

What We Think and How We Talk: Toward a Cognitive Model of Information Exchange in Negotiation

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Abstract

Information exchange is a key factor that determines how negotiation proceeds and further what type of outcomes can be obtained from such a dynamic process. Normal information exchange includes both formal offers during the process of negotiation and informal communication occurs during or after formal negotiation. This paper examines this process using a cognitive perspective and proposes that what negotiators think will predict how they will talk in order to communicate with their counterparts during negotiation. A cognitive model is built with testable propositions put forward for possible empirical validation in future studies. Implications for this line of research are also explored in this paper.

1 Introduction

Negotiation is a dynamic process in which two or more parties exchange products or services and attempt to agree upon an exchange rate for them (Carnevale & Pruitt, 1992; Wall, 1985; Wall & Blum, 1991). In this process, the involved parties exchange information about their interests and preferences in relevant issues and attempt to reach an integrative agreement. When information is insufficient, the result will be a less adequate definition of the problem; fewer alternatives will be generated; the potential consequences of these alternatives will be less explored; and the parties will produce relatively low-grade solution (Thompson, 1991). By exchanging information negotiators may learn that their interests and preferences are not completely opposed to those of the other parties, as they might otherwise have assumed. As a result, negotiators may identify ways in which they can maximize their gains at little cost to the other parties. Therefore, information exchange is crucial to make accurate judgment and thus reach integrative agreements.

In the course of negotiations, involved parties may use two fundamental methods to exchange information: informal discussion or informal information exchange and formal offer or formal information exchange. While formal information exchange involves formal offers in both face-to-face negotiations and electronic negotiations, informal information exchange mainly refers to the informal discussion whereby rapport between negotiators is built and information about each other's interests and preferences are implicitly or explicitly exchanged. Several investigations measured the amount of information exchange in negotiation and related this to the quality of negotiation outcomes (Pruitt & Lewis, 1975; Thompson, 1991). In general, bargainers do not exchange a lot of information, typically constituting less than 10% of their communication (Pruitt & Lewis, 1975). This paper is intended to explore this phenomenon and to examine what factors contribute to negotiators' intention of information exchange from a cognitive perspective. The major theme of this paper is that what negotiators think about the negotiation will determine how they approach the negotiation and further what they choose to communicate, which affects the potential of reaching integrative or distributive agreements.

2 Negotiation Literature

The past decades have seen active research in negotiation area. From the early social psychological studies in the 1960s and 1970s to the behavioral decision-making perspective in 1980s and 1990s, negotiation researchers have been attempting different methods to build actionable knowledge. Recent research also attempts to investigate the impact of technology development on negotiation, from which e-negotiation studies have sprung up within a couple of years (e.g., see Kersten, 2003).

While the social psychological perspective focuses on negotiator's dispositional characteristics and situational constraints and further on these factors' impact on the negotiation process, behavioral decision-making perspective takes the position of assuming negotiators are purely rational and therefore believes that examining the biases and errors of negotiators during the decision-making process will be able to provide negotiation practitioners with helpful suggestions on how to negotiate effectively. However, neither of these perspectives has succeeded in explaining the negotiation process and resulting outcomes (Bazerman, Curhan, Moore, & Valley, 2000). Researchers have begun to explore new perspectives and better frameworks to integrate the enormous negotiation research.

An important emerging feature of negotiation research is the study of how players define and create the negotiation—by their own personal interpretations, relationship-specific motives, and social norms (Bazerman et al., 2000; Rusbult & Van Lange, 1996). Researchers argue that how competitors define the negotiation may be more important than the actual moves they make during negotiation (Brandenburger & Nalebuff, 1996), and how involved parties understand the negotiation thus becomes critical in determining how they approach the negotiation. Therefore, people have to learn negotiators' actual preferences and their perception structure, rather than simply inferring that they will accept the given negotiation utility structure, in order to provide meaningful suggestions to them.

