keep their cognitive intent under wraps. For example, it is useless to tell others that one is courageous, decisive, intelligent, honest, or empathetic. To have credibility, these things must be shown. Both leaders and subordinates may sometimes engage in behaviors that have a natural association with various traits not (only) because they have such traits, but so that others can see that they do. Such a cognitive intent may be undermined if recognized, suggesting that the behavior is "only for show." In other cases, recognition of intent might threaten the intended audience with loss of face. For example, a type of communication that is sometimes face threatening is *instruction* (Keppler & Luckmann, 1991; Knoblauch, 1991). Superiors who wish to help subordinates perform a procedure correctly might let subordinates see them modeling the procedure but do so in such a way that the subordinates are unaware of the instructional intent.

Leese's sitting next to Mason at breakfast (line 1, Table 8.1) provided direct evidence of Leese's accessibility and willingness to talk with subordinates, whether or not sending such a message was recognized by Mason as Leese's intention. Sometimes, as will be shown, a leader can exploit ambiguity of cognitive intent in order to avoid premature commitment or to test the intentions of others.

Expressing Emotion

The exchange of smiles between Leese and Mason in lines 1 and 2 (Table 8.1) illustrates how recognition of intent can interact with more accessible natural meaning. Although smiling is naturally associated with positive affect, there is no guarantee that it will always have its natural meaning because adults can smile or refrain from smiling voluntarily. Rather than intending to deceive, however, smilers may intentionally exploit a smile's natural meaning to signal that they are pleased with something (or in more complex cases, to communicate ironically that they are not pleased). Even when no irony is intended, smilers may be counting on recognition of the intent underlying a voluntary smile to make the natural message more salient. This account of *social smiling* probably fits Leese's smile in line 1 (Table 8.1), which functions as both a greeting and a signal that the business at hand is not expected to be unpleasant.

The preferred response to the first part of a greeting is a second greeting that echoes the first in style (Sacks, 1995, vol. 1, pp. 3-11). In line 2, Mason indicates that he "smiled back *weakly*" at Leese. Any deviation from an expected response draws attention to itself because it may be a clue pointing toward a more complex cognitive intent. Leese may infer that Mason's intended message is something like, *I'm glad to see you too (hence, smile), but there is something else that I am not pleased about (hence, weak smile)*. Evidence that this was Leese's conclusion appears in his follow-up question in line 3, "Something wrong?" Understanding

Mason's weak smile depends on a process that takes into account both natural meaning and less accessible intentional deviations from customary patterns. The ability both to show and to recognize emotion requires sensitivity to the moment-by-moment dynamics of cognitive intent in everyday interactions. Caruso & Wolfe (chap. 10, this volume) give a fuller picture of how people identify, understand, and attempt to influence the emotions of others. Emotional intelligence, for both leaders and subordinates, is intertwined with conversational skill.

Communicating Intent

Communicative intent is often essential for achieving the desired cognitive effect (Grice, 1989, chaps. 5, 14, and 18). Speakers are not likely to get a question answered, have an order obeyed, or convince someone of a claim unless recipients recognize their intent to ask a question, give an order, or defend a claim, respectively. Communicative intentions (for example, to ask questions, give orders, and defend claims) define what Austin (1965) and Searle (1969, 1979) called *speech acts*.

For example, in line 7 (Table 8.1), Mason did a number of things in addition to uttering a sequence of sounds. First, Mason made an *assertion*. This counts as a type of speech act because he accomplished it simply by getting Leese to *understand* that his cognitive intent was to convey information (rather than have an order obeyed, a question answered, etc.). A speech act is successful when its communicative intent is accomplished, that is, when the cognitive intent is recognized by the recipient (whether or not it is successful). Of course, Mason's intent in line 7 was not merely to make an assertion. He also wanted to change Leese's mind about his ability to fly off the carrier (the cognitive intent). Success of the communicative intent may be necessary for achieving the desired cognitive effect but is seldom sufficient. Success of the cognitive intent depends on many other factors in addition to recognition of that intent, such as the listener's

prior views, trust in the speaker's credibility, and further information that the listener may obtain. For example, the discussion in lines 8 through 15 (Table 8.1) provided Leese with additional information bearing on the truth of Mason's assertion in line 7.

Line 7 is also an indirect *request* by Mason to be released from the flying assignment mentioned in line 1. A request, like an assertion, counts as a speech act because it is accomplished by getting the recipient to recognize the relevant cognitive intent (in this case, to get the recipient to do something) whether or not the cognitive intent is successful. Note that the assertion in line 7 is regarded as a *direct* speech act because it uses a linguistic form (declarative sentence) that is conventionally associated with asserting, whereas the request in line 7 is an *indirect* speech act because it does not (e.g., Mason did not say, "Please reassign me" or "I request that you reassign me"). Cognitive dialogue theory shifts the emphasis from individual communicative actions to the more extended transactions to which they contribute. Emphasis on transactions will provide a better insight into the leadership skills required for initiating, recognizing, and implementing cognitive and communicative intentions.

Relying On Cooperation

If people did not understand indirect communication, they could not participate in real-life conversations. But how are people able to do so? Two basic answers have been offered to this question. One lays out normative principles for conversational cooperation that could be used in deliberative reasoning about the intent of a speaker. The other approach attempts to identify cognitive processes that under most circumstances satisfy the normative principles relatively automatically without any explicit reasoning at all. Both are important for a full understanding of what conversational interaction is and should be.

According to Grice (1989, chaps. 2, 7, and 17), the hearer *infers* the speaker's intent

through reasoning that is based on (a) the literal, conventional meaning of the uttered sentence, (b) mutual knowledge about the background and the context, and (c) mutual assumptions about cooperation. One of Grice's major contributions was to lay out a general normative framework for communication that spells out assumptions about cooperation that make communication work. Grice introduces his overarching cooperative principle as follows: "Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged" (p. 26). Grice's idea is at the heart of what we mean by a *dialogue*: A dialogue corresponds to a mutually recognized purpose in a talk exchange and a set of constraints that participants impose on themselves as to what counts as a suitable contribution at each point in the exchange.

Could Leese and Mason have used the cooperative principle and the specific maxims that Grice derives from it to infer the identity of the indirect speech acts in their exchange? Take Mason's response "Really?" in line 2 as an example. The inference process, which Searle believes must largely be unconscious (1979, pp. 46-47), takes place in two stages: (a) Apparent violation of the cooperative principle triggers awareness of a problem in interpreting Mason's utterance. Taken literally, "Really?" implies disbelief. Disbelief seems unlikely, however, since Mason and Leese both know, and know that the other knows, that Leese has the authority to make the assignment and is unlikely to have forgotten or lied about it. So Mason could not have meant "Really?" literally as a question about the truth of the assignment. (b) The problem is solved by showing that the violation of the cooperative principle is only apparent. If Mason meant to make a cooperative contribution to the conversation, he must have had some other intent. "Really?" may suggest that Mason had a good reason not to expect the assignment. If so, a decision contrary to that reason might make him uncomfortable, and this is something worth

communicating. If Mason anticipated that Leese would reason in this way, he intended to perform the speech act of *expressing discomfort with the assignment*.

