The Effects of Profit Knowledge, Size of Initial Concession, and Motivational Orientation on "Aspiration Level" Versus "Reciprocity" In Bilateral Bargaining

by

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CHAPTER I

REVIEW OF THE LITERATURE

What is the most effective concession making strategy in bargaining? Presently there are several answers to this question. Two of these answers contradict each other. The reciprocity explanation of concession making prescribes softness in bargaining. The level of aspiration hypothesis argues for bargaining toughness. The major research question of this study is "Is reciprocity theory's softness more effective than level of aspiration theory's toughness?"

Conflict is a significant aspect of human life. Researchers and theorists prescribe a variety of methods of controlling, managing, or withdrawing from conflicts with others. Bargaining is one of these methods. This study concerns itself with the bargaining approach to resolving conflicts

Several bargaining research paradigms have been developed in order to study the bargaining process. Four of these research paradigms, the Prisoner's Dilemma, the Parcheesi Coalition Game, the Acme-Bolt Trucking Game, and bilateral monopoly bargaining, have been used often enough to merit being called major bargaining research paradigms. Rubin and Brown (1975) determined that Prisoner's Dilemma has accounted for more than 300 of the bargaining studies done within the

last decade. The Parcheesi Coalition Game accounted for approximately forty studies, twenty-five or so studies used the Acme-Bolt Trucking Game, and approximately twenty-five studies have been conducted using the bilateral monopoly paradigm (p. 20).

Comparing Four Bargaining Paradigms

Prisoner's Dilemma takes its name from the following predicament described by Luce and Raiffa (1957, p. 95)·

> Two subjects are taken into custody and separated The district attorney is certain they are guilty of a specific crime, but he does not have adequate evidence to convict them at a trial. He points out to each prisoner that each has two alternatives. to confess to the crime the police are sure they have done or not to confess If they both do not confess then the district attorney will book them on some very minor trumped-up charge such as petty larceny and illegal possession of a weapon, and they will receive minor punishment; if they both confess they will be prosecuted, but he will recommend less than the most severe sentence, but if one confesses and the other does not, then the confessor will receive lenient treatment for turning state's evidence whereas the latter will get "the book" slapped at him.

The weakness of the Prisoner's Dilemma Game as a way of researching bargaining is that whereas bargaining involves the exchange of offers and counteroffers, Prisoner's Dilemma

involves two simultaneous "offers." In Prisoner's Dilemma each person makes a choice between a competitive option and a cooperative option. Each person makes this choice incommunicado and simultaneously in respect to the other person's choice This situation is different than bargaining where offers and counteroffers are made sequentially, not simultaneously. Rubin and Brown (1975, p. 25) wrote

> In summary, the PD paradigm contains many, but by no means all, of the characteristics of a true bargaining relationship In light of this fact, it is interesting that so much research has been conducted using this relatively simple, if elegant game, and that so much reliance has been placed on the findings to emerge. Much of the PD research is obviously interesting and important. In interpreting this work, however, its limitations as a bargaining paradigm should be kept in mind, and PD results - whenever possible - should be interpreted in relation to findings that have emerged using other, "truer" bargaining paradigms.

The Parcheesi Coalition paradigm focuses on coalition formation in trios. It is thus outside the interests of this study of <u>bilateral</u> bargaining.

The Acme-Bolt Trucking Game has been generally interpreted to intrinsicially emphasize two variables that are not of major interest in this study, namely threat potential and threat use. Additionally the Acme-Bolt

Trucking Game has the same characteristic that makes Prisoner's Dilemma different than bargaining. This limiting characteristic is the simultaneous choices of cooperation or competition rather than the sequential exchange of offers.

In summary, note that Prisoner's Dilemma, Parcheesi Coalition, and the Acme-Bolt Trucking Game are less desirable paradigms for studying bargaining than the bilateral monopoly paradigm. As noted by Rubin and Brown (1975, pp. 29-30) "While several of the paradigms we have already examined contain many or all of the characteristics of a true bargaining relationship, they tend to bear relatively little resemblance to more familiar bargaining encounters."

Siegal and Fouraker's (1960) bilateral monopoly paradigm is important because it does resemble actual bargaining encounters. Two players, the lone buyer and the lone seller of some type of imaginary merchandise (cars, ocean facility rights, micro-circuit technology, iron ore) negotiate the particular price (and sometimes the quantity) at which this merchandise will be bought or sold. Negotiators are usually given a profit table of their potential profits, and are sometimes given their opponent's profit table as well. This paradigm, " . . not only has most of the characteristics of a true bargaining relationship but considerable face validity as well." (Rubin & Brown, 1975, p. 30). Accordingly the bilateral monopoly paradigm was selected from the four major research paradigms used to study bargaining.

The Concession-Making Process

Bilateral monopoly theorists and researchers often focus on explaining and predicting concession making. In Negotiation Behavior, Pruitt (1981) details his two explanations for negotiation, the goal/expectation hypothesis and the strategic choice model. Both theories have as a central issue an explanation of concession making. Furthermore, Pruitt's Chapter One is exclusively focused on explaining concession making. In Process and Outcome of Negotiations, Bartos (1974, p. 26) wrote that the main problem in explaining negotiation is to understand the impact of concessions. Bacharach and Lawler (1981, p. xi) wrote: "the basic choice confronting bargainers is how large or small, tough or soft, their concessions should be " Hamner and Yukl (1977, p. 140) stated that a concession-making strategy is a key issue in bargaining. "It is important to examine strategies of bargaining since one of the key problems facing a bargainer in a conflict situation is deciding what type of concession-making strategy is most effective." These reviewers of the research stated what is evident, namely that bilateral monopoly studies often focus on explaining and predicting concession making. This study continues in that same research tradition It aims at understanding more completely the concession making process as it begins to unfold in the bilateral monopoly situation.

Seven Theories of Concession Making

Seven different explanations of concession making have been noted by researchers when reviewing the negotiation research literature (Druckman & Bonoma, 1976, Hamner & Yukl, 1977). Four can be called strategies· (1) Siegel and Fouraker's (1960) 'tough' strategy; (2) Bartos (1967) and Komorita's (1972) 'moderately tough' or 'intermediate' strategy; (3) Osgood's (1962) 'reciprocity' or 'soft' strategy; and (4) Schelling's (1960) 'fair' strategy. A fifth explanation of concession making advanced by Esser and Komorita (1975) argued that the opponent's toughness, moderate toughness, softness, or fairness is irrelevant. "Finally, a third alternative (Kelley, Beckman, & Fischer, 1967) assumes that the opponent's concession making has no effect on the bargainer's concessions Rather each bargainer tends to follow a predetermined offer schedule which is largely unaffected by the opponent's concessions." (Esser & Komorita, 1975, p. 865).

A sixth explanation of concession making developed by Bacharach and Lawler (1981, pp. xi-xii) stated that concession making strategy is dependent upon perceptions of one's own power relative to one's opponent's power.

Chapter Three applies the framework on bargaining power to concessions. The basic choice confronting bargainers is how large or small, tough or soft

their concessions should be. Toughness may extract more concessions from an opponent, but it also has the drawback of increasing the chance of an impasse Chapter Three examines how bargainers use dimensions of bargaining power to make decisions on how tough to be in the bargaining.

The seventh explanation of concession making rests solely on one study, Wall (1977). Wall suggested a bargainer should reward any sizeable concession by an opponent with a large concession until he/she has operantly conditioned his/her opponent to make large concessions Wall then prescribes a contingent reciprocity, which is basically softness.

Level of Aspiration Hypothesis

The level of aspiration hypothesis is generally credited to Siegel and Fouraker (1960) They have suggested that the concept began as a general hypothesis which helped explain many types of goal-striving behavior (Frank, 1941; Rotter, 1942). "Level of aspiration" may be defined as the magnitude of the goal toward which an individual is striving Siegel and Fouraker applied this general notion specifically to goal-striving in the bargaining situation. In the bargaining situation one's level of aspiration is that level of payoff toward which a bargainer is striving. Level of aspiration was asserted to be an underlying factor of a bargainer's expectancy and a bargainer's "bargaining

strength" "(These results) . . . suggest that the basis of both a bargainer's 'expectancy' and, at least partially, of his 'bargaining strength' may very well be his level of aspiration" (p. 60).

Siegel and Fouraker manipulated bargainers' levels of aspiration to test whether level of aspiration could affect bargaining outcomes. They reported that a high level of aspiration bargainer who bargained with a low level of aspiration bargainer did tend to obtain a larger payoff advantage by the time the bargaining has ended. The theoretical explanation was that a high level of aspiration is one determinant of bargaining strength and that bargaining strength is one among many of the "personal characteristics" which account for success at bargaining.

Although Siegel and Fouraker did not write any formal statements about the effect of a specific concession on a bargainer's aspiration level, such formulations can be inferred from their conclusions concerning level of aspiration

> The general conclusions which may reasonably be drawn from research on level of aspiration to date are· (1) experiences of success generally lead to a raising of the level of aspiration, and experiences of failure to a lowering; (2) the stronger the success, the greater the

> probability of a rise in level of aspiration; the stronger the failure, the greater the probability of a lowering (p. 62).

When these conclusions are adapted to considering the effect of no concession, a small concession, or a large concession upon a bargainer's level of aspiration, the following seem to be easily inferred· (1) the larger the opponent's concession, the greater the rise in a person's level of aspiration; (2) the smaller the concession, the smaller the rise in a person's level of aspiration; and (3) no concession at all from one's bargaining opponent might lower one's aspiration level.

The general bargaining advice from the level of aspiration hypothesis is to bargain tough; start with extremely tough offers, make few concessions, and make small concessions rather than large concessions. Recent studies (Bartos, 1960, 1966, 1967, 1970, 1974, Benton, 1971; Benton, Kelley & Liebling, 1972; Chertkoff & Baird, 1971; Chertkoff & Conley, 1967, Cialdini et al., 1979, Druckman & Bonoma, 1976, Druckman et al., 1972; Hamner & Harnett, 1975, Harnett et al , 1973, Hinton, Hamner, & Pohlen, 1974; Holmes, Throop, & Strickland, 1971, Komorita & Barnes, 1969; Komorita & Brenner, 1968, Liebert et al , 1968; & Yukl, 1972, 1973, 1974a, 1974b) provide support for the level of aspiration hypothesis.