2.1 A Cognitive Approach

The important emerging feature of cognitive negotiation research is the study of how players define and create the negotiation—by their own personal interpretations, relationship-specific motives, and social norms (Bazerman et al., 2000; Rusbult & Van Lange, 1996). According to the cognitive tradition (Gelfand et al., 2001; Thompson, 1990), negotiation process and outcomes can be best understood when negotiation is viewed as a cognitive decision-making task in which negotiators construct mental representations of the conflict situation, the issues involved, and their opponents. Negotiators enter the negotiation with cognitive representations, or negotiator cognitions, which serve to impart meaning or make sense of the conflict situation (Pinkley, 1990; Putnam & Holmer, 1992) and which often take place below the level of consciousness (Drake & Donohue, 1994). Negotiator cognitions are “what goes on in the heads of negotiators” (Neale & Northcraft, 1991) and they develop a perceptual context that influences subsequent decision-making. Researchers argue that how negotiators define the negotiation may be more important than the actual moves they make during negotiation (Brandenburger & Nalebuff, 1996). How involved parties understand the negotiation thus becomes critical in determining how they approach the negotiation. Therefore, people have to learn negotiators' actual preferences and their perception structure, rather than simply inferring that they will accept the given negotiation utility structure, in order to give meaningful suggestions to negotiators.

2.2 A Typology of Negotiator Cognitions

Negotiation is a cognitive decision-making process involving the consideration of what are appropriate objects of the dispute and what are acceptable behaviors to reconcile the “incompatible” interests. A conflict situation elicits a well-defined cognitive structure based on a negotiator's past experiences with conflict as well as present concerns and interests (Pinkley, 1990). These cognitive structures or

representations of negotiation situations may then guide disputant behavior, strategy selection, outcome preferences, and reaction to the other parties. Given the importance of negotiator cognitions and their potential impact that such naturally occurring cognitive structures can have on the selection of resolution procedures and outcomes, it is necessary to develop a framework that describes various ways in which people perceive negotiation.

In an initial investigation of negotiator cognitions, Pinkley (1990) used an inductive multivariate technique known as multidimensional scaling (MDS) to specify the conceptual dimensions necessary to represent people's cognitive interpretations of conflict. The MDS technique allows investigators to derive a representation of the cognitive structure, even though the critical dimension may be implicit and unavailable to subjects at a conscious level. In her 2 multi-phrase studies, Pinkley found, and replicated the findings in a second study, that three dimensions represented people's interpretation of conflict and thus provided a reasonable and parsimonious structure for thinking and categorizing conflict. These 3 dimensions are relationship versus task, emotional versus intellectual and compromise versus win (or cooperate versus win, as she used in another study). Although she claimed that such dimensions were sufficient to represent people's cognitive interpretations of conflict, certain dimensions that were known to be important in negotiation were missing from her studies. Based on the fundamental dimensions of interpersonal relationships (Wish, Deutsch, & Kaplan, 1976), and Pinkley's original studies (1990), I propose a 4-dimensional model of negotiator cognitions that will be more able to categorize the cognitive structure in negotiation and to provide a representative mental picture of the dyadic negotiations (see Figure 1).

As seen in Figure 1, dimension 1, labeled as *Task vs. Relationship Orientation*, reveals that people differ in the extent to which they attribute the conflict to problems in the interpersonal relationship and consequently, how concerned they are with maintaining the relationship with the other parties. Individuals with a relationship orientation focus on interpersonal concerns and the relationship between involved parties; individuals with a task orientation instead concentrate on material aspects of a conflict, such as profits. Dimension 2 is labeled as *Rational vs. Emotional Orientation*, instead of Rational versus Intellectual. Such refinement helps to reveal this dimension as the variance in the degree of attention paid to the affective component of conflict. Although some negotiators focus on the feeling involved, such as hostility, anger, and frustration, others seem to be more rational and focus on the specific behaviors and thoughts involved. The third dimension is labeled as *Win-win vs. Win-lose Orientation*, which suggests some disputants concentrate on looking for integrative solutions that benefit both sides while others see the conflict as a battling game and try to maximize their own gains, even at the expense of the other parties.