The Gricean inference model remains an important source of insight into normative constraints on conversation. However, it has problems as a model of actual cognitive processes because it requires explicit representation of, and reasoning with, maxims of cooperation and assumptions about mutual knowledge. Sperber & Wilson (1995) have proposed a more cognitively plausible account, which they call *relevance theory*, according to which maxims of cooperation and assumptions about mutual knowledge are implicit in the operation of cognitive mechanisms. According to that theory, recognition that an action probably has some communicative intent causes the recipient to attend to the action, thereby linking it in working memory with contextual information that is currently accessible to both the recipient and the action's originator. The combination of this information and the communicative action may generate cognitive effects (such as strengthening or weakening beliefs, intentions, and affect) through rapid and relatively automatic processes. If no relevant effects are generated, the recipient accesses more information from long-term memory or the external environment to combine with the original stimuli. The longer the process goes on, the less accessible the information becomes to which the recipient shifts attention and the more costly it becomes to obtain (i.e., it requires more steps of retrieval from long-term memory or examination of a larger area of the external environment). The degree of relevance of the communication depends on the magnitude of change in the recipient's cognitive state (beliefs, actions, and affect) relative to the cognitive effort required to generate it. The process stops as soon as the expected additional gain in cognitive effects is exceeded by the expected additional costs (Sperber & Wilson, 1995, pp. 137-142) (for a similar process in decision making, see Cohen & Thompson, 2001). The

threshold of relevance can be adjusted up or down based on experience with particular communicators (e.g., how useful has their information been in the past?) or judgments about what they are able or willing to deliver on the current occasion (e.g., do they have a reason to be vague or to lie?). On this view, recognition of intent for indirect communications may occur rapidly and relatively automatically without necessarily passing through a stage of literal interpretation. Mason's "Really?" in line 2 might combine in Leese's working memory with Leese's own statement in line 1 and with associated contextual and background information to activate the explanation that Mason is uncomfortable with the assignment. Basic communicative competence includes a repertoire of interactive patterns that can be quickly recognized and implemented. Leadership skill may involve a wider repertoire of patterns, better understanding of their conditions of use, more effective strategies that can be used for search and retrieval from long-term memory when familiar patterns do not fit, and the ability to blend and modify existing patterns to communicate in novel situations.

Transacting Conversational Business

According to relevance theory, rapid identification of a speaker's intent depends on the accessibility of appropriate knowledge in long-term memory. This knowledge appears to include structures specialized for communicative interaction. There are two broad approaches to those structures. Speech act theory implies that the recognition of intent is the matching of *individual* utterances to models of speech acts. Cognitive dialogue theory, by contrast, focuses on matching *sequences* of utterances to mental models of dialogue. *Dialogues* are multiturn, multiperson exchanges that participants jointly create and recognize by acting within the constraints of dialogue-specific roles. From the dialogue point of view, the pragmatic meaning of an individual utterance is the contribution it makes to the overall interactive exchange in which it occurs (Geis,

1995). Such contributions are of two kinds, one joint and the other role-specific: (a) individual utterances help the participants collaboratively understand and construct the type of transaction that they are conducting (the communicative intent) and (b) individual utterances help a participant achieve the goals associated with his or her specific role in the transaction by affecting the beliefs, actions, or affect of other participants (the cognitive intent). Thus, parties to an exchange use utterances associated with particular roles to construct recognizable dialogues in which they wish to play those roles. Cognitive dialogue theory suggests that leadership competence includes the ability to determine which types of dialogue are appropriate under which conditions, produce or heighten the salience of stimuli that enable others to recognize the intended type of dialogue, and recognize and respond appropriately to the transactional intentions of others.

Different kinds of interactive business (e.g., requesting-promising, asking-telling, challenging-justifying) are associated with different dialogue models in long-term memory. Fig. 8.1 is a dialogue mental model for a *request-offer* transaction. Most of the elements of Fig. 8.1 resemble speech act conditions proposed by Searle and others for individual speech acts of requesting and promising. Thus, Fig. 8.1 inherits all the support provided by linguistic data (e.g., regarding indirect requests and promises) that are cited in support of speech act theory (Geis, 1995; Searle, 1969, 1979). In addition, it accounts for facts about observed conversations that speech act theory leaves unexplained, such as symmetries between requesting and offering and the collaboration that is often required for their accomplishment (Geis, 1995; van Eemeren & Grootendorst, 1983). (For example, line 14 by Leese and line 15 by Mason in Table 8.1 work together to convey the same information as line 7, and can therefore be counted as an indirect request by Mason even though Leese plays an essential role. The same two lines simultaneously

count as an indirect offer by Leese even though Mason plays an essential role!) Cognitive dialogue theory is more in the spirit of Grice's initial conception: The cooperation necessary to execute a request or an offer manifests itself in the relationships among utterances by different parties as they contribute to the overall direction of the conversation. Dialogue structures also have an advantage from the point of view of relevance theory as patterns to be recognized. A dialogue structure can be matched and its activation strengthened by multiple utterances in an ongoing interaction, whereas a speech act structure may have only one chance to be triggered, by a single utterance. Cognitive dialogue theory also builds on work by Bratman (1999, pp. 93-161), Grosz and Sidner (1990), and Searle (1990) on shared intentions and shared plans in both discourse and domains of practice. Finally, there is independent evidence that people use causal models of this kind (i.e., "stories") to predict and explain one another's actions (Cohen et al., 1998; Pennington & Hastie, 1993; Schank, 1990).

Cognitive dialogue theory implies that four things must happen if any transaction is to be successful: (a) One or more persons must (recognizably) intend to engage in a particular type of transaction; (b) all the parties must (recognizably) accept the type of transaction they are to conduct and the roles they are to play in it; (c) optionally, the parties may elicit relevant information from each other about the satisfaction of conditions for accomplishing the transaction goals; and (d) the parties must recognize whether the conditions are satisfied and whether the transaction has been successful. Fig. 8.1 contributes to the achievement of each of these items in three different ways: (a) as a partial plan for achieving collaborative and role-specific objectives, (b) as a source of stimuli that enable others to recognize the intended transaction and its current status, and (c) as a source of normative expectations and obligations that govern the conduct of the transaction. Depending on the richness of the shared context, an

entire transaction may be accomplished by one or two words, a quick exchange of glances, a simple question and answer, or a discussion lasting hours, days, or weeks.

As a plan, Fig. 8.1 implies that an initial *motive* together with a possible *means* to fulfill it leads one or more of the parties to adopt a *cognitive intent*. The cognitive intent together with an *opportunity* (an appropriate situation for broaching the issue and appropriate relationships with other parties) leads in turn to a *communicative intent* to make the cognitive intent known to others. The communicative intent is successful in a narrow sense (comparable to the performance of a speech act like requesting or offering) if the other parties recognize the intended transaction and the intended role (requester or offerer) of the speaker. The communicative intent successfully initiates a transaction if the parties *share* the communicative intent from the perspective of complementary roles, that is, if they recognizably accept the transaction structure as a plan for the exchange. The transaction ends successfully if all parties share the cognitive intent, because they agree implicitly or explicitly that the conditions (motive and means) specified in the plan for adopting that intent are satisfied. The *expected results* of a successful transaction include achievement of the end state specified by the cognitive intent (commitment by the offerer to do the action, reciprocated by the requester's appreciation) and fulfillment of the motive (the requested action is performed by the offerer at the appropriate time). If the parties do not arrive at a shared cognitive intent, the transaction will continue, be temporarily suspended, or end without success.

The communicative intent is implemented by producing or drawing attention to verbal or nonverbal stimuli that match components of the appropriate dialogue structure. An utterance matches the structure if it asks for, provides, or otherwise activates information that fills a slot in the structure. The structure itself does not impose rigid constraints on what kinds of

communicative actions might do the job or in what order they need to occur. To the extent that the parties already share relevant knowledge and know that they share it, they may have to say or do very little to achieve mutual recognition of the intended transaction and of their respective roles in it. A plausible structure will generally be activated rapidly by pattern matching to features of the actions and the situation (Sperber & Wilson, 1995). However, if a ready match is not found or if utterances do not fit any familiar transaction type very well, participants may have to draw on less immediately accessible background knowledge to construct more novel explanations and plans for their exchange (Cohen et al., 1998; Cohen & Thompson, 2001).

There is a positive relationship between *actually* producing utterances that match a dialogue structure and being *normatively* obligated to do so. The clearer the match between a speaker's utterances and a particular structure, the stronger are the expectations formed by other participants that the speaker will continue to adhere to the norms associated with that structure and the greater is the obligation felt by the speaker to do so. Highly ambiguous utterances, such as line 2 ("Really?") and irrelevant utterances, such as lines 4 through 5, are less likely to generate mutually recognized commitments.