A series of studies by Bartos (1960, 1966, 1967, 1970,

1974) supported the Siegel and Fouraker "be tough" theory as well as the "moderate toughness" approach. His results supported both approaches because Bartos found that toughness greatly increases profit when agreement is reached, but simultaneously toughness greatly increases the odds of bargaining deadlock, which means no profit for the bargainer. On "toughness" Bartos (1974, p. 237) concluded "Inspection of Figure 9.1 suggests that the high final payoff was received most often by the subjects who were extremely tough. Moreover, we see that the relationship between toughness and the probability of high final payoff is monotone increasing, the tougher the subject was, the more likely he was to receive a high final payoff. Thus, ex post facto at least, toughness is shown by our data to be a good strategy." On toughness and deadlock Bartos (1974, p 302) summarized "Toughness decreases the chances of an agreement."

Hamner and Yukl (1977) interpreted Barto's research as evidence of a curvilinear relationship between toughness and profit, with a moderately tough offer strategy being as effective as a very tough strategy "Apparently, as a negotiator's toughness increased, he obtained greater concessions from the other negotiator, but fewer agreements occurred Since deadlocks resulted in zero profit, more than a moderate degree of toughness failed to produce any increase in the mean level of profits" (p 145). Bartos's

subjects were college students recruited from social science classes and included a variety of ethnic representation. Bartos's research paradigm involved five party negotiation over political issues. Sometimes the students role played five U.S. Senators. In other experiments they role played five heads of state In others they role played fictitious heads of state such as ALGO, ERGA, INGO, OMNE, and UTRO. Each subject always knew his/her own payoffs Communication was unrestricted except in one important way No negotiator was allowed to reveal what his/her payoffs for a particular political agreement were. Bartos's negotiators must therefore be classified as unilaterally profit informed. Negotiations were allowed to continue until agreement was reached or until the time limit of two hours was exhausted.

Benton (1971) contrasted hard IO (a tough initial offer)/ no concession, hard IO/moderate concession, and soft IO/no concession. The "soft IO/no concession condition" tested Schelling's "fair" strategy which says one should quickly concede to the fair settlement point, and then make no further concessions The subjects, who knew their opponent's payoffs, achieved the greatest profits with the hard IO/ moderate concession strategy.

Benton, Kelley, and Liebling (1972) examined the effects of extremity of initial offer and toughness or softness of concession making upon bargaining outcomes. The experiment

involved simulated bilateral bargaining among college psychology students at U.C.L.A. Communication was restricted to offers only. No prominent or fair outcome was provided. Some bargained without knowledge of their opponent's payoffs; others had such information. Benton et al. advanced the following conclusions Unilateral profit informed bargainers made more extreme offers during the early stages of bargaining than did bilateral profit informed bargainers. These extreme demands elicited extreme counterdemands. The demand strategy of an extreme ınitial offer followed by moderate concessions was more effective than either an extremely tough initial offer with further toughness in concessions or an extremely soft initial offer coupled with intransigence from this soft intitial offer.

Chertkoff and Baird (1971), although primarily studying the effectiveness of deceiving a bargaining opponent, found evidence that toughness in bargaining is more successful than softness. They explained that the perceived motive or cause of the toughness ıs crucial:

> An attributional analysis suggests that for tough bargaining to be successful, a bargainer must become convinced that the toughness being exhibited by the opponent is not due to excessive greed. As long as an opponent shows some willingness to

> compromise, his protracted toughness may convince a bargainer that he is not trying to win an overwhelming victory, but rather is merely responding to his profit schedule. Hence, yielding finally occurs. Tough bargaining should be more successful, then, if it appears to be caused by economic necessity rather than personal greed. (Chertkoff & Esser, 1971, pp 481-482).

Chertkoff and Baird discovered that tough demands thought to be caused by a high breakeven point were effective in eliciting substantial concessions

In order to study initial offers and concession frequency, Chertkoff and Conley (1967) asked female college students to simulate the purchase of a used car. The experimental instructions to the subjects appeared to be designed to enhance a competitive motivation. "Remember you are trying to buy the car for the lowest price possible. . . This experiment is designed to test your skill in bargaining. Make every effort to buy the car for as low a price as possible." (p. 182). Communication was restricted to exchanging written price offers. All bargained knowing only her own potential profits. The major findings were consistent with the predictions of a level of aspiration explanation. An extreme initial offer was more effective in obtaining profits than a moderate offer An extreme initial

offer allowed greater room to concede. This room to concede was useful in eliciting further concessions from the opponent by making small concessions An extreme opening offer coupled with infrequent concessions was best for bargaining success. More frequent concessions elicited more frequent concessions, but not greater movement - just nominal concessions. "Getting your opponent to concede more frequently is an empty gain if more frequent concessions do not result in greater total movement"(p. 183).

Cialdini et al. (1979) used actual new car bargaining rather than simulated car bargaining. Their study thus provided an interesting contrast to the typical laboratory simulation where the opponents are college students, who may not have experienced many negotiations Cialdini et al. noted. "In a naturally-occurring automobile sales interaction, however, one's opponent is often a professional salesman with years of bargaining experience. . " (p. 119). Toughness consisted of refusing all of the salesman's offers on a Chevy Impala before bargaining about the price of a Monte Carlo. Softness consisted of saying that the first price offered on an Impala was satisfactory before bargaining about the price of a Monte Carlo. The tough bargaining on the Impala was found to be effective in lowering the price on the Monte Carlo.

Cohen (1980) offered a tidbit of anecdotal evidence that softness is ineffective. Cohen argued that·

> During the armistice negotiation ending the Korean War, both sides stated their initial demands regarding the location of the final truce line. Obviously, they were far apart. Suddenly the United Nations negotiators, departing from appropriate adversary bargaining practices, made a quick major concession. In trying to be conciliatory with the 'Soviets' from North Korea, we actually revealed our final fallback position Instead of this being perceived as reasonableness, it gave the impression of weakness to our opponents and hardened their negotiating posture. The American admiral, C. Turner Joy, who headed the U. N. negotiating team at Panmunjon, later admitted that this quick concession (which was never returned in kind) gave the Communists a big advantage in the negotiations (p. 141).

Druckman and Bonoma (1976) arranged for 52 eighth grade boys to participate in buyer-seller interactions. Their results suggested starting soft and becoming increasingly tough produces deadlocks "Supplementary data analysis suggest that this reaction resulted from the realization that they were taken advantage of by their nonreciprocating opponent" (p. 261). Softness was not reciprocated; it lead to increased aspiration. Druckman and Bonoma advised bargainers that starting tough

and becoming soft is the better concession making strategy on the basis of their study

In another study which focused on the bargaining of young boys, Druckman et al. (1972) documented a raised aspiration effect following softness As sellers became increasingly soft, buyers became increasingly tough. However, toughness was "reciprocated" with toughness It should be pointed out that all bargainers negotiated with bilateral profit information

One-hundred and sixty male undergraduate students from introductory business courses simulated bargaining in a study by Hamner and Harnett (1975). Hamner and Harnett found that bilaterally profit informed bargainers had more realistic expectations of profit, made less extreme initial offers, and made less profit. They further discovered that information about one's opponent's profits tended to lower the aspirations of bargainers starting with high aspirations and tended to raise the aspirations of bargainers starting with low aspirations. Bilateral profit information corrected unrealistic aspirations.

Harnett et al. (1973) studied three types of bargaining strategies. The tough strategy started with an extreme initial offer and followed with infrequent small or moderate concessions. The "intermediate strategy" started with a moderate initial offer and followed through with moderate

concessions. The soft strategy consisted of a soft initial offer, followed by an early concession to a fair offer, with small or no concessions thereafter. The largest profits were earned by bargainers using the tough strategy.

Hinton, Hamner, and Pohlen (1974) found that bargainers achieved higher profits when they made extreme rather than moderate initial demands. The twenty-four graduate business students bargained without bilateral profit information.

Holmes, Throop, and Strickland (1971) studied forty-eight male psychology students in a bilateral monopoly bargaining situation. Negotiators with high levels of aspiration had higher initial demands, smaller concessions, and received more profit. The negotiators were not informed about their opponent's profit tables.

Komorita and Barnes (1969) examined the buyer-seller negotiation of one hundred and sixty male undergraduate psychology students. Primarily studying the effect of pressure to settle on bargaining, they also reported that a tough bargaining strategy is effective if coupled with pressure to settle All negotiators bargained with a clearly defined range of $50 as an unacceptable low price for the seller and $100 as the seller's starting price.

Komorita and Brenner (1968) examined four offer strategies, which in order from softest to toughest were· (1) a fair initial offer and no subsequent concessions; (2) 100 percent reciprocation; (3) 50 percent reciprocation;

and (4) 10 percent reciprocation. The greatest profits were obtained by the least reciprocation - by the toughest strategies.

Liebert et al. (1968) studied the bargaining of forty male college students in an automobile selling game. Those who bargained knowing only their own potential profit raised their demands upon receiving a favorable concession. Such bargainers used their opponent's first bids to set an aspiration level. Those who bargained knowing both their own potential profit and their opponent's potential profit tended to reciprocate extreme demand with extreme demand and tended to reciprocate a "generous" initial offer with a moderate concession.

Eighty high school students played a bilateral buyer-seller game in the 1972 study by Rubin and DiMatteo. All bargained knowing only their own potential profit. Bargainers who received "generous" concessions raised their aspirations and bargained tougher.

In a series of experiments Yukl (1972, 1973, 1974a, 1974b) found that toughness resulted in greater profits. Yukl studied buyer-seller negotiations among college students. Most bargained without knowledge of their opponent's potential payoffs. When subjects knew their opponents' payoffs this aspiration level increase/toughness effect did not hold.