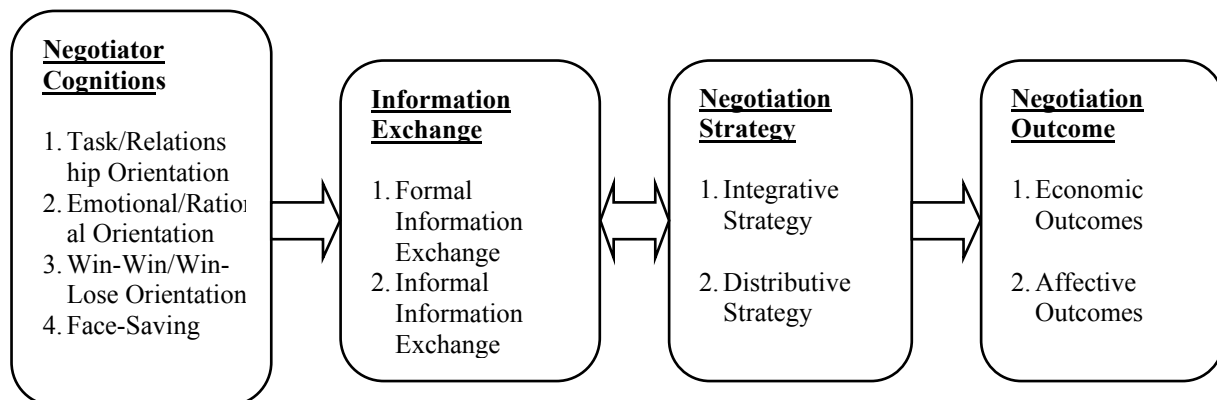


Figure 1. A Cognitive Model of Information Exchange in Negotiation

Dimension 4, labeled as *Face-Saving*, is less researched, but is equally important in negotiations, especially in cross-cultural encounters. Dating back at least 2500 years to Chinese culture (Hu, 1944), the concept of face has been defined as the positive value that individuals attach to their situated identities (Goffman, 1967). This concept has two important qualities (Wilson, 1992). First, face is a social commodity. Negotiators worry about losing face when their actions or events discredit a desired identity in *the eyes of significant others*, such as their opponents or their own constituents. Second, face is situated, in the sense that different identities arise from the context. Negotiators strive to be seen as firm or tough advocates who will resist unjust intimidation (Brown, 1968), or, as Tjosvold (1983) put it, face is the image of strength negotiators want to project in conflict.

Face-saving is not only prevalent in the West. Researchers have found it is even more important in the East (Hofstede, 2001). Basically, face in the East describes the proper relationship with one's social environment, which is as essential to a person and to that person's family as the front part of his or her head. Face is lost when the individual fails to meet essential requirements placed upon him by virtue of the social position he occupies, either through his action or the action of people closely related to him. Losing one's face, in terms of dignity, self-respect, and prestige, is equivalent to losing one's eyes, nose, and mouth. Therefore, saving-face is a matter of utmost concern in everyday life and in negotiation.

Image may not be everything, but for negotiators it is a major concern (Wilson, 1992). Experiments in interpersonal bargaining indicate that unjustified insult, unfair reduction of one bargainer's outcomes by an opponent, or other behavior that poses a threat or damage to "face", usually result in retaliation and mutual loss (Brown, 1968, 1970). The reason is that one will fear a loss of status and self-esteem if he permits himself to be unjustly intimidated. In the face of unjustified threat, the culturally prescribed way of behaving is to challenge the threatener and to engage with him in a contest for supremacy. Goffman (1955) has theorized that there is a pervasive need to "maintain face" in the Western culture and that it is especially apparent in aggressive interchanges and after one's prestige has been damaged in public view. The need, he suggests, motivates people to appear capable and strong whenever possible.

In the service of this need, people often do things that may be costly to them. Goffman (1955) sees face saving as being so pervasive that "... at each and every moment of interaction, actors are concerned with the question: If I do not act in this way or that, will I or others lose face?" (p. 227). As a result, in the process of negotiation bargainers act not only purposely to maximize their own outcomes, but also to avoid appearing incapable or foolish to audience while they are seeking them.

3 Research Propositions

From a cognitive perspective, negotiator cognitions are organized knowledge structures that guide negotiators' selection and interpretation, and thus lead to a particular focus on some characteristics of a conflict situation while ignoring others. In essence, because conflict situations often contain many elements and because negotiators have limited information-processing capabilities (Neal & Bazerman, 1991), negotiator cognitions enable negotiators to render some of the elements to the "figure" and others to the "ground" (Gelfand, et al., 2001; Goffman, 1974). Manifest in information exchange styles, different negotiator cognitions will incline people to exchange information differently and thus lead to different strategies and outcomes.