The initiator of a dialogue is the first to communicate commitment to the relevant cognitive intent. Cognitive dialogue theory makes no assumptions as to which role initiates a transaction. For example, R (the requester) may initiate a transaction by asking, "Can you help me change this tire?" or, more indirectly, "Did you happen to bring your jack?" (both of which match the means condition in Fig. 8.1). O (the offerer) may initiate a transaction by asking, "Do you want some help with that tire?" or, more indirectly, "Is that tire giving you trouble?" (both of which match the motive condition). They may, of course, have different reasons for initiating or participating in this transaction, for example, R to get back on the road and O to earn R's

gratitude and indebtedness. A request-offer transaction may thus begin with "speech acts" of requesting or offering. There are cases, however, in which it is difficult to determine which person, if either, has taken the initiative. Requests and offers sometimes emerge in parallel through an exchange of utterances that provides a progressively better match to the structure:

R: Boy, today just isn't my day.

O: Is that a flat tire you've got there?

R: Yep.

O: Well, I've changed a lot of flats in my day.

R: Thanks, I could use a hand.

Here, the requester (R) may have been fishing for an offer of help but relies on the potential offerer (O) to improve the match to the request-offer structure. As a result, R enjoys a degree of deniability regarding the intent to *request* help. Analysis in terms of individual speech acts obscures the way communicative and cognitive intentions emerge collaboratively, gradually, and in parallel. One party is the initiator only if his or her utterances recognizably match the intended structure at an earlier point in time.

Mason's "Really?" in line 2 (Table 8.1) weakly matches the motive condition in Fig. 8.1 because it suggests that he is uncomfortable with the assignment. Fig. 8.1, however, does not easily account for Leese's remarks in lines 3 through 5. Their apparent irrelevance suggests either that Leese has failed to recognize the intended request-offer transaction or declines, at least for now, to participate. Mason's line 7 is more explicit and provides a much better match, making him the initiator of the transaction. By far the best explanation of line 7 in the context of line 1 is that Mason wants Leese to recognize his intention to get Leese to change his assignment. Leese directly addresses Mason's complaint in line 8, suggesting that he has

recognized the intended request and moreover has agreed to play the role of a potential offerer in a request-offer dialogue.

By engaging in a mutually recognized transaction of a given type, the participants become subject to the normative constraints associated with that type of transaction. First, they implicitly accept the recognized structure as a criterion of relevance (hence, of cooperation) for the rest of the exchange. Further utterances are expected to match conditions in the dialogue structure. For example, each utterance in lines 8 to 15 either elicits or provides information pertaining to Mason's motive for his request. Second, by engaging in a transaction (and accepting Fig. 8.1 as a plan for the exchange), participants implicitly agree to accept the cognitive intent if relevant conditions are satisfied. From a Gricean point of view, a cooperative transaction requires that both parties at least *conditionally* accept the relevant cognitive intent, subject to verification of motive and means; that is, they must at least be *potential* offerers or requesters. If they are in doubt about motive or means conditions, they are expected to reflect on or verify them. For example, the recipient of an offer may refuse to accept it until assured by the offerer that he or she can fulfill the request without too much inconvenience (that is, the means condition in Fig. 8.1 is satisfied). By the same token, the recipient of a request may want to make sure that the requester has a good reason for the request (that is, the motive condition is satisfied). The critical discussion in lines 8 through 15 in Table 8.1 reflects Leese's interest in further verifying the motive conditions of Mason's request.

If the parties to a transaction agree that motive and means conditions are satisfied, the transaction concludes successfully with a shared *unconditional* cognitive intent (i.e., the request is granted or the offer accepted). Like recognition and sharing of communicative intent, however, recognition and sharing of cognitive intent can emerge gradually rather than all at once; there

need not be a single "moment of decision." The accumulation of positive matches in lines 8 through 15, by means of Leese's questions and Mason's answers, moves Leese farther into the gravitational orbit of commitment to a shared cognitive intent; it would be more and more surprising and awkward if he did finally refuse to change the assignment. Still, line 17, in which Leese explicitly grants Mason's request, is not wholly redundant.

Fig. 8.1 is only one element in a much larger nexus of knowledge and goals, variation in which accounts for variability in content across different instances of the same dialogue type. Variation is also contributed by the different strategies and conversational devices that people may adopt to conduct a dialogue. However, Fig. 8.1 captures an important invariant structure underlying very diverse exchanges that traditional speech act theory fails to describe. Cognitive dialogue training helps leaders learn to understand the purposes and elements of different types of dialogue, to initiate them when appropriate, to recognize them when initiated by others, and to understand and respect the constraints and expectations associated with dialogue roles at each stage of the transaction (Cohen et al., 2003).

Negotiating Dialogue Roles

How a transaction is accomplished is as important as the transaction itself for understanding and training leadership skills. For example, in one case the participants may be slow to provide clues regarding the type of exchange they intend or what they wish to achieve by it, while in another case they may be straightforward. Participants may prefer some ambiguity in order to create space for implicit negotiation about the type of discussion and the roles that are to be played. One or both parties may want to keep their cognitive intentions hidden until they have a better read on what the other participants want or will accept. Implicit negotiation can establish the terms for future interactions between the same parties, and a suitable outcome may facilitate

efficient future coordination. The difference between what is minimally required for the accomplishment of a transaction (e.g., lines 1, 7, and 17 in Table 8.1) and what actually happens (e.g., lines 1 through 22), is one indication of the importance of interpersonal goals in an exchange relative to immediate task goals. When well managed, this extra effort may be an astute investment in the success of future transactions (Hutchins, 1990, p. 218).

The most ambiguous part of Leese and Mason's conversation occurs in lines 1 to 7. There are two major approaches that can help us figure out what is happening here, pragmatics (Brown & Levinson, 1987) and conversation analysis (Sacks, 1995), and they dovetail nicely. In combination, they provide an account of how interpersonal or team-building goals are manifested in real world conversational exchanges between leaders and subordinates.

Protecting Face

The basic idea of Brown and Levinson's (1987) *politeness theory* is that participants in conversational exchanges are concerned with protecting the *face* of themselves and their partners. There are two varieties of face threats (pp. 59-68). *Negative face threats* involve restricting freedom of action or invading privacy. A request virtually automatically counts as a negative face threat to the recipient of the request. *Positive face threats* involve not being highly regarded or valued by others. Blatant non-cooperation and negative affect addressed to a specific person are obvious positive face threats. More subtly, criticism and disagreement often count as positive face threats by implying that their targets should have known better. Having a request rejected is also a positive face threat because it may imply that the requester's merits or needs are insufficiently valued. Politeness theory predicts that transactions associated with face threats (such as request-offer dialogues) will tend to be accompanied by strategies for mitigating those threats. Negative politeness strategies typically involve steering gingerly around the edges of the

relevant dialogue mental model (p. 131). In general, the more imperfect the match between an utterance and a structure and the more distant the match is from the cognitive intent component, the less threatening is an utterance to the recipient's freedom of action (i.e., his or her negative face). Thus, negative politeness strategies work directly *against* efficiency in getting the request done by increasing ambiguity about what transaction is taking place (communicative intent) and throwing roadblocks in the way of accomplishing it (cognitive intent). Positive politeness strategies (p. 102) also reduce efficiency because they impose extraneous demands on the interaction, such as taking time to show concern for the other party's interests. Brown and Levinson (1987, pp. 71- 84, 250) propose a cost-benefit tradeoff mechanism for choosing interactive strategies, in which efficiency in the transaction is traded off against the perceived seriousness of the face threat implicit in the transaction, the power or authority of the target of the threat, and the social distance between the two parties.