There is one study that neither supports the reciprocity hypothesis nor the level of aspiration theory's "be tough" strategy. Kahn and Kohls (1972) asked male students from an undergraduate psychology class to engage in a buyer-seller game. Unilateral profit informed bargainers made higher initial offers, had higher aspirations, but tended to earn lower profits.

So at least two dozen studies provide support for the level of aspiration hypothesis. These studies reveal that starting with and continuing with extremely tough offers is a more successful strategy than softness. The theoretical explanation is that toughness lowers opponents' aspirations

Reciprocity Hypothesis

Reciprocity has been assumed to play a role in a number of social situations (Adams, 1965, Gouldner, 1960, Homans, 1961, Walster, Berscheid, & Walster, 1973) In bargaining situations the reciprocity hypothesis states that bargainers will operate in a tit-for-tat manner In other words concessions per se will be reciprocated and the magnitude of concessions will be reciprocated. The bargaining advice from the reciprocity hypothesis is to match a concession with a concession and match the size of a concession with one of equal softness or hardness. In contrast to the aspiration level hypothesis, the reciprocity hypothesis suggests that sometimes generous concessions can be effective in eliciting concessions from one's opponent.

Esser and Komorita (1975) asked fifty-five male undergraduate students from a psychology class to bargain about the sale price of a used appliance in Experiment I. They asked 78 others to bargain in Experiment II. Subjects had full knowledge of their opponent's profit scheme. Esser and Komorita contrasted a concession matching condition (100 percent reciprocation) with two conditions in which an equal magnitude of total concessions occurred, but these concessions were delayed into catch-up concessions. These other two conditions consisted of fifty percent immediate reciprocation and twenty-five percent immediate reciprocation with the other fifty percent/seventy-five delayed into catch-up concessions. Esser and Komorita concluded that immediacy, size, and frequency are all important aspects of reciprocity. The results supported the reciprocity hypothesis in that final offers were more profitable to the bargainers using 100 percent reciprocation. Despite this support several necessary qualifications of the reciprocity hypothesis were noted First, costs for deadlocks were nonexistent, and high costs for deadlock tend to make toughness an effective strategy. Second, ".. the validity of the reciprocity hypothesis may be restricted to situations in which there is sufficient information to evaluate a reciprocal strategy as being fair or unfair " (p. 870).

Hamner (1974) examined whether after a stalemate in negotiations, toughness, moderate toughness, softness, or fairness was a superior concession making strategy. Toughness was manipulated to be 50 percent reciprocation, moderate toughness was 75 percent reciprocation, softness was 100 percent reciprocation, and fairness was making one even-split offer. Softness was superior in this study in terms of maximizing profits.

Hinton et al. (1974) asked twenty-four MBA candidates to transact the sale of "micro-circuit technology" in repeated bargaining sessions. Subjects who conceded at a higher rate earned more profits because they had fewer deadlocks. Hinton et al. also attributed this reciprocity/softness finding to high pressure to reach agreement and in part to the fact that participants bargained with the same opponent in a series of separate sales negotiations. Hinton et al. wrote "It is obvious that the subjects who reach agreement earn more money . Our results seem to indicate that a bargainer should actively cooperate with his bargaining partner by either making a fairly sizeable concession on the opening bid, or by having a reasonably high concession rate during the negotiation period." (p. 202).

Ninety-five female students from undergraduate psychology classes bargained over the price of a used appliance in a study by Komorita and Esser (1975). All bargained with

bilateral profit information. A higher concession rate triggered a higher proportion of settlements rather than deadlocks and consequently greater profit.

Lawler and MacMurray (1980) studied the negotiations of one hundred and twenty college females bargaining about the price of iron ore. All bargained with unilateral profit information. The authors suggested that their results supported a reciprocity of frequency of concessions.

Michener et al. (1975) studied the bilateral negotiations of eighty male college students. These students simulated the negotiations under two power conditions, strong and weak. All negotiated with information about the other's punishment magnitude but not with knowledge of the other's payoffs. Strong power position bargainers tended to raise their aspirations in response to soft concessions. Weak power position bargainers used a reciprocity strategy of matching soft concessions.

Pruitt and Johnson (1970) varied the number of offers in a bargaining round while holding the number of concessions constant. They discovered it made no difference if the opponent made few large concessions or many small concessions. Pruitt and Johnson documented a reciprocation of frequency of offers but not a reciprocity of magnitude of opponent concessions.

The reciprocity hypothesis has been supported by at least

seven studies. These studies found that softness resulted in maximum profits. The main theoretical explanation is that softness causes fewer deadlocks

Intermediate Toughness

The Siegel and Fouraker (1960) "be tough" prescription is considered too extreme by some researchers. Bartos (1960, 1966, 1967, 1970, 1974) noted toughness is an excellent way to maximize profits if an agreement is reached. However, toughness profits on the average are lowered by increased instances of no agreement. Komorita (1972) concurred with this analysis stating that there is a limit to the principle that toughness in bargaining pays.

Benton et al. (1972) demonstrated that extreme levels of toughness are counterproductive. Their subjects achieved the greatest profits with a hard initial offer and then moderate concessions.

Hinton et al. (1974) conducted a study in which bargainers interacted with the same opponent in a series of negotiations They argued such repeated negotiation characterizes labor union/management negotiations. The author indicated that some moderation of demand, either in the form of a soft initial offer or large concessions was necessary where there is a continuing relationship between the parties.

Lawler and MacMurray (1980) argue that reciprocity is too soft, that Siegel and Fouraker's level of aspiration advice is too hard, and that "vigilant reicprocity" is just

right. Vigilant reciprocity is a mixture of toughness and softness.

> A 'vigilant' approach to reciprocity suggests that consistent softness will lead to exploitation rather than reciprocity; while, consistent toughness will tend to backfire and produce an impasse in negotiations. The 'vigilant' version of reciprocity implies that a mixture of tough and softer strategies will produce the most yielding by a bargainer. Specifically, toughness in the early phases of the bargaining or until an impasse is created will generate respect and avoid exploitation. Beyond the initial phases of bargaining, however, a reciprocal (i.e. matching) concession strategy will extract the largest concessions from the opponent. Thus, a 'vigilant' approach to reciprocity suggests that initial toughness combined with a later matching strategy will produce the greatest concessions (p. 418).

Lawler and MacMurray (1980) discovered that a tough initial stance coupled with reciprocated concessions produced profitable settlements as did a soft initial offer coupled with an extremely tough concession strategy.

Morgan and Sawyer (1967) suggested that toughness will be restrained when the negotiator must consider the future payoffs as well as the present ones. They prescribe moderate

toughness over extreme toughness: "Wise persons, however do not treat every encounter like a used-car transaction where they never expect to see others again, friends, instead, also take care that the other obtains an outcome sufficiently rewarding so that he is willing to interact again" (p. 140).

Lawler and MacMurray (1980) interpreted Chertkoff and Esser (1976) to have argued that concession strategies are important primarily because of the impressions they create in opponents. Their advice is that a firm but reasonable approach will maximize an opponent's concessions. "A bargainer must appear 'firm' in order to avoid exploitation and to lower the other's aspiration level; but, at the same time, a bargainer must convey a willingness to make concessions, i.e., appear reasonable. Behavior which gives undue attention to only one of these dimensions, firm or reasonable, may engender less yielding than behavior which takes account of both impression-management dimensions (p. 427).

In summary, an alternative to toughness or softness has been anticipated. The intermediate toughness strategy has been supported by at least ten studies Some of the limitations of extreme toughness that have been discussed are increased instances of deadlocks and a deterioration of the continuing relationship between parties who will be bargaining with each other in the future. The limitation of extreme softness is it sometimes leads to being exploited.

Fair Strategies

A fourth strategy of concession making is Schelling's fair strategy. Schelling (1960) suggested that bargainers often view a certain "prominent" settlement as the most fair to both parties. Often this prominent point is a 50-50 split of available profit. "The bargainer, in following the fair strategy, should not attempt to 'bluff' his opponent but instead should propose a settlement at the point where the prominent solution is reached. If communication is allowed, the bargainer should point out the fact that this is the equitable solution and stay at this point until agreement is reached"(Hamner & Yukl, 1977, p. 142).

Pruitt (1972) points out that there are many different definitions of fairness. Benton (1971) included a condition of soft initial offer followed by no further concessions, which he called a test of Schelling's "fair" strategy. The subjects knew their opponents payoffs. Benton found the fair strategy to be less profitable than either toughness or moderate toughness.

Harnett et al., created a simulation of a fair strategy, that is conceding quickly to a fair offer and then making small or no concessions thereafter. This bargaining strategy, however, earned less profit than either toughness or moderate toughness.

Little research has tested the fair strategy. Two

studies have found that fair strategies earned less profit than either toughness of softness.

Independent Concession Strategies

A fifth explanation of concession making has argued that toughness, moderate toughness, or softness is irrelevant. Esser and Komorita (1975) asserted that toughness may be irrelevant. "Rather, each bargainer tends to follow a predetermined offer schedule which is largely unaffected by the opponent's concessions" (p. 865) Cann et al (1973) found support for this assertion. However, Hamner and Yukl (1977) argued that the study is confounded in two ways. First, the absolute magnitude of concessions was confounded with rate of concession Second, subjects knew they had the advantage of making a last chance final offer. Hamner and Yukl concluded· "In view of this confounding. .it is not surprising that the researchers found that the opponent's offer strategy did not affect the final subject offer" (Hamner & Yukl, 1977, p. 149)

Hatton (1967) performed a study comparing rapid concession with slow concession of the same magnitude. There was no effect of opponent-offer strategy on the subject's final offer.

Opponent concessions did not affect the final offer of subjects in a study by Pruitt and Drews (1969). The participants bargained with only unilateral profit knowledge Hamner and

Yukl argued: "The absence of a significant effect in this study was probably due to the use of opponent offers providing mostly negative payoffs for subjects, . ." (p. 147).