3.1 Negotiator Cognitions and Information Exchange

Task vs. Relationship Orientation reveals that people differ in the extent to which they attribute the conflict to problems in the relationship and consequently, how concerned they are with the other parties and with maintaining the interpersonal relationship. Negotiators with a relationship orientation focus on interpersonal concerns and the relationship, and therefore they tend to exchange information informally

so that the relationship will not be impacted in case their requests are declined. In contrast to the intention to maintain the interpersonal relationship, task-orientated negotiators will concentrate on material aspects of a conflict, such as profits, and therefore tend to exchange information in a formal method.

Proposition 1a: Negotiators with Task Orientation will use more formal information exchange.

Proposition 1b: Negotiators with Relationship Orientation will use more informal information exchange.

Rational vs. Emotional Orientation reflects the degree of attention paid to the affective components of negotiation. Rational negotiators focus more on the specific behaviors and thoughts involved and less on the feelings, and thus are more likely to use formal information exchange to communicate with their counterparts and try to reach an agreement. Negotiators with more attention to affective components may behave differently: On the one hand, when negotiators feel the hatred, anger, and frustration towards the other parties, they tend to use extreme formal offer to retaliate or humiliate their opponents. On the other hand, when negotiators feel the need to appeal to affective feelings between negotiation partners so that a harmonious relationship could be established, informal information exchange will be their choices.

Proposition 2a: Negotiators with Rational Orientation will use more formal information exchange.

Proposition 2b: Negotiators with Emotional Orientation will use more informal information exchange when they appeal to positive feelings between involved parties and they will use more formal information exchange when they feel anger, frustration, or hatred towards their partners.

Win-win vs. Win-lose Orientation measures negotiators' perceptions of the negotiation situation on its potential to reach a win-win (integrative) or win-lose (distributive) agreement. Negotiators with Win-lose Orientation concentrate on a distributive solution that maximizes their interests and are likely to use formal information exchange to communicate with their partners, while negotiators with Win-win Orientation will be more likely to use both formal and informal information methods to exchange information so that their intention to reach an integrative solution that satisfies both sides would be well communicated to their counterparts. Moreover, to reach a win-win agreement and to build lasting relationship for future business, win-win orientated negotiators may emphasize more informal contacts and information exchange with their partners in the process of negotiation.

Proposition 3a: Negotiators with Win-lose Orientation will use more formal information exchange.

Proposition 3b: Negotiators with Win-win Orientation will use both informal information exchange and formal information exchange, with informal information exchange slightly more emphasized.

The need to save face is ubiquitous in negotiation and thus face-saving has important influence on how people negotiate. Face-saving makes people attempt whatever ways deemed necessary to protect their image from damaging in every step of negotiation. As a result, negotiators with high need to save face will tend to exchange information through informal discussion so that their faces will be protected when their offers or requests for information are declined. They may also use formal offer as one way

to communicate, but more often than not, their formal offers are just symbolic gesture rather than communicating any information substantive about their interests and preferences.

Proposition 4: Face-saving Orientation will lead negotiators to use more informal information exchange.

3.2 Information Exchange, Negotiation Strategies and Outcomes

The use of formal or informal information exchange during negotiation is closely related to the strategies negotiators adopt in order to obtain the desired results. In general, negotiators have two strategic options to select in service of their objectives: integrative strategies and distributive strategies. Adoption of integrative strategies involves collaboratively examining the problem and digging into the issues interesting to both sides and generating a creative solution beneficial to both sides, i.e., neither side has lost anything because of agreeing on the created solution. The results of such a process are win-win solutions. Contrasting to this, distributive strategies assume that the negotiation is a battling game and one side's win is always the other side's loss. As a result, negotiators using this strategy will use whatever tactics they believe appropriate to single-mindedly achieve their individual goals.

To implement an integrative strategy requires at least one side of involved parties to learn the other side's interests and priorities on different issues, instead of knowing only the other side's stated position as in most formal offers, which is often quite different from their real interests. Learning the other side's interests and preferences relates information exchange to negotiation strategies in the process of negotiation. In this paper, I propose that informal information exchange will be associated with the use of integrative strategies while formal offer will be associated with the use of distributive strategies.