These observations suggest a method that analysts can use to uncover relationship goals in a conversational interaction: Look for alternative sequences of utterances that could have been used in place of the actual one and would have been more efficient in accomplishing the same transactional goal. Then ask why those alternatives were not used. This method is consistent with the research methodology pursued by conversation analysts (e.g., Sacks,1995, vol. 2, pp. 538-541). For example, the exchange between Leese and Mason begins in line 1 when Leese sits down and tells Mason about his assignment. Consider some of the alternatives available to Leese at this point. Leese could have simply said, "You're going to fly a ship off the carrier." The effect of this direct order would be to discourage a counterrequest by Mason. Instead, Leese referred explicitly to his own role in making the assignment ("I've assigned you"). These words would be irrelevant and redundant if Leese's goal was only to communicate an order. Both the

formulation of line 1 and the choice of a private setting may be clues pointing toward a more complex cognitive intent, namely, to inform Mason that Leese is open to questions about the assignment (matching the opportunity condition for a request-offer transaction, as shown in Fig. 8.1). However, this interpretation runs into problems: It conflicts with Grice's cooperative principle, which prescribes that communicators be clear and unambiguous. Why didn't Leese ask Mason a direct question, such as, "How do you feel about flying a ship off the carrier?" Moreover, in lines 3 through 5, Leese passes up another chance to ask Mason directly whether there was a problem with the assignment, instead commenting on Mason's appearance and asking about his reaction to the food. In other words, Leese *chooses* to respond to the half smile (which expresses discomfort, but has an unclear target) and to ignore "Really?" (which clearly refers to the assignment), thus prolonging the ambiguity for another turn.

A possible explanation is that Leese was concerned with face, both his own and Mason's. Asking Mason directly how he felt about an order might suggest that obedience was up to the subordinate, threatening Leese's negative face (i.e., his freedom to make assignments as he sees fit) and his positive face (i.e., his image as a decisive and respected leader, whom subordinates do not challenge). Second, an explicit question would suggest that Leese had doubts about Mason's ability, and such doubts would threaten Mason's positive face. (Leese's later remark in line 20, "I'm sure you wouldn't have any trouble," confirms that Mason's positive face was a concern to Leese.) In another words, if Leese had asked Mason point blank, "Are you capable of flying a ship off the carrier?," he would have been showing *less* rather than more "individual consideration." Line 1 nicely finesses these problems because it can be construed as an assertion, an order, or a indirect question. It is conducive to discussion (contributing to the success of that cognitive intent) without revealing that discussion *was* Leese's cognitive intent.

Politeness strategies, especially ambiguity, enable a leader to maintain a decisive posture while at the same time leaving a perceptible opening for subordinates to raise questions. Politeness strategies enable subordinates to take small, measured steps toward a risky transaction, such as request-offer. In training based on cognitive dialogue concepts, leaders are taught to recognize the social risks associated with different types of dialogue, to consider the degree of indirectness or directness that might be appropriate on a given occasion, and to recognize and correct misunderstandings both of one's own intent and that of other dialogue participants (Cohen et al., 2003).

Nevertheless, politeness theory is not the whole story. In the course of this exchange, Mason's role is gradually transformed from cautious recipient of an order to someone who claims the right to *question* the order and make a *counter-request* of his own. Politeness theory does not explain the evolution of Mason's position. What was it about Leese's responses – which, after all, remained studiously non-committal – that encouraged Mason in this progression and made the request-offer transaction possible? What, if anything, suggested to Mason that he might succeed in this implicit negotiation?

Controlling the Floor

While pragmatists explain utterances in terms of individual and shared goals, conversation analysts look at the general functions that communicative devices serve in a system of conversation as shown by examination of a large corpus of exchanges. The devices they examine typically involve sequences of utterances and are characterized abstractly so as to capture the most general possible rules of conversation. One such conversational mechanism involves *adjacency pairs*, which help regulate turn-taking in conversation (Sacks, 1995, v. 2, pp. 521-541). Adjacency pairs are such that when the first part occurs, the person to whom it is

addressed is obligated (by mutual expectations of cooperation) to perform the second part. This class includes greetings or goodbyes followed by greetings or goodbyes, questions followed by answers, requests and offers followed by acceptance or rejection, assertions or claims followed by agreement or disagreement, complaints or accusations followed by denials or excuses or apologies, and compliments followed by acceptances of a compliment. Usually, only one of the allowable second parts of an adjacency pair is *preferred* by the initiator, for example, acceptance of a request and agreement with a claim. Mason's half smile and "Really?" in line 2 are each allowable but dispreferred responses to adjacency-pair first parts in line 1, the former to Leese's smile and the latter to Leese's statement of the assignment. When the preferred response does not occur, the responder is *accountable*: It is perceived as reasonable for the first speaker to ask for an explanation, and so it is not surprising that Leese does so (lines 3 through 5). The request for an explanation is itself the first part of another adjacency pair, which obligates the responder to produce an appropriate second part. This chain of expectations can be exploited by an individual, like Mason, who has a limited perceived *right to speak*. The non-privileged party may produce a dispreferred response as a way to induce the first speaker to demand an explanation. That demand, in turn, serves as an invitation to the responder to say things that he or she wanted to say in the first place. If it works, the responder is obligated (by mutual expectation) to say what he or she did not originally have the right to bring up. Thus, Mason's "Really?" functions to set Leese up as the questioner and Mason as the *answerer* in the remainder of the conversation. A more primitive version is a child's saying to a parent, "You know what, Mom?" When the adult responds by asking, "What?," the child has an unambiguous right to speak (Sacks, 1995, vol. 1, pp. 256-257). From the point of view of pragmatics, Mason's response in line 2 was a transactionally inefficient response to the flying assignment, driven by the need to protect face.

This is true as far as it goes, but conversation analysis supplies a positive function for Mason's line 2 response, as part of a negotiation for floor time in order to initiate a request-offer transaction. In *this* aim it was entirely successful.

By the same token, pragmatics sees Leese's response in lines 3 through 5 as transactionally inefficient because Leese did not use more direct alternatives (e.g., asking Mason about his feelings about the assignment). Does it follow that Leese did nothing to facilitate such a transaction? To answer that, we need to imagine that Leese did want to preclude a discussion of the assignment (i.e., to negate the opportunity condition in Fig. 8.1) and ask whether more efficient tactics might have been available for him to accomplish that. For example, Leese could have responded to Mason's "Really?" with "Yes" or the equivalent and gone on to another topic. Leese had yet another efficient alternative: a general query (e.g., "Something wrong?") without mentioning the food. What, if anything, did "This chow getting to you?" accomplish? It turns out that lines 3 through 5 are an example of another frequently used conversational device, a *correction invitation*, which in this particular context has precisely the function of accepting Mason's implicit request for floor time (Sacks, 1995, vol. 1, pp. 21-25). A correction invitation is a question (in this case, "Something wrong?") accompanied by a sample answer ("This chow getting to you?"). The expected response, that is, the second part of this adjacency pair, is not a simple *yes* or *no*, but *yes* or *no plus an explanation* (Sacks, 1995, vol. 2, p. 414). The aim of a correction invitation is to induce the responder to speak the truth by obliging him or her to correct the questioner's mistake. After this correction invitation, cooperation obliges Mason to initiate the request-offer transaction, and Mason gets right to the point in his next utterance (line 7, Table 8.1). In sum, Mason has asked for the floor in line 2, and Leese has granted it to him in lines 3 to 5 (matching the opportunity condition of the request-offer transaction), with the

additional face benefits that Mason is not personally accountable for questioning the assignment and Leese is not accountable for asking Mason how he felt about the assignment. Politeness theory explains the ambiguity of lines 1 through 6, conversation analysis explains the interactive work that is accomplished despite that ambiguity, and dialogue theory explains the transaction roles that emerge as a result.

Initiative is often recognized when subordinates take on nonobligatory tasks that they know will win the leader's approval. In this interaction, by contrast, Mason has no such assurance. He must decide whether to take an initiative (i.e., make a request about the flying assignment) that presents a significant social risk. Dialogue, politeness, and conversation analytic perspectives highlight the skill that both parties used to maneuver their way to a protected space where Mason could express his concerns without transgressing face boundaries. This also suggests another, quite speculative explanation of Leese's ambiguity in lines 1 and 3 to 5, in addition to mitigating threats against face. Leaders may sometimes use ambiguity about their own intent to create opportunities for subordinate initiative under conditions of real uncertainty. The leader can observe the subordinate's willingness to act when the subordinate cannot fully anticipate the superior's reaction. In this way, leaders can assess the ability of subordinates to identify appropriate initiatives and avoid inappropriate ones.