Three studies have concluded that opponent concessions did not affect the offers or outcome in bargaining. Since many studies have connected opponent concessions to bargaining outcomes, more support is needed before this theory can be accepted.

Concession Making and Power

A sixth explanation of concession making involves the relative power of the two bargainers. ". . social psychologists tend to neglect bargaining power and thereby miss a potentially critical determinant of concession tactics. They emphasize the effectiveness of different concession tactics rather than the foundation of the tactics in the power relationship" (Bacharach & Lawler, 1981, p. 83). Komorita and Barnes (1969) varied the power by placing greater pressure to settle on half of the bargainers. Toughness was especially effective if a bargainer was under pressure to settle Michener et al. (1975) found that strong power position bargainers tended toward toughness, while weak power position bargainers tended toward reciprocity.

While there is little research on this theory of concession-making, the one study completed does support the hypothesis that power position may be related to toughness or

softness in bargaining

Conditioning Concession Making

A seventh explanation of concession making suggested that one can behaviorally condition reciprocity. Wall (1977) designed four experiments to test the theory that concessions can be used to operantly condition an opponent's concessions. Reasoning that a bargainer values concessions, Wall argued that the negotiator can use his/her own concessions to reward acceptable opponent concessions. That is, the negotiator can give rewards in the form of concessions when the opponent makes concessions. The first three experiments provided no distinct test of an operant conditioning theory of concession making rather than the reciprocity theory. Since the overall concessions in the reward condition were larger than those in the control condition, one can contend that subjects in the operant conditioning condition simply reciprocated large concessions. In a fourth experiment each control subject received demands and concessions identical to the subject's counterpart in the operant conditioning condition. However, control subjects received these concessions in such a fashion that their concessions were not immediately rewarded. This more unequivocal test of the hypothesis indicated that rewarded subjects increased their concessions.

Three Variables Which May Explain the Conflicting Hypothesis

Since each of these different hypotheses has some empirical

support, the validity of these hypotheses must be examined in further research. This study will examine the effect of three variables upon the first counteroffer in a bargaining session. Only the first counteroffer will be studied because of its importance in the bargaining process.

The Extent of the Bargainer's Profit Information

One potential explanation for the inconsistencies in the research studies which focus on concession making behavior is the profit information condition of the bargainer. Some bargainers negotiate with full knowledge both of their possible profits and the profits of their partner. Such bargainers have been called complete information bargainers. Because knowledge other than profit table knowledge can be significant in a bargaining encounter (knowledge of bargaining procedures, for example), a preferable term would be a bargainer with bilateral profit information. A bargainer with bilateral profit information knows his/her own and his/her opponent's possible profits. A bargainer who only knows his/her own possible profits bargains with unilateral profit information.

Research by several investigators (Kelley, 1966; Kelley, Beckman, & Fischer, 1967, Liebert, Smith, Keiffer, & Hill, 1968, Siegel & Fouraker, 1960) has shown that unilateral profit knowledge often results in bargainers making higher initial demands, making fewer concessions, and taking longer

to reach agreement. Simply put, unilateral profit knowledge results in bargaining toughness. This result is hypothesized to occur because when one lacks bilateral profit information it is difficult for that person to determine what constitutes an equitable agreement. Therefore, uninformed bargainers start with comparatively high initial demands and make few concessions to protect themselves from giving away too much too soon, i.e., before they can estimate what an equitable agreement is from their opponent's offers. Such bargainers bargain cautiously and conservatively until they can collect some data from their opponent's offers Rubin and Brown (1975) have noted that when a bargainer lacks knowledge of the other's possible profits, a concession can provide a clue about the other's utility values and toughness (p. 261) So, it is more effective to bargain cautiously until those clues are provided in the form of concessions from an opponent.

Liebert, Smith, Keiffer, and Hill (1968) have demonstrated that the profit information state of bargainers affects whether they reciprocate the magnitude of a concession or readjust their level of aspiration accordingly. Their results support the hypothesis that unilateral profit knowledge bargainers use opponents' bids to set their own goals (the aspiration level hypothesis). Bilateral profit knowledge bargainers tended to assess the reasonableness of opponents' bids and respond in kind (which is the reciprocity hypothesis). Only the bargainer with bilateral profit knowledge has enough

information to compare a bid to possible splits of the potential profit in order to check for "reasonableness" or "competitiveness or cooperativeness." This is an important foundation of reciprocity explanations as stated by Esser and Komorita (1975):

> In addition, subjects in the present study had full knowledge of their opponent's profit scheme. This is another important variable restricting the generality of the results, because the reciprocity hypothesis assumes that a bargainer must first perceive violations of reciprocity and then react against this attempt at exploitation. Hence, the validity of the reciprocity hypothesis may be restricted to situations in which there is sufficient information to evaluate a reciprocal strategy as being fair or unfair (p. 866).

Esser and Komorita did in fact fully inform bargainers about their opponents' possible profits. These bilateral profit knowledge bargainers exhibited reciprocity just like the bilateral profit knowledge bargainers in the Liebert et al. (1968) study. Benton (1971) discovered that bilateral profit knowledge bargainers tended to reciprocate a minimal concession with a minimal concession. These three studies would suggest bilateralness of profit knowledge is a precondition to reciprocity of concessions.

Unilateral profit knowlege has produced aspiration level effects in several studies. Liebert et al. (1968) compared unilateral profit knowledge to bilateral profit knowledge as a manipulated variable. Unilateral profit knowledge bargainers who received a generous first concession did not reciprocate the generosity Rather, each made a mean counteroffer which gave himself 107% of the possible profit and his opponent -7% of the possible profit. Similarly, Chertkoff and Conley (1967) noted that unilateral profit knowledge bargainers responded to a hard initial offer with a soft final offer level. Bartos (1966, 1967), Komorita and Barnes (1969), and Komorita and Brenner (1968) all support the aspiration level hypothesis advice that small concessions are best when the opponent is only unilaterally informed about profits.

Siegel and Fouraker (1960) studied eight bargaining pairs where both parties had bilateral profit knowledge. Although no data are available about whether concessions were reciprocated concession by concession, Siegal and Fouraker did report that six of these eight pairs divided the available profit in an exact 50%/50% split, (p. 58). They found that bilateral profit knowledge bargainers were "softer" in their initial offers than were unilateral profit knowledge bargainers, (p. 59). Siegel and Fouraker postulated that bilateral profit knowledge bargainers have more realistic

expectations of profit, (p. 70). These conclusions demonstrate the tendency of bilateral profit knowledge bargainers to offer generous concessions and split profit, which are two key components of a reciprocity theory. The following hypotheses concerning unilateral or bilateral profit knowledge are posited.

Unilateral Versus Bilateral Profit Knowledge Hypotheses

Hypothesis One Bilateral profit knowledge bargainers will exhibit more reciprocity of concession magnitude than will unilateral profit knowledge bargainers

Hypothesis Two: Unilateral profit knowledge bargainers, more often than bilateral profit knowledge bargainers will offer concessions of a large magnitude to an extremely small initial concession and of a small magnitude to an extremely large initial concession.

Hypothesis Three Unilateral profit knowledge bargainers will modify their aspiration levels in response to the opponent's initial concession significantly more than will bilateral profit knowledge bargainers.

Hypothesis Four· Unilateral profit knowledge bargainers will raise their aspirations in response to a generous first concession.

Hypothesis Five Unilateral profit knowledge bargainers will lower their aspirations in response to an extremely small initial concession.

The Magnitude of the Initial Offer

A second variable which might account for either adjusted aspiration level or reciprocity is the extremity of the initial offer. Rubin and Brown (1975) have summarized the importance of the initial offer and counteroffer:

> The course of bargaining is largely determined by the initial offers and counteroffers made by each side. Early moves and gestures are critical in the creation of the psychological setting . It is here that rules and norms are first implanted, issues such as trust and bargaining toughness are considered for the first time, and the division of resources to which each party aspires are presented for the other's consideration (p. 260)

Opening moves strongly influence the outcomes of bargaining sessions In the prisoner's dilemma paradigm, initial choices are limited to either a cooperative choice or a competitive choice. The most general conclusion of prisoner's dilemma research concerning initial choices is that the early initiation of cooperative choices tends to elicit cooperative choices from the other party Similarly, initially choosing the competitive choice tends to induce the other party to reciprocate with the competitive option. Research (Crumbaugh & Evans, 1967; Michelini, 1971; Oskamp, 1970, Sermet & Gregovich, 1966, Tedeschi, Hiester, Lesnick, & Gahager, 1968) supports this idea. However, Bixenstine,

Potash, and Wilson (1963), Bixenstine and Wilson (1963), and Sermat (1964) found no difference as a function of the other's initial cooperative or competitive behavior.

Pilsak and Rapoport (1964) have described the "lock-in" effect. This effect describes the tendency of bargaining pairs to quickly fall into a pattern of either mutual cooperation or mutual competition. When lock-ins occur, they begin early in the bargaining and persist for the remainder of the interaction. Lock-in effects are a demonstration of reciprocated toughness.

Not only does prisoner's dilemma research show the importance of initial posturings, but it also shows the dramatic importance of the first offer Komorita (1973), Oskamp (1970), Rapoport and Chammah (1965), and Terhune (1968) each found that whether the first move was cooperative or competitive has a strong influence on the outcome of a prisoner's dilemma game.

When the bilateral monopoly paradigm is used instead of prisoner's dilemma, the magnitude of initial cooperation can be manipulated. Several such studies have examined the effects of extreme versus moderate opening offers upon bargaining outcomes. Chertkoff and Conley (1967) found that bargainers achieved higher outcomes when they made extreme rather than moderate initial demands. Hinton, Hamner, and Pohlen (1974) concluded the same. The strategy of making an initial offer

at the level one expected to settle at eventually was found to be ineffective by Komorita and Brenner (1968).