Proposition 5a: Formal information exchange in negotiation will be associated with the use of distributive strategies.

Proposition 5b: Informal information exchange in negotiation will be associated with the use of integrative strategies.

Different negotiation strategies lead to different outcomes. Negotiation outcomes are generally grouped into two major categories: Economic outcomes and affective outcomes. Economic outcomes mainly refer to the economic profits achieved during negotiation and they reflect an ultimate interest in negotiation studies and the interests in the effectiveness of strategies negotiators use in negotiation. Affective outcomes are the factors that will increase the possibility of double winning and establishing good relationships. They have been linked to functional behaviors in a variety of settings (Churchill, Walker, & Ford, 1990) and considered as critical outcome measures of exchange relationships (Ruekert & Churchill, 1984). Affective outcomes, such as satisfaction with negotiation, are especially important when integrative solutions in negotiation become more important and long-term relationships become more valuable than a one-shot transaction success. In this paper, I propose that distributive strategies, closely related to formal information exchange, will lead to better economic outcomes, while integrative strategies, related to informal information exchange, will lead to better affective outcomes.

Proposition 6a: Distributive strategies that negotiators use during negotiation will be associated with better economic outcomes.

Proposition 6b: Integrative strategies that negotiators use during negotiation will be associated with better affective outcomes.

3.3 A Suggested Plan for Empirical Evidence

The proposed relationships fill a gap in theory by linking negotiator cognitions to information exchange methods because there is no previous research on how negotiator cognitions might be affecting the way people exchange information, empirical or theoretical. However, they are more of theoretical nature and empirical evidence is in great need to validate these relationships. A brief plan for testing these propositions is suggested as follows, with detailed plans yet to be designed.

To collect the data, a simulated negotiation either in face-to-face or through internet is recommended, based on which data on cognitions, information exchange methods, negotiation strategies, and negotiation outcomes can be collected. The most important work for testing these relationships involves how to measure negotiator cognitions and how to measure the way negotiators choose to exchange information. At present there is no existent scale for measuring negotiator cognitions since this approach is relatively young in negotiation studies and the typology put forward in this paper is a new method to study negotiation, although it is developed based on previous studies. Fortunately, the author has done some preliminary work on developing a scale for measuring the proposed 4 dimensions on negotiator cognitions, part of his dissertation study. Therefore, to test the proposed relationships, this scale can be first used to measure how negotiators perceive the negotiation situation, either in real negotiation scenarios or in simulated exercises. Formal information exchange and informal information exchange can be measured by recording/video-taping every gesture negotiators express during the process negotiation and then transcribe it to get the amount of informal exchange and formal exchange each negotiator uses. Negotiation strategies and outcomes are relatively easy to measure since there are widely accepted scales for such purposes. With these data, the proposed relationships can be tested using regular regression analysis and new directions will be revealed for further studies

4 Implications

This paper begins by noticing that information exchange is a key factor that will determine whether an integrative agreement can be reached in the process of negotiation. With a brief review on negotiation literature, a cognitive approach is used to examine the relationship between negotiator cognitions and the choice of information exchange method in the process negotiation. The main theme of this paper asserts that what negotiators perceive of the negotiation will determine what methods they choose to exchange information. With this cognitive perspective, this paper puts forward a typology for negotiator cognitions and proposes testable relationships between cognitions and information exchange styles, between information exchange and negotiation strategies, and between negotiation strategies and negotiation outcomes, followed by some suggestions on how to test the proposed relationships.

The proposed model and relationships will have important implications for future studies. First, the proposed cognitive approach points to a new direction of negotiation study, from which more consistent results on negotiation can be obtained. This perspective introduces an individual-centered cognitive analysis which the most powerful negotiation theory will begin with and thus is more suitable for negotiation studies (Thompson, 1990). Second, with proposed relationship readily available for testing, negotiation practitioners will have more comprehensive understanding about information exchange during negotiation. This model and proposed relationships will be able to provide important guidance to negotiators once they are empirically validated. Empirical studies are thus called for to test these relationships using data collected from both traditional negotiations and electronic negotiations. Moreover, this is the first time in negotiation area that a conceptual model is built for information exchange and relationships among different variables are investigated, which will contribute to the development of negotiation research as a whole.

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