Thinking Critically

There is a distinct change in the tone and structure of the conversation between Leese and Mason after line 7. Leese has just become aware of Mason's indirect request to change the assignment. He does not respond immediately because he does not agree with the reason Mason gives for the request, that he is unable to fly off the carrier. The conversation suddenly focuses like a laser on this claim. Argumentation – the exchange of reasons for and against a claim –

typically begins in this way, as an *insertion sequence* in some other on-going activity such as a request-offer dialogue (Sacks, 1995, vol. 2, p. 529). Van Eemeren & Grootendorst (1983; van Eemeren et al., 1993) pioneered the use of concepts from pragmatics to analyze argumentation. They regard a conversation in which argumentation takes place, that is, a *critical discussion*, as a loosely structured discourse *genre*, like television interviews, business meetings, and sermons, in which various individual-utterance speech acts occur. An alternative account of argument in terms of dialogue mental models and relevance theory is simpler and explains more of its structure, including the roles that both challenger and defender play at each stage of dialogue. We have successfully used this model to train leadership skill in collaborative critical thinking (Cohen et al., 2003).

Fig. 8.2 is a dialogue mental model for the transaction *challenge-defend*. It is used when two parties disagree about a hypothesis and at least one of them is *motivated* to resolve their disagreement. The relevant *means* is that one of the individuals (the defender) has reasons that might persuade the other (the challenger) to accept the hypothesis. Given the appropriate *opportunity*, a challenger can start the exchange by raising specific objections or general doubts about a claim to which the other party appears committed (matching the motive component of the model in Fig. 8.2). Alternatively, a defender can start the exchange by volunteering reasons that anticipate a challenger's potential objections to the defender's point of view (matching the means component of the model). The transaction begins when both parties accept the challenge-defend transaction as a criterion of relevance for the rest of the exchange and adopt at least a conditional shared cognitive intent. Challengers intend to accept the claim *if and only if* it can be properly justified, and their motivation for challenging is precisely to elicit such a justification from defenders (or else conclude that none exists). In other words, by accepting the norms of this

kind of dialogue, cooperative challengers agree to be open-minded; they are sincerely prepared to be persuaded by defenders. Defenders begin with an unconditional intent to persuade challengers yet must be prepared to suspend advocacy for the claim if the defense turns out to be unsuccessful.

Challengers and defenders work together to determine whether there is an adequate justification of the claim. The challenger's job is to envisage mental models of the situation in which the claim is false, while the defender's job is to plausibly exclude such possibilities. In doing so, each introduces new factors into their mental models corresponding to reasons to doubt the claim and reasons to accept it respectively (Cohen, Salas, & Riedel, 2002; Johnson-Laird, 1983). If the defender succeeds, the parties agree to accept the hypothesis because the most plausible surviving mental models include it. Whether or not the disagreement is resolved, however, the parties emerge with better understanding of their own views (Walton, 1998, pp. 57-60), in particular, a more complete situation model, more finely discriminated alternative mental models for aspects of the situation that remain uncertain, and awareness of assumptions that are not shared by others. The process of argumentation also provides insight into other parties' views. Finally, it is likely in many contexts to expand the sphere of mutual knowledge (beliefs that each party knows that the other holds) and thereby provide an improved basis for further interaction and coordination.

The benefits of a challenge-defend dialogue – in resolving conflicting views, promoting situation understanding, identifying uncertainty, and surfacing shared beliefs – are counterbalanced by the face threat that it poses to the participants. Every line from 8 to15 in Table 8.1 is shaped partly by politeness, despite the fact that the more powerful individual, Leese, was challenging the less powerful, Mason. For example, Leese did not state outright that

he doubted line 7; he simply gave a reason for doubting without labeling it as such. Mason's response starts in line 9 with "Well," which is a conversational device that prepares the recipient for an upcoming disprefered response. This effort to mitigate surprise is followed by emphasis on something Mason and Leese agree on ("I *have* flown them"), which provides a reassuring counterbalance to the upcoming disagreement (Sacks, 1995, vol. 1, p. 736). In lines 10 and 11 Mason finally gets to the disagreement ("but…"). These tactics reduce positive face threats by blurring the disagreement, while still allowing the participants to recognize it and to continue challenging and defending efficiently.

Critical thinking training based on cognitive dialogue theory (Cohen et al., 2003) focuses on skills in recognizing and explicitly acknowledging disagreement, prioritizing issues on which disagreement exists, determining what type of dialogue will take place, recognizing different types of uncertainty that call for different kinds of argument, identifying hidden assumptions, and evaluating the overall plausibility of alternative mental models or stories.

Sharing Control

Lease has allowed a subordinate to question a decision and defend a reason for retracting it, and has resolved the issue in the subordinate's favor. A leader needs a distinctive set of skills to do this while avoiding face threats to his own authority and image. To appreciate this, let us take a broader view of the issue of control in conversation and the different levels at which it can be exercised by both leaders and subordinates. In doing so, we are not directly concerned with the "power" of Leese over Mason due to their positions in an organizational hierarchy. The most "powerful" individual need not dominate a conversation at all times or in all respects. External variables like power, sociability, intelligence, and expertise (or any other purported traits or styles of leadership) may be among the determinants of conversational asymmetry on a particular

occasion, and conversational asymmetry may shape and maintain the importance of those variables over longer spans of time. But the role of external factors should not be presupposed during the analysis of the conversation itself.

Several different observable levels of conversational dominance can be identified (Linell & Luckmann, 1991). At the most basic level is *quantitative dominance*, measured crudely by the number of words produced by each party in the exchange. In this instance, Leese has 90 words to Mason's 65. This measure is not particularly meaningful unless analysis of the conversation turns up evidence that one speaker was directly responsible for reducing the participation of the other, for example, by interrupting or by ignoring what the other party says (Kasermann, 1991). We will look at an example where this did occur between a leader and a subordinate (Table 8.2), but there are no signs that Leese exercised that kind of dominance over Mason.

The next level in the analysis of conversational asymmetries is *interactional dominance*, the relative balance between reaction and initiative on a turn by turn basis. The basic assumption of *initiative-response analysis* (Rommetveit, 1991) is that each turn sets conditions of relevance for the turn that follows. Thus, each turn may contribute to a conversation in either or both of two ways: (a) by creating new conditions of relevance for the next turn, for example, as the first part of an adjacency pair such as a question or request and (b) by complying with the conditions defined by the previous turn, for example, as the second part of an adjacency pair like the answer to a question or the response to a request. The balance between the proactive score and the reactive score averaged over the turns taken by a participant is the participant's initiative-response (IR) index. The difference between the IR indices of two participants in a conversation measures the asymmetry between influencing and being influenced for those participants in that conversation. It is clear that Leese dominated Mason in terms of IR measures. Leese used turns

that demanded a response from Mason on three out of seven occasions (i.e., the three explicit questions in turns beginning at lines 3, 12, and 14). All of Leese's other turns contained assertions that added information to the exchange, thus inviting a response from Mason though not demanding one. Mason, by contrast, did not use any turns to demand a response from Leese. Moreover, Mason had two turns that were purely reactive, adding no new information at all and thus returning the initiative to Leese (turns at lines 2 and 15). At the turn by turn level, therefore, Leese was very much in charge of the exchange. *Semantic dominance* reflects the degree to which one party or the other controls the topic of discussion. Leese was dominant here also because he introduced the topic that occupied their attention throughout (Mason's flying assignment). The exchange was semantically cooperative, however, in the sense that every turn by either party (except, of course, line 1) was topically relevant to the turn before.