Benton, Kelley, and Liebling (1972) compared three strategies of concession making· (1) extreme initial demand followed by continued extreme demand; (2) minimal demand followed by continued minimal demand; and extreme initial demand followed by gradual concessions. Their conclusion was that the best way to maximize joint profit is to start extreme and gradually concede. Such a conclusion emphasized that both initial demands and further demands are important. However, Pruitt and Drews (1969) have argued that sixty-seven percent of the variance in subsequent demands is accounted for by the initial demands

Rubin and DiMatteo (1972) compared subjects in a bilateral monopoly situation who were offered an extremely generous initial offer with subjects who were offered an extremely ungenerous initial offer. A generous initial concession raised the aspiration level of bargainers. It also usually resulted in greater final profit for the recipient of the generous initial offer. Yukl (1974) has supported this conclusion.

Liebert, Smith, Hill, and Keiffer (1968) studied the interaction between the magnitude of initial offers and the bilateralness or unilateralness of profit knowledge. Against a bargainer who knows only his/her own possible profits,

high initial demands led to lower counteroffers. On the other hand, when bargainers had information about both their own and their opponent's possible profits, extreme initial demands led to extreme counteroffers

In summary, it is apparent that the initial offer is an important variable in bargaining. That fact, along with the interaction between level of initial demand and the completeness of profit information, requires the inclusion of the magnitude of the initial offer as a variable in this study. Specifically, initial offer magnitude may well help explain some of the inconsistent findings regarding the aspiration level hypothesis and the reciprocity hypothesis.

Magnitude of Initial Offer Hypotheses

Hypothesis Six The preceived competitiveness or cooperation of the opponent will be a function of the size of the initial concession received. Extremely large (small) initial concessions will lend to attributions of cooperation (competition).

Hypotheses Seven· Bilateral profit knowledge bargainers will respond to a large (small) initial concession with a reciprocally large (small) concession

Motivational Orientation of the Bargainer

A third variable of interest is the motivational orientation of the bargainer. Motivational orientation describes a bargainer's attitudinal disposition toward the

other bargainer Deutsch (1960, 1973) describes three types of motivational orientation A cooperative motivational orientation means a positive interest in the other's profits as well as one's own A competitive motivational orientation indicates an interest in doing better than the other and in maximizing one's own profits. An individualistic motivational orientation denotes an interest in maximizing one's own profits regardless of how the other fares.

The archetypal studies of motivational orientation were conducted by Deutsch (1958, 1960, 1973) Deutsch found that motivational orientation as a variable produced sharp effects, regardless of the other variables manipulated. These effects were straight forward. A cooperative motivational orientation led to greater cooperation; a competitive motivational orientation led to greater competition. Similar findings have been reported (Griesinger & Livingston, 1973; Kanouse & Wiest, 1967; Radlow, Wiedner, & Hurst, 1968). Gallo (1966) manipulated motivational orientation in an indirect way. Half of the subjects were told they were taking part in a "decision making" study, in which they were to maximize their profits without regard for the other player--the individualistic motivational orientation. The other subjects were told they were participating in a test of "social intelligence" in which the more socially intelligent an individual is, the more likely it would be that they would win more money than their opponent. This condition was the competitive motivational orientation Gallo found no eventual effect on joint payoff

Schenitsky (1963) reported that if both bargainers had an individualistic motivational orientation in a bilateral monopoly game, they, more often than cooperative motivational orientation players, maximized joint payoff.

For reciprocity to work, a bargainer must trust his/her opponent not to exploit his/her softness but to reciprocate it. Such a trust seems more consistent with a cooperative motivational orientation than a competitive motivational orientation. Reactions to reciprocity violations are stronger in competitively motivated bargainers (Esser & Komorita, 1975). Therefore it is expected that the cooperative orientation will enhance "reciprocity" while a competitive orientation will favor "level of aspiration" effects.

Motivational Orientation of the Bargainer Hypotheses

Hypothesis Eight· A competitive motivational orientation will decrease reciprocity across all conditions in contrast to a cooperative motivational orientation.

Hypothesis Nine. A cooperative motivational orientation in combination with bilateral profit knowledge compared to a competitive motivational orientation in combination with unilateral profit knowledge will result in more reciprocity.

Hypothesis Ten A competitive motivational orientation will decrease the reciprocity of bilateral profit knowledge bargainers compared to cooperatively motivated bilateral profit knowledge bargainers.

In summary, concession making cannot be explained on a straight forward basis by either aspiration level or reciprocity. Therefore, more specific variables must be explored. This study will investigate three such variables· the unilateralness or bilateralness of profit information, the magnitude of the initial concession, and the motivational orientation of the bargainers. Unilateral profit knowledge, more so than bilateral profit knowledge, will be expected to trigger aspiration level adjustments. Reciprocity will be more likely under bilateral profit knowledge conditions Secondly, an interaction is expected between the size of the initial concession and the bilateralness or unilateralness of profit information. Bilateral profit information is expected to moderate reactions to extremity of initial concessions (either large or small), while unilateral profit knowledge is expected to aggravate initial concession size reactions Lastly, the cooperative orientation, as opposed to the competitive orientation is expected to enhance reciprocity.

CHAPTER TWO

METHODOLOGY

Subjects

The subjects were 120 students who were taking an organizational communication class at Fort Hays State University. Subjects were both female and male. Their school classification ranged from sophomore to senior, with a predominance of upperclassmen All members of the class were asked to take part in the study. Subjects were told they were taking part in a study of bargaining. In terms of assignment to experimental conditions, all such assignments were random

Design

A 2 X 2 X 2 factorial design was used with three independent variables. Knowledge of profits was either bilateral or unilateral Initial concession received was either large or small The motivational orientation of the bargainer was encouraged in the direction of either competition or cooperation. Fifteen subjects were randomly assigned to each of the eight treatment groups

Procedure

The bargaining simulation was a buyer-seller game like that used by Liebert et al. (1968). Instructions informed subjects that they were about to participate in a bargaining

game in which the buyer and a seller would attempt to negotiate the sale of a used car. Each subject was told he/she would bargain through the exchange of written price offers with a person in another room

The experiment was conducted in the speech pathology laboratory which contains several small rooms Four subjects were scheduled to arrive at each bargaining session The subjects were kept ignorant of which other three students in the class would be in that same bargaining session. To insure that subjects did not see each other prior to the bargaining session, the time of arrival for each subject was staggered.

Written instructions explained to the subject that he/she and the other subjects were to negotiate a sale of a used car All were told that the car cost them $2500. They were instructed that they were to make sales offers to the other bargainer on the offer sheets which would be provided.

Independent Variables

Knowledge of opponent's possible profits. Knowledge of opponent's possible profits was manipulated through the written instructions to the bargainers. Bilateral profit knowledge bargainers were told that "Based on information you have obtained from a mutual acquaintance, you know that the person trying to purchase the car plans to resell it. He/she has a buyer, however, you do not know who this person is nor how you

could get in touch with him/her. You do know that the buyer has offered $3500 for the car, and consequently, you can estimate the other bargainer's profit by comparing the sales price with $3500." Such subjects could easily compute their profit and their opponent's profit. Their profit for any offer was the amount of that offer minus $2500. Their opponent's profit was the result of subtracting that sales price from $3500. The total potential profit available for splitting was $1,000. Bilateral profit knowledge bargainers knew this. In contrast unilateral profit knowledge bargainers only know what the car cost them ($2500). They could compute their profits but only guess at their opponent's profits.

Size of initial concession received In the extremely small concession condition a bid of $2550 was handed to the subject by the experimenter (as if it was from the other subject). Such an initial offer conceded 5% of the potential $1,000 profit available between the two bargainers. In the extremely large concession condition a bid of $2900 was handed to the subject. Such an initial concession concedes 40% of the potential profit. Manipulation checks verified that such concessions were viewed as small and large respectively, (see Appendices C and D). These checks were performed in the following manner· Students from Interpersonal Communication classes were given the basic instructions for being in the experiment. Then they were asked to describe a first offer of

$2550, or in some cases a first offer of $2900. Eight out of eight bilateral profit knowledge students and 14 out of 17 unilateral profit knowledge students described an initial offer of $2550 as a small initial concession. Six out of nine bilateral profit knowledge students and 8 out of 15 unilateral profit knowledge students described an initial concession of $2900 as "fair or reasonable". Fifty-two other students were given the basic instructions for being in the experiment, and then were asked "What would be an extremely large (small) initial concession?" In terms of mean responses, bilateral profit knowledge students thought $2529 would be a small initial concession and that $2975 would be a large initial concession. Unilateral profit knowledge students thought $2325 would be a small initial concession and that $4347 would be a large initial concession. These manipulation checks verified that $2550 and $2900 were small and large initial concessions respectively.

Motivational orientation. A cooperative motivational orientation was encouraged by the following additional instructions in the bargainers· "Remember that bargaining requires cooperation. In order for a buyer and a seller to agree, they must cooperate by both making concessions When neither party makes concessions, no agreement is reached. If you and your partner cannot cooperatively agree on a price your profit is $0. Hopefully cooperative concessions will

lead to an agreement. Remember that the other person may do you a favor some day. Cooperate."

A competitive motivational orientation was encouraged by the following instructions· "Remember that bargaining is competitive. Every dollar your opponent demands is one less dollar from your profit. Keep in mind that you are competing against a rival. We want to see how much profit you can obtain."

An independent manipulation check provided verification that such instructions did enhance a cooperative (competitive) approach to bargaining. Twenty-five students were given the instructions to the experiment. Then all answered a four-item questionnaire to measure their cooperation or competitiveness. A t-test revealed that the 13 students given the competitive instructions did answer the four self-report questions about their competitiveness in a different way than the 12 students given the cooperative instructions ($t = 3.61$, $p < .01$) (see Appendix E).

Before the subject received an initial offer, they responded to a pre-bargaining questionniare. This questionnaire asked the subject to describe his/her bargaining expectations (see Appendix A)

The subject received an initial concession, ostensibly from the other subject, but actually from the experimenter in order to manipulate the size of initial concession.

The subject's counteroffer was collected by the experimenter, and the subject was asked to fill out another questionniare while the other bargainer was considering the subject's counteroffer. This second questionniare measured the subject's aspiration level in a variety of ways. It also measured self-perceptions and perceptions of the initial concession received (see Appendix B). When the subject completed the post concession questionniare he/she was debriefed about the purpose and proceduresof the experiment.