These measures do not capture the influence that Mason exercised through active participation in two dialogue transactions. Mason initiated a request-offer transaction that Leese agreed to participate in and was its potential beneficiary in the role of requester. He became its actual beneficiary when Leese granted his request. While Leese was responsible for the initiation of a challenge-defend dialogue, Mason was the potential beneficiary in the role of defender and as beneficiary of the superordinate request-offer dialogue. Although it is not clear whether Mason's defense actually changed Leese's mind, it was successful in getting Leese to drop his challenge. Dialogue mental models thus capture influence in collaborative transactions that IR measures miss, based on conversational data that are ignored by macro-theories of power.

Failing to Cooperate

Mason and Leese each used conversational devices to overcome obstacles posed by face threats to a successful transaction. By contrast, the conversation between Mason and another

superior (Shaker) presented in Table 8.2 has a very different dominance profile and a very different outcome (Mason, 1983, p. 188). By the time of this conversation, Mason has been flying missions in Vietnam for three months and is considerably more experienced than in the earlier conversation. After less than two hours of sleep in two days of non-stop flying and with a sense of a job well done, Mason and his partner are stunned to hear Shaker assign them an unexpected new flying mission. Mason is certain that Shaker is aware of their exhaustion and suspects bad faith in the assignment decision. Mason catches up with Shaker as he walks out of the briefing and initiates the exchange in Table 8.2.

In terms of quantitative dominance, this conversation is extreme: 49 words for Shaker and only 10 for Mason. Moreover, the word-count evidence is strengthened by direct evidence of suppression, such as Shaker's interruption of Mason (lines 7 through 8) and Mason's failure to take a full turn after the interruption (line 9) (Kasermann, 1991). IR analysis gives the same verdict. Mason and Shaker had one turn each in the high initiative category (lines 1 and 8, respectively), but both of Shaker's other two turns either demanded a response or introduced new information whereas neither of Mason's did. What about dominance at the dialogue level? It might be supposed that Mason performed better at this level because he initiated an indirect request to change his assignment (line 1) even though the request was not granted (line 10). Closer examination of the exchange reveals, to the contrary, that Mason and Shaker never achieved the shared acceptance and agreement on relevance criteria necessary for a transaction. Because this was due in large part to active violation of expectations by Shaker, a dialogue-based analysis supports the conclusion that Shaker was dominant.

Mason begins the exchange (line 1 of Table 8.2) with an utterance that is ambiguous regarding its transactional intent. It hints at the existence of a reason for changing the assignment

but is several steps removed from matching the request-offer structure. In this case, Mason has chosen ambiguity not to *avoid* a face threat to Shaker, as in Table 8.1, but to create one (even if taken as an exaggeration, "trying to kill us" is a serious accusation). In addition, Mason lays a trap for Shaker. If Shaker agrees to change the assignment in response to the highly indirect request in line 1, it can only be because he is already aware of the reason (Mason's exhaustion) and therefore amounts to a confession of bad faith in the original assignment (another threat to Shaker's positive regard). If line 1 was intended to be a request, Mason has provided a disincentive for the preferred response (a change in assignment).

Shaker denies the accusation (line 2 Table 8.2) and defends his denial (lines 3 through 6) by giving an alternative explanation for the assignment (namely, that Mason needs practice flying at night) which does double duty as a reason for rejecting a reassignment request. In these moves, Shaker evokes expectations associated with the roles of defender in challenge-defend (Fig. 8.2) and potential offerer in request-offer (Fig. 8.1). Unfortunately he violates both sets of norms. The reasons Shaker provides (lines 3 through 6) in defense of line 2 fail to match the means conditions of a challenge-defend dialogue. First, they do not supply reasons that the potential challenger (Mason) would ever be likely to accept; both Shaker and Mason knew that Mason had plenty of night-flying experience. Second, they are not an adequate defense of the conclusion (line 2) even if true because they fail to address the exhaustion that Shaker certainly recognized as the point of line 1. Shaker has taken advantage of Mason's ambiguity in line 1 to pretend that Mason had no reason at all for uttering it. It is clear that the ostensible defender (Shaker) has no real desire to resolve the disagreement, a violation of the motive condition of challenge-defend. Moreover, as a response to Mason's indirect request, lines 3 to 6 violate a key expectation imposed by Fig. 8.1, that a request will be granted if it is strongly motivated (for

example, by extreme exhaustion) and the offerer has no compelling reason to disprefer granting it (Shaker has provided no such reason). Finally, both the instructional tone of lines 2 through 6 and the claim that Mason needs more night-flying experience are attacks against Mason's positive face. In sum, lines 2 through 6 are an aggressively non-cooperative response at the dialogue level despite their surface civility.

Mason is probably trying to raise the issue of exhaustion explicitly in line 7 ("But – "). By interrupting him (line 8), Shaker violates Mason's legitimate expectation of being allowed to challenge the reasons that Shaker presented in lines 3 to 6. Shaker shows his unwillingness to continue in the role of defender and shifts the defender's burden of proof to Mason (another violation of mutual expectations associated with challenge-defend). In line 8 Shaker challenges Mason's implicit claim to be exhausted, thereby revealing that he had been aware of it from the start. Shaker's challenge, moreover, depends on an unacceptable assumption (that any amount of sleep is enough, no matter how little) and therefore counts as another violation of the motive condition (a genuine desire to resolve disagreement). Viewed as a conversational device, the question in line 8, "You got some sleep last night, right?," presupposes a specific answer (because it is declaratively phrased) and discourages any elaboration or objection (because it is brusque). Finally, line 10 unilaterally ends the discussion, making clear that the decision will not take Mason's input into account.

At each turn, Shaker mimicked acceptance of a dialogue role, raising expectations associated with defender, potential offerer, and challenger. In each case, however, he proceeded to violate the relevant constraints. Although Shaker's tactics may have begun as retaliation for Mason's initial misstep in line 1, the exchange probably exacerbated Mason's original suspicion of unfairness in the assignment. Punishment for raising questions in discussion is consistent with

vindictive motives in the assignment decision itself. The consequences of unfair assignments (in particular, favoring some subordinates over others) can be severe, involving deadly risk in combat and stalled careers in business, and are of intense concern to subordinates. They should also be of concern to leaders because perceived unfairness may cause a breakdown in the mutual trust necessary for collective action (Shay, 1995, pp. 10-14). Shaker never addressed those concerns.

Leadership training based on cognitive dialogue theory teaches leaders how to manage and stay in control of interactive exchanges without transgressing norms that maintain trust. They learn to recognize the expectations that their own actions elicit in others and to avoid implicit commitments that they do not intend to keep. In particular, they learn to turn down a proffered dialogue role when they judge that it is inappropriate without closing off the possibility of a more appropriate dialogue at a later time.

Sense Making

Cognitive dialogue theory has an interesting corollary. The meaning of a transaction and the utterances within it may change retrospectively as the participants' understanding of the enterprise evolves. As the type of activity being conducted becomes more overt and less ambiguous, changes direction, or is viewed in retrospect, the contribution of earlier utterances may be seen in a different light. The Leese-Mason exchange (Table 8.1) has several examples of retrospective meaning that becomes accessible only after the request-offer structure is recognized as the appropriate match at line 7: (a) Leese's sitting down next to Mason may be seen in hindsight as showing a intent to permit and even invite discussion with subordinates. (b) Line 1 can be taken to describe the situation that Mason wanted to change. (c) Mason's "Really?" in line 2 can be seen as expressing a desire to change the assignment. In these cases, the meaning of

previous events is clarified as a byproduct of the transaction itself. In other cases, however, dialogue participants may intentionally make statements that modify the contents of the transaction structure or its mapping to previous actions and thus retroactively change the meanings of earlier events.

For example, lines 14 and 15 (Table 8.1) appear to be a puzzling redundancy in which Leese elicits a repetition of line 7 just before he announces his decision to grant Mason's reassignment request. The effect is to reconstruct the conversation *as if* the challenging and defending in lines 8 through 13 had never taken place at all. This can be explained, therefore, as retroactive sense making designed to simulate the immediate acceptance of Mason's request in line 7 and mitigate the positive face threat that the entire critical dialogue posed to Mason.

The conversation might have ended with Mason's expression of appreciation ("Thanks") in line 18 of Table 8.1 (matching the expected results component of Fig. 8.1). However, it continues for a few more lines even *after* the work of the request-offer and challenge-defend transactions are completed. This part of the exchange allows the parties to disclose and revise their understandings of what has just transpired. In lines 18 and 19 Mason implies that Leese's reason for agreement to the reassignment was avoidance of disaster (motive). Mason thus sees the request-offer dialogue as one in which he had nothing positive to offer Leese in exchange for disrupting the flying schedule. Leese subtly but firmly rejects this understanding of their conversation. In line 20 Leese indicates that he is not convinced of Mason's inability to fly off the carrier, implicitly redefining the claim that was settled in the challenge-defend dialogue (the sincerity of Mason's worry rather than its validity). Leese goes on in lines 21 and 22 to supply an entirely new context for the request-offer dialogue. As for motive, Mason will get some practice, alleviating his worry about his flying ability (line 22). At the same time, Leese will get a copilot

that he needed anyway (line 21), so the effect is not to degrade the performance of the unit but to enhance it (means). Leese encourages Mason to see the entire exchange as a plus-plus negotiation in which everyone, including the organization itself, comes out ahead. In these few lines at the end of the conversation, Leese redirects Mason's attention from self- to group-centered objectives. Cognitive dialogue theory explains how leaders can use conversational exchanges to accomplish on a micro level the retrospective sense making that Weick (2001) identified as a major contributor to the development of organizational purpose and meaning.

Conclusion: Cognitive Dialogue Theory and Leader Development

This chapter focused on two hypotheses. The first is that leadership skills are manifested in the interactions that leaders have with subordinates and others. The second is that those interactions can be illuminated by an integration of cognitive and communicative concepts, methods, and findings. The purpose of the chapter was to illustrate one such integration, cognitive dialogue theory, and to show how dialogue mental models, politeness strategies, and conversational devices can be combined for naturalistic description, theoretical understanding, and practical measurement of conversations between leaders and subordinates. A third hypothesis was that understanding leadership behavior in terms of the cognitive skills underlying dialogue can contribute to the development of better leaders. To fully develop and test this idea, it will be necessary to (a) identify patterns of individual differences and situational contingencies in the use of dialogue models, politeness strategies, and conversational devices in conversations among leaders, subordinates, and others, (b) incorporate findings into the curricula of leader development programs, and (c) measure the outcomes.

The chapter identified an important set of skills to be included among the objectives of a cognitive and communicative approach to leader development. Dialogue mental models figure

prominently in such leadership skills as learning how to recognize different types of transactions (e.g., negotiation, inquiry, deliberation, request-offer, and challenge-defend), determining when they are appropriate and when not, and mastering the associated expectations and roles. Politeness strategies capture complementary aspects of leadership skill, such as identifying negative threats to freedom of action, identifying positive threats to self-regard, learning how such threats can obstruct dialogue transactions, and adopting appropriate strategies for mitigating threats while accomplishing the business at hand. Skill in the use of conversational devices enables leaders to put dialogue skills into practice. They include learning to detect and handle conversational control tactics by others, learning to predict the responses of others, negotiating demands for attention and floor time with subordinates, and being able to control conversation when necessary without violating trust.

There are many obstacles to successful conduct of collaborative transactions such as request-offer and challenge-defend. Among them are (a) tendencies to disguise requests and disagreements because of face threats (the problem that Mason and Leese tackled successfully in Table 8.1), (b) unwillingness to generate and consider alternative possibilities (part of Mason's problem in line 1 of Table 8.2), and (c) adoption of actively non-cooperative attitudes in response to face threats (Shaker's problem in Table 8.2). These difficulties are sometimes camouflaged by other, more legitimate reasons for declining such transactions: for example, fleeting opportunities that call for quick decisions, time lags between planning and implementation that impose a cost on revisiting and revising plans, low-stakes decisions which do not warrant additional deliberation, and occasional inappropriate challenges to authority. It is no small accomplishment for leaders to plot a safe path for themselves and subordinates through these opposing dangers and opportunities. There are popular "dialogue" approaches that address

such problems by explicitly declaring a safe setting where authority hierarchies, organizational practices and exigencies, interpersonal conflicts, and time constraints are to be held in suspension (Bohm, 1996; Isaacs, 1999; Yankelovich, 1999). This is a special *type* of dialogue that concentrates on relationship goals and excludes immediate task goals. Like request-offer or challenge-defend, "dialoguing" has its own characteristic motives (to remove fundamental long-term obstacles to effectively working together), means (an ability to reflect on deeply rooted assumptions in a nonjudgmental manner), opportunity (a license to regard all participants as equal and to suspend task work for the duration of the dialogue), and cognitive intent (to develop a deeper mutual understanding). In most cases, however, participants in group activity have no choice but to tend to task and relationship issues simultaneously, as in Tables 8.1 and 8.2. Dialogues are an essential part of everyday activity, along with the complications of time stress, differences in rank, social risk, and the inertia of habitual practices. Leadership training in real-world contexts should emphasize (a) skill in judging *when* it is desirable to spend time in a particular type of dialogue transaction and when it is not (Cohen, et al., 1998; Cohen & Thompson, 2001), (b) skill in translating such judgments into effective conversation management by means of politeness strategies and conversational devices without threats to the positive regard of subordinates and without undermining group cohesion, and (c) collaborative techniques that are not personally threatening to either leaders or subordinates for presenting, challenging, and defending requests and claims to both improve task performance and encourage "buy-in" by subordinates.

Early work on leadership tried to identify distinct *behaviors* corresponding to task and relationship concerns. The problem this work encountered is that a single behavior often reflects both kinds of concern at once (Yukl, 1998, p. 56). Theories that focus on leadership styles rather

than behavior bypass this difficulty by obtaining subjective judgments that average over behaviors and situations, permitting high overall scores in both categories. As a result, however, style theories supply little concrete understanding of how and why subjectively assessed styles manifest themselves in action. The practical guidance provided by such theories is not always as general as "show concern for both tasks and people," but it is far from specific.

One important contribution of cognitive dialogue theory is its demonstration of just how closely intertwined task and relationship concerns can be in leadership while allowing us to understand and measure them separately. The task of leaders is to strike a balance that is right for the situation. The way to understand how leaders succeed or fail in striking this balance is to analyze real conversations and the cognitive skills they draw on. The way to improve their chances of success is to instruct, demonstrate, practice, and reward skills of dialogue.

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Table 8.1

A conversation that illustrates leadership skills.

1	L:	((Leese sat next to me at breakfast.)) I've assigned you to fly a [helicopter gun] ship off the carrier when we get to Qui Nhon. ((He smiled.))
2	M:	Really? ((I smiled back weakly.…))
3	L:	Something wrong?
4		You look kind of sick.
5		This chow getting to you?
6	M:	No, the chow's okay.
7		I'm not too sure about my ability to fly a Huey off a carrier.
8	L:	It says here ((he produced a penciled note)) that you're checked out in Hueys. All four models. ((He looked back at me.))
9	M:	Well, I *have* flown them,
10		but it was mostly time under the hood at altitude.
11		I had about ten hours of contact-flying instruction in them.
12	L:	How long have you been out of flight school? ((I noticed smile wrinkles around his eyes as he looked at the front of his paper and then at the back.))
13	M:	I graduated in the middle of May.
14	L:	So you don't feel too confident flying off the ship?
15	M:	That's right.
16	L:	Okay. ((He put his notes on the plastic tablecloth next to his food tray.))
17		I've just reassigned you to fly with me.
18	M:	Thanks.
19		I'd rather not end my tour just getting off the boat.
20	L:	Oh, I'm sure you wouldn't have any trouble,
21		but I need a copilot,
22		and from what you say you need the practice.

Note. The speakers are Leese (L) and Mason (M). Double parentheses enclose comments by Mason. From Chickenhawk (pp. 54-55), by R. Mason, 1983, New York: Penguin. Copyright 1983 by Robert C. Mason. Adapted with permission.