Dependent Variables

The most important dependent variable was the subject's counteroffer. It constituted a direct measure of whether the subject was responding to either reciprocity or adjusted aspiration.

The Counteroffer as Exact Reciprocation or Nonreciprocation

Bilateral profit informed bargainers knew their car was worth $2500 - $3500. Those who received an initial concession of $2900, were, in effect, being asked to accept a 40%/60% split of the total potential profit. An exactly reciprocal counteroffer would be a 60%/40% split, or a counter offer of $3100. Thus, $3100 is the exact reciprocity point for receivers of a large initial concession. Those who received an initial concession of $2550 were being asked to accept a 5%/95% split. In that case a 95%/5% split or a counteroffer of $3450 would be an exactly reciprocal counteroffer. The

exact reciprocity point for receiving a small initial concession is $3450. Thus each counteroffer can be classified as a case of exact reciprocation or a case of nonreciprocation. Nonreciprocation would be evidence against the reciprocity hypothesis. This analysis can be applied to the hypotheses predicting more or less reciprocity under different conditions, which are Hypothesis One, Hypothesis Seven, Hypothesis Eight, Hypothesis Nine, and Hypothesis Ten.

Counteroffer as Within a Range of the Reciprocity Point

Counts of counteroffers were performed to measure the percentage of counteroffers that fell within a range of plus or minus $104 54 of the reciprocity points previously described The amount of $104 54 is one-eighth of the standard deviation of counteroffers. This analysis was applied to the hypotheses predicting more or less reciprocity under certain conditions, Hypothesis One, Seven, Eight, Nine, and Ten. It was a measure of the amount of reciprocity versus nonreciprocity.

Size of the Counteroffer as Soft, or Moderate, or Tough Demand

High counteroffers equal tough demand levels The low counteroffers equal soft demand levels An analysis of the size of the counteroffer provided evidence as to which conditions softened demand and which conditions toughened demand.

Hypothesis Two posited that unilateral profit knowledge bargainers relative to bilateral profit knowledge bargainers would be tough in response to softness and soft in response to toughness.

Hypothesis Eight asserted that competitively motivated bargainers more so than cooperatively motivated bargainers would be tough in response to softness as well as tough in response to toughness.

Hypothesis Nine asserted unilateral profit knowledge bargainers with a competitive motivational orientation would be tougher in response to softness than would bilateral profit knowledge bargainers with a cooperative motivational orientation.

Hypothesis Ten asserted bilateral profit knowledge bargainers with a competitive motivational orientation would be tougher in response to softness than would bilateral profit knowledge bargainers with a cooperative motivational orientation.

The pre and post initial concession questionnaires provided many relevant comparisons of the perceptions of bargainers These perceptions were of four types· (1) changed expectations, (2) perceptions of the opponent and the opponent's initial concession; (3) perceptions of the probability of reaching agreement, and (4) self-perceptions of bargaining toughness.

Changed Expectations

Post concession expected profit was measured by self-report. The fifth question on the post initial concession

questionnaire asked, "What is your estimate of your probable profit?" Subjects indicated how many dollars of profit they expected. It was a direct measure of level of aspiration and was thus a method of testing all hypotheses which dealt with aspiration level

Changes in expected profit were measured by self report. Post initial concession profit expectations were collected from the fifth question on the post initial concession questionnaire, "What is your estimate of your probable profit?" On the pre-initial concession questionnaire, which was filled out after experimental instructions but before a concession was received, the same question was asked By subtracting the post concession profit estimate from the preconcession profit estimate, the amount and direction of changes in expected profit were calculated Changes in expected profit were a direct measure of changes in level of aspiration, and thus were related to all hypotheses regarding level of aspiration.

Post concession minimum profit expectations were measured by self-report. The fourth question on the post initial concession questionnaire asked "What is the absolute minimum price you will accept for the used car?"

Subjects indicated how many dollars the minimum acceptable was. The amount of $2500 was subtracted from this to calculate minimum profit expectations. Minimum profit expectation were another way of measuring aspiration level, and were used to test all hypothesis regarding aspiration level.

Changes in minimum profit expectations were computed by subtracting the post concession minimum described above from the preconcession minimum. The third question of the pre-initial concession questionnaire asked: "What is the absolute minimum price you will accept for the used car?"

Post concession expectations of best possible profit were collected by self report answers to question number three of the post initial concession questionnaire. It asked, "What do you think is the best price that you can expect to get from the buyer?" This was another measure of level of aspiration.

Changes in expectations of best possible profit were calculated by subtracting post initial concession expectation from pre-initial concession expectation. Question two of the pre-initial concession questionnaire asked, "What do you think is the best price that you can expect to get from the buyer?". Changes in expectations of best possible profit tested hypotheses regarding level of aspiration.

Perceptions of the Opponent

Questions 8 and 9 of the Post Initial Concession Questionnaire read·

"How competitive is your opponent?"

VERY COMPETITIVE 1 2 3 4 5 6 7 NOT VERY COMPETITIVE

"How cooperative is your opponent?"

VERY COOPERATIVE 1 2 3 4 5 6 7 NOT VERY COOPERATIVE

By adding the reversed score of Question 8 to the score of Question 9 a cumulative score of the perception of the

competitiveness--noncooperativeness of the opponent was calculated. The lowest possible score of 2 would indicate cooperation, the highest possible score of 14 would indicate competition. Those conditions hypothesized to show decreased aspiration should show a perception of the opponent as competitive as well as conditions expected to engage in reciprocated toughness

Perceptions of the Opponent's Concession

Questions 10-12 of the Post Initial Concession Questionnaire in order read

"Characterize the initial position taken by the other bargainers."

STINGY 1 2 3 4 5 6 7 GENEROUS

"How reasonable was your opponent's initial bid?"

VERY REASONABLE 1 2 3 4 5 6 7 VERY UNREASONABLE

"How equitable was your opponent's initial bid?"

VERY EQUITABLE 1 2 3 4 5 6 7 VERY INEQUITABLE

By adding the reverse score of Question 10 to the scores of Question 11 and Question 12, a cumulative score of the perception of the stinginess, unreasonableness, and inequity of the first concession was calculated. The lowest possible score of 3 would indicate a perception that the first concession was generous, very reasonable, and very equitable. The highest possible score of 21 would indicate a perception that the first concession was stingy, very unreasonable, and very inequitable. Those conditions

hypothesized to show decreased aspiration should show a perception of "stinginess" as well as conditions hypothesized to engage in reciprocated toughness.

Dissatisfaction with the Initial Concession

Question 13 of the Post Initial Concession Questionnaire read

"How satisfied are you with your opponent's initial bid"

VERY SATISFIED 1 2 3 4 5 6 7 VERY UNSATISFIED

This seven point self-report scale of dissatisfaction with initial concession received allowed a check of whether conditions were reciprocating toughness or were lowering aspiration.

Perceptions of the Probability of Reaching Agreement

Question 7 of the Post Initial Concession Questionnaire read,

"What is the probability that you and your opponent will agree on a price?"

NOT VERY PROBABLE 1 2 3 4 5 6 7 VERY PROBABLE

This was another measure of whether a subject views the concession they received as tough or soft. Those subjects who view the opponent's concession as one not likely to lead to agreement might be saying it is so tough as to preclude negotiation

Self-Perceptions of Bargaining Toughness

Question 14 and 15 of the Post Initial Concession Questionnaire asked

"How competitive was your offer?"

VERY COMPETITIVE 1 2 3 4 5 6 7 NOT VERY COMPETITIVE

"How cooperative was your offer?"

VERY COOPERATIVE 1 2 3 4 5 6 7 NOT VERY COOPERATIVE

By summing the reverse score of question 14 and the score of question 15 an indication of self perceptions of toughness was measured. Self-toughness tested hypotheses regarding reciprocated toughness or raised aspiration

Self-Reports of Profit Motivation

Question 15 of the Post Initial Concession Questionnaire asked, "How important was it for you to obtain as large a profit as possible?"

NOT AT ALL IMPORTANT 1 2 3 4 5 6 7 VERY IMPORTANT

This provided a measure of the effect of the experimental conditions upon profit-motivation. Lowered aspiration may be accompanied by lowered importance of profits to the bargainer, so this measure tested hypotheses regarding lowered aspiration and raised aspiration.

CHAPTER THREE

RESULTS

Hypotheses Relevant to Reciprocity Effects

Hypotheses One, Seven, Eight, Nine and Ten predicted subjects' counteroffers would show a reciprocity effect under certain conditions and would show an adjusted aspiration effect under other conditions. The key dependent variable in analyzing these hypotheses was the counteroffer as a sign of either reciprocity or nonreciprocity

Hypothesis One stated bilateral profit knowledge bargainers would exhibit more reciprocity of concession magnitude than would unilateral bargainers

Bilateral profit informed bargainers knew their car was worth $2500 - $3500. Those who received an initial concession of $2900, were, in effect, being asked to accept a 40%/60% split of the total potential profit. An exactly reciprocal counteroffer would be a 60%/40% split, or a counteroffer of $3100 Those who received an initial concession of $2550 were being asked to accept a 5%/95% split In that case a 95%/5% split or a counteroffer of $3450 would be an exactly reciprocal counteroffer. Using either $3100 or $3450, whatever was appropriate to that experimental condition, counteroffers were classified as being either reciprocation or nonreciprocation. When

reciprocation was defined as exactly $3100 or $3450 (the reciprocation points) Hypothesis One was not confirmed. Bilateral profit knowledge bargainers and unilateral profit knowledge bargainers both had the same rates of exact reciprocation of counteroffer, which were in both conditions 6 cases out of a possible 60 cases, or 10% When a range of ±$104.54 ($104.54 equals one-eighth of the standard deviation of counteroffers) of the exact reciprocity points was used to classify counteroffers as either reciprocation or nonreciprocation, Hypothesis One was still not confirmed (see Table 1).