Table 8.2

A conversation in which expectations are violated.

1	M	What [are you] trying to do, kill us? ((We had just got back from our marathon mission with Grunt Six just two hours before. Shaker knew we had already put in eight hours of flight time today and twenty hours the day before.))
2	S	No, I'm not trying to kill you…
3		Mason, you're new to our unit
4		and fresh out of flight school,
5		and I'm responsible for your training.
6		You need all the night flying you can get.
7	M	But—
8	S	You got some sleep last night, right?
9	M	Yes.
10	S	So be ready to go at 2000 hours.

Note. The speakers are Leese (L) and Mason (M). Double parentheses enclose comments by Mason. From Chickenhawk (p. 188), by R. Mason, 1983, New York: Penguin. Copyright 1983 by Robert C. Mason. Adapted with permission.

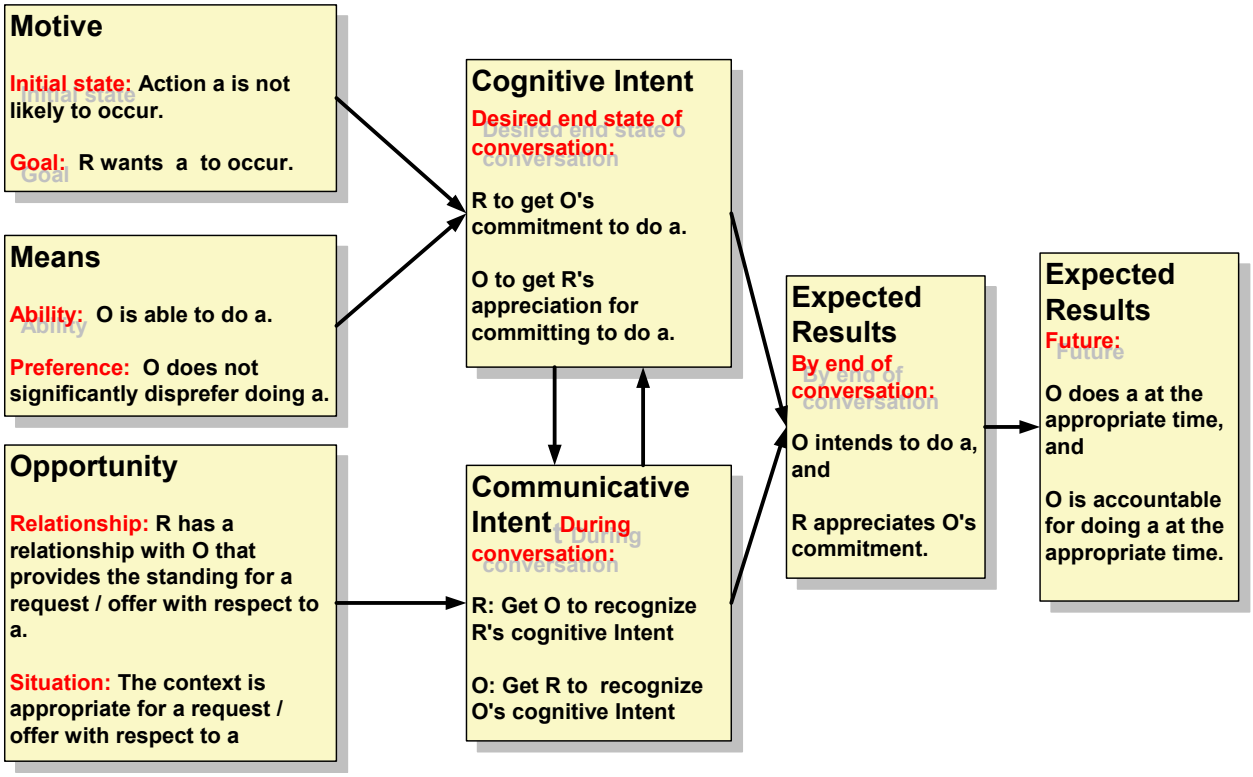

Fig. 8.1. Dialogue mental model for *request-offer* transaction. R = *requesting* role, O = *offering* role, **a** = an action or set of actions. Arrows signify *is a reason for* or *is a precondition of*.

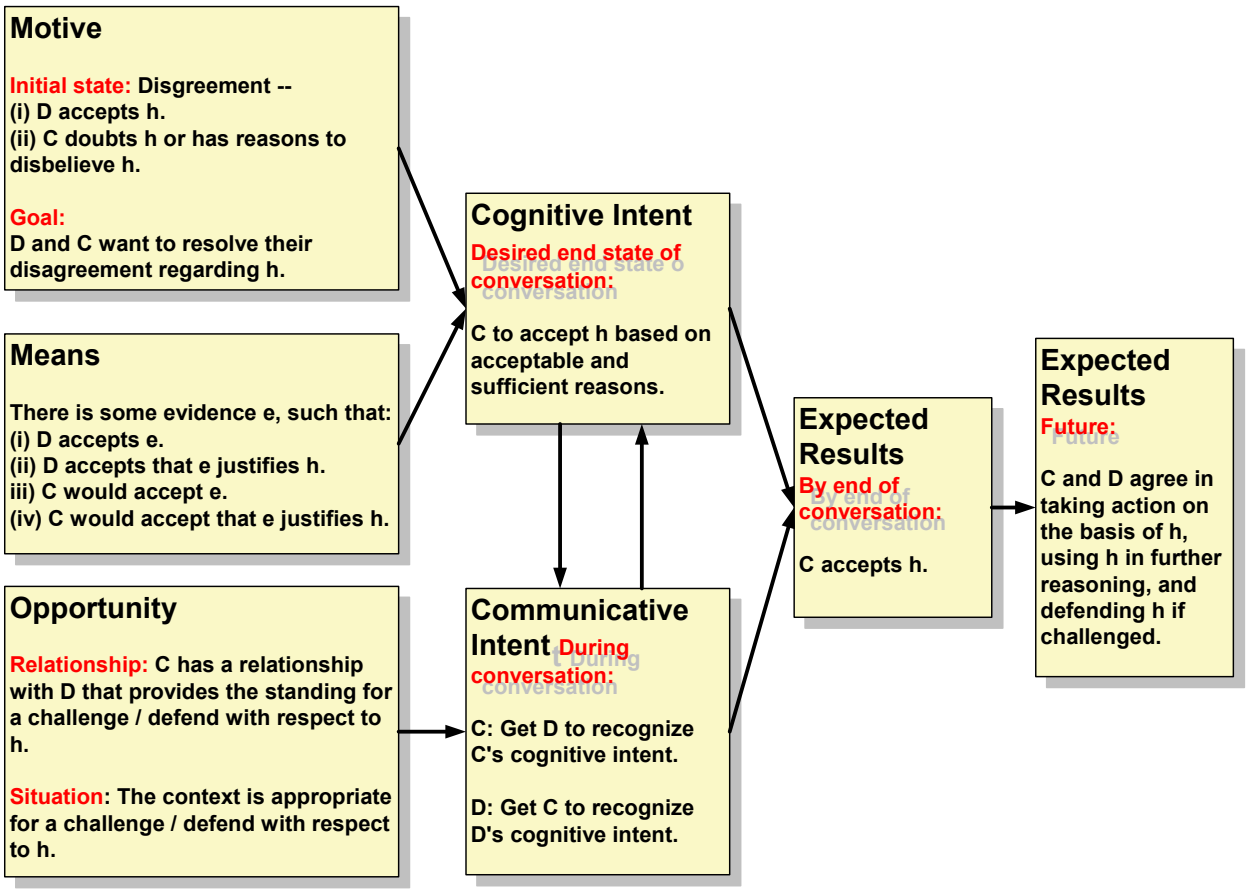

Fig. 8.2. Dialogue mental model for *challenge-defend* transaction. D = *defending* role, C = *challenging* role, h = a set of hypothesis or claims, e = a set of statements that may serve as reasons for believing h. Arrows signify *is a reason for* or *is a precondition of*.