Hypothesis Seven stated bilateral profit knowledge bargainers would respond to a large (small) initial concession with a reciprocally large (small) concession Thirty bilateral profit knowledge car sellers received a large concession of 40% of the potential profit (an offer of $2900 for a car worth between $2500 and $3500). A reciprocally large counterconcession would be $3100 or less. Only 8 of 30 (26.67%) made reciprocally large counterconcessions. Thirty bilateral profit knowledge car sellers received a small concession of 5% of the potential profit (an offer of $2550 for a car worth between $2500 and $3500). A reciprocally small counterconcession would be $3450 or more. Only 10 out of 30 (33 33%) did so The combined rate was 18 of 60 or 30%. The hypothesis was not confirmed.

Table 1

Instances of Reciprocity of Counteroffer

	Bilateral Profit Knowledge		Unilateral Profit Knowledge			
	Reciprocation	Nonreciprocation	Reciprocation	Nonreciprocation	χ^2	Significance
Reciprocity Defined as:						
Exact Reciprocity Point	6	54	6	54	0.00	Not significant
± $104.54 of Exact Reciprocity Point	20	40	16	44	0.63	Not significant

Hypothesis Eight posited that a competitive motivational orientation would decrease reciprocity across all conditions in contrast to a cooperative motivational orientation. No differences were found in reciprocity rates between competitively and cooperatively motivated bargainers (see Table 2).

Hypothesis Nine predicted the highest level of reciprocity would occur in the counteroffer of cooperative, bilateral profit informed bargainers, the lowest would occur in competitive, unilateral profit informed bargainers. This hypothesis was not confirmed. Both rates of reciprocity were low and were approximately equal (see Table 3).

Hypothesis Ten predicted that when considering only bilateral profit informed bargainers, competitive motivation would decrease reciprocity compared to cooperative motivation. This hypothesis was not confirmed. Both were low in terms of reciprocity rates (see Table 4).

Hypotheses One, Seven, Eight, Nine and Ten predicted subjects' counteroffers would reflect a higher rate of reciprocity under certain conditions and a lower rate of reciprocity under other conditions. The differences in reciprocity rates in all five hypotheses were statistically insignificant None of these reciprocity hypotheses were confirmed. The number of counteroffers reflective of reciprocity was low.

Table 2

Instances of Reciprocity of Counteroffer

	Competitively Motivated		Cooperatively Motivated			
	Reciprocation	Nonreciprocation	Reciprocation	Nonreciprocation	χ^2	Significance
Reciprocity Defined as:						
Exact Reciprocity Point	5	55	7	53	0.39	Not significant
± $104.54 of Exact Reciprocity Point	20	40	16	44	0.63	Not significant

Table 3

Instances of Reciprocity of Counteroffer

	Bilateral-Cooperative		Unilateral-Competitive			
	Reciprocation	Nonreciprocation	Reciprocation	Nonreciprocation	χ^2	Significance
Reciprocity Defined as:						
Exact Reciprocity Points	3	27	2	28	0.27	Not significant
± $104.54 of Reciprocity Points	9	21	9	21	0.00	Not significant

Table 4

Instances of Reciprocity of Counteroffer

	Bilateral Competitive		Bilateral Cooperative			
	Reciprocation	Nonreciprocation	Reciprocation	Nonreciprocation	χ^2	Significance
Reciprocity Defined as:						
Exact Reciprocity Points	3	27	3	27	0.00	Not significant
± $104.54 of Reciprocity Points	11	19	9	21	0.30	Not significant

Level of Aspiration Results

Hypothesis Two predicted counteroffers reflective of the level of aspiration hypothesis. Specifically, "Unilateral profit knowledge bargainers, more often than bilateral profit knowledge bargainers, will offer concessions of a large magnitude after receiving a small initial concession and of a small magnitude after receiving a large initial concession." The mean counteroffer reflects the size of the counterconcession. Since all subjects were sellers, the higher the mean counteroffer, the smaller the counterconcession

The mean counteroffer of a unilateral profit knowledge bargainer who received a large initial concession was higher (tougher) than the mean counteroffer of a unilateral profit knowledge bargainer who received a small initial concession ($t = 1.72$, $df = 59$, $p < .05$) (see Table 5). As predicted in Hypothesis Two there was no difference in the mean counteroffer of bilateral profit knowledge bargainers who received a large initial concession compared to bilateral profit knowledge bargainers who received a small initial concession (see Table 5). The hypothesis was confirmed in that unilateral profit knowledge bargainers offered smaller concessions when given large concessions On the other hand they did not exhibit comparatively

Table 5

Mean Counteroffer

	Size of Concession Received	
	Large ($400)	Small ($50)
Bilateral Profit Knowledge	3304.97	3320.83
Unilateral Profit Knowledge	3606.67	3236.67

Standard Deviation = 152.61

larger concessions when faced with small concessions.

Aspiration Level Changes

Hypotheses Three, Four, and Five predicted aspiration adjustments.

Hypothesis Three stated that: Unilateral profit knowledge bargainers will modify their aspiration levels in response to the opponent's initial concession significantly more than will bilateral profit knowledge bargainers.

Hypothesis Four and Five predicted the direction of aspiration change in unilateral profit knowledge bargainers Hypothesis Four stated that unilateral profit knowledge bargainers would raise their aspirations in response to a generous first concession. Hypothesis Five stated that unilateral profit knowledge bargainers would lower their aspirations in response to an extremely small initial concession.

Aspiration was measured in three different ways· (1) expected profit, (2) minimum profit expectations, and (3) best possible profit expectations.

Expected Profit and Changes in Expected Profit

After each bargainer had received an initial concession and had made his/her counteroffer, each was asked how much profit he/she expected. By comparing prebargaining expectations

of profit to post initial concession expectations of profit, a change in expected profit was calculated for each bargainer. As predicted by Hypothesis Three, there was an interaction between the profit information condition and the size of the initial concession received in terms of the magnitude of profit expectations ($F = 5.26$, 1 and 119 df, $p < .05$). This interaction revealed that bilateral profit informed bargainers were not as likely to change significantly their profit expectations on the basis of an opponent's generous or stingy initial concession than were unilateral profit informed bargainers (see Table 6).

Table 6

Changes in Expected Profit

Profit Information Condition	Size of Initial Concession Received	
	Large	Small
Bilateral	-85.83	-104.17
Unilateral	36 67	-232.50

Standard Deviation = 56.81

As predicted in Hypothesis Four, unilateral profit knowledge bargainers raised their aspirations in response to a generous first concession As predicted in Hypothesis Five, unilateral profit knowledge bargainers lowered their aspiration in response to an extremely small initial concession.

Expected Minimum Profit

A second way of measuring aspiration is to measure what minimum profit a bargainer aspires to. After each bargainer had received an initial concession and had made his/her counteroffer, each was asked how much minimum profit he/she expected. Bilateral profit informed bargainers had significantly higher minimum profit expectations than did unilateral profit informed bargainers ($F = 4.48$, 1 and 159, df, $p < .05$) (see Table 7). Receivers of a large initial concession revealed higher minimum profit expectations than did receivers of a small initial concession ($F = 5.01$, 1 and 119 df, $p < .05$ (see Table 7).

Table 7

Minimum Profit Expectations

Profit Information·	Bilateral	Unilateral
	379.17	292.50
Size of Initial Concession Received	Large	Small
	381.67	290.00

Standard Deviation = 29.64

Expected Best Possible Profit and Changes in Expected Best Profit

A third way of measuring aspiration is to measure what best possible profit a bargainer aspires to. After each bargainer had received an initial concession and had made his/her counteroffer, each was asked what was the best possible profit he/she could expect By comparing

prebargaining expectations of best possible profit to post-initial offer expectations of best possible profit, a change in expectation of best possible profit was calculated. As predicted in Hypothesis Three, an interaction of profit knowledge and size of initial offer showed that unilateral profit knowledge bargainers adjusted their expected best possible profit more to the size of the initial concession received than did bilateral profit informed bargainers ($F = 9.03$, 1 and 119 df, $p < .005$) (see Table 8)

Table 8

Changes in Expected Best Possible Profit

Profit Knowledge Condition:	Size of Initial Concession Received: Large	Small
Bilateral	-185.00	-253.33
Unilateral	36 67	-384 17

Standard Deviation = 64.31

As predicted in Hypothesis Four, unilateral profit knowledge bargainers raised their aspirations in response to a generous first concession. As predicted in Hypothesis Five, unilateral profit knowledge bargainers lowered their aspirations in response to an extremely small initial concession.

Summary of Aspiration Adjustment Results

Hypothesis Three posited an interaction effect of information state and size of opponent's initial concession

upon aspiration level Unilateral profit knowledge bargainers were expected to modify their aspirations in correspondence to the size of initial concession received. Bilateral profit informed bargainers were predicted to be less prone to modify their aspirations on the basis of one concession, be it large or small. Three measures of aspiration were measured expected profit; minimum profit acceptable, and best possible profit. Two of those three measures confirmed the hypothesis, and the third followed the prediction but fell short of reaching the statistically significant levels of the first two measures.

Change in expected profit was measured by subtracting post-initial concession estimates of profit from pre-initial concession estimates of profit. Unilaterals raised their profit estimates after receiving a large concession. Unilaterals lowered their profit estimates after receiving a small concession

When changes in minimum acceptable offer were used as the measure of aspiration adjustment, Hypothesis Three was not confirmed at the .05 level of significance ($F = 2.82$, 1 and 119 df, $p = .096$)

As predicted in Hypothesis Four unilateral profit knowledge bargainers raised their aspirations in response to a generous first concession. They were the only group with increased expectations of profit, +$36.67. All other

groups lowered their expectations. They were also the only group with increased aspiration in terms of best possible offer, +$36.67. All other groups lowered their best possible offer hopes.

As anticipated in Hypothesis Five unilateral profit knowledge bargainers who received a small initial concession lowered their aspiration (see Tables 6 and 8).

Perceptions of Opponent Cooperation or Competition

Hypothesis Six stated: "The perceived competitiveness or cooperation of the opponent will be a function of the size of the initial concession received." Extremely large (small) initial concessions will lead to attributions of cooperation (competition) The hypothesis was directly confirmed, both in perceptions of the opponent and in perceptions of the opponent's initial concession. It was indirectly confirmed in measures of "satisfaction with initial concession received," in "probability of reaching agreement," and in "estimated number of offers to agreement."

Bargainers who received an extremely small first concession viewed their opponent as more competitive and less cooperative than did bargainers who received a large initial concession Receivers of a small initial concession rated their opponents' competitiveness with a mean score of 9 08 on a possible range of 2 ("NOT VERY COMPETITIVE" and "VERY COOPERATIVE") to 14 ("VERY COMPETITIVE" and "NOT VERY

COOPERATIVE"). Receivers of a large initial concession averaged a score of 7.00 This main effect for size of initial concession was statistically significant ($F = 36.98$, 1 and 119 df, $p < .001$) (see Table 9).

Table 9

Perceived Competitiveness of Opponent

	Size of Initial Concession Received	
	Large	Small
Opponent's Competitiveness	7 00	9.08

14 = Very Competitive

Standard Deviation = 0.28

When the opponent's initial concession was extremely small, bargainers tended to perceive it as being "STINGY," "VERY UNREASONABLE," and "VERY INEQUITABLE " This was a less prevalent tendency with bargainers who received a large initial concession. Receivers of a small initial concession rated their opponents' initial concessions with a mean score of 16.35 on a possible range of 3 ("GENEROUS," "VERY REASONABLE," AND "VERY EQUITABLE") to 21 ("STINGY," VERY UNREASONABLE," AND "VERY INEQUITABLE.") In contrast, receivers of a large initial concession rated their opponents' initial concessions with a mean score of 10.58. This main effect for extremity of initial concession was statistically significant ($F = 97.29$, 1 and 119 df, $p < .001$) (see Table 10).

Bilateral profit informed bargainers also rated their

opponents' concessions as "Unreasonable," 14 47, while unilateral profit informed bargainers rated their opponents' initial concessions as more reasonable, 12.47. This main effect for profit information condition was statistically significant (F = 11.70, 1 and 119 df, p < .005) (see Table 10.)

Table 10

Perceived Unreasonableness of Opponent's Initial Concession

Profit Knowledge·	Bilateral	Unilateral
	14.47	12 47
Size of Initial Concession Received·	Large	Small
	10.58	16.35

21 = Very Unreasonable

Standard Deviation = 0.57

Receivers of small initial concessions were more unsatisfied with those concessions than were receivers of large initial concessions. On a seven point scale from 1 "VERY SATISFIED" to 7 "VERY UNSATISFIED," receivers of small initial concessions averaged 5.77 compared to the 3.55 of receivers of large initial concessions. This main effect for size of initial concession received was statistically significant (F = 79.89, 1 and 119 df, p < .001) Bilateral profit informed bargainers were less satisfied with their

opponents' initial concessions than were unilateral profit informed bargainers. Their level of unsatisfaction was statistically different than the level of unsatisfaction of unilateral profit informed bargainers ($F = 4.92$, 1 and 119 df, $p < .05$) (see Table 11).

Table 11

Unsatisfaction with Opponents' Initial Concessions

Profit Knowledge·	Bilateral	Unilateral
	4.93	4 38
Size of Initial Concession Received	Large	Small
	3 55	5.77

7 = Very Unsatisfied

Standard Deviation = 0.23

Receivers of a large initial concession were more prone to say that it was very probable that they and their opponent would agree on a price. Receivers of a small initial concession were not so confident of reaching a settlement. On a scale of 1 (agreement is "NOT VERY PROBABLE") to 7 (agreement is "VERY PROBABLE") receivers of a large initial concession averaged 5.75 Receivers of a small initial concession averaged 4.75. The difference is statistically significant ($F = 18.78$, 1 and 119 df, $p < 001$) (see Table 12).

Table 12

Perceived Probability of Reaching Agreement

Size of Initial Concession Received·	Large	Small
	5.75	4.75

7 = Very Probable

Standard Deviation = 0.17

Receivers of a large initial concession lowered their estimates of how many more offers would be necessary to reach a settlement. After receiving a generous concession they believed it would take 1.60 less offers than they previously believed. Receivers of a small initial concession did not lower their estimates to that extent; they believed it would take .83 less offers ($F = 7.40$, 1 and 119 df, $p < .01$) (see Table 13).

Table 13

Change in Estimated Number of Offers Until Agreement

Size of Initial Concession Received·	Large	Small
	-1 60	-.83

Standard Deviation = 0.20

CHAPTER FOUR

DISCUSSION

Reciprocity Versus Level of Aspiration

The results of this experiment suggest that the level of aspiration hypothesis seems to be a more likely explanation of the initial counteroffer than does the reciprocity hypothesis. Hypotheses One, Seven, Eight, Nine, and Ten predicted reciprocity None was confirmed Hypothesis Two predicted counteroffers reflective of the level of aspiration hypothesis It was confirmed in the sense that unilateral profit knowledge bargainers offered smaller (tougher) concessions in response to larger (softer) concessions. Hypothesis Three, Four, and Five asserted that aspiration levels would systematically vary on the three different measures of expected profit, minimum profit expectations, and best possible profit. These hypotheses were confirmed.

There are a number of potential explanations for this aspiration adjustment effect rather than a reciprocity effect. First, this result is congruent with the majority of bargaining studies about reciprocity and level of aspiration. Two dozen studies have provided support for the level of aspiration hypothesis Only about seven studies have supported the reciprocity hypothesis, and two of these

seven, Lawler and MacMurray (1980) and Pruitt and Johnson (1970), documented only a reciprocity of frequency of concessions, not magnitude of concessions.

Second, the softness, prescribed by the reciprocity hypothesis, maximizes profits (relative to toughness profits) by avoiding deadlocks which result in no profit at all. Note that both Hinton (1974) and Komorita and Esser (1975) attribute their reciprocity results to this advantage of the softness strategy. Perhaps in this study where the focus was limited to the effect of the first concession upon the first counteroffer, the impact of any potential deadlock and loss of profit was not as urgently felt as in studies where a deadlock is not just a potential loss but is an actual loss of profits

Third, the bargainers in Hamner's (1974) reciprocity study initiated their reciprocity in the middle and later stages of bargaining--not in the initial stage of bargaining which was the focus of this study. Also, Hamner's study examined the relative effectiveness of softness or toughness after a deadlock in negotiations. Since a deadlock, by definition, is toughness followed by toughness followed by toughness, perhaps Hamner's finding that it takes softness to break the cycle is not so astounding. While softness after a deadlock might be effective, in this study initial softness was exploited, in congruence with the level

of aspiration hypothesis and the studies which support it

Profit Knowledge and Size of Initial Concession Received

The results of this experiment demonstrate that both a person's knowledge of the potential profit available and the size of the initial concession received can affect the aspirations of a bargainer. The hypothesized interaction between these two variables received consistent support. The general pattern of findings matched those of Liebert et al (1968), Yukl (1974a), Yukl (1974b), and other studies in support of the level of aspiration hypothesis. Unilateral profit knowledge bargainers seemed to use the size of the initial concession received to set their aspiration level. Bilateral profit knowledge bargainers were less influenced by the size of the initial concession received. Rather, the evidence suggests that they use their knowledge of the range of possible profit as a gauge to judge the competitiveness, stinginess, and reasonableness of the opponent. Perhaps their aspiration level is already set, on the basis of their bilateral profit knowledge.

Limitations of the Study

This study has limitations. An enumeration of its limitations can aid in the design of future experiments on bargaining so that a more definite test of the level of aspiration hypothesis can be made.

First, this experiment used simulated bargaining. If possible real bargaining should be studied.

Second, in real bargaining, communication is unrestricted. In this study the only medium of communication was the written exchange of price quotations. If communication were unrestricted one might expect that bilateral profit knowledge bargainers would quickly reveal their profit limits to unilateral profit knowledge bargainers who were exceeding those limits in their demands. Of course some bargainers may be tempted to exaggerate their profit limitations for strategic purposes Also, some wary bargainers may not believe the communications about profit limitations since bargaining is somewhat adversarial in nature. In any case studying bargaining with unrestricted communication would restore some of bargaining's complexity to the bargaining research paradigm.

Third, perhaps bargaining for real profits is different than simulated bargaining. Perhaps laboratory bargaining emphasizes face-saving and self-esteem while real money bargainers emphasize dollars not pride.

Fourthly, this study had no real penalty for deadlock. In real bargaining, failing to negotiate a settlement often results in negative consequences Minimally, one has lost the time spent in bargaining. Maximumly, one loses the potential profits of the deal that got away. Hamner and Yukl (1977, p 155) have argued that in situations where a deadlock results in zero profits, reciprocity or intermediate toughness are superior in effectiveness over toughness.

Fifth, early bargaining, as in this study, may be more conducive to aspiration setting and aspiration adjustment than reciprocity. Those reciprocity effects found, have tended to be in the middle and later stages of bargaining.

Sixth, in this study bargainers had no future relationship with their opponent. In fact they had no present relationship with the other bargainer other than whatever relationship one can have on the basis of an exchange of written sales offers. They did not see or speak to the opponent. Exploitation seems more likely when one will not meet one's "victim" again. So, the less a future relationship is probable, the more one might expect the exploitation of softness by a tough counterconcession, that is aspiration adjustment rather than reciprocity.

Suggestions for Future Research

First, perhaps the bilateral monopoly simulated bargaining studies can be augmented with studies of real bargaining. Do real car salesmen react to initial offers the way people pretending to bargain do? Cialdini et al. (1979) used actual new car bargaining rather than simulated car bargaining.

Second, the persuasion strategies in bargaining should be studied. Communication should become a manipualted variable instead of a controlled variable. Are experienced

bargainers more persuasive than inexperienced bargainers? Are skilled persuaders more effective at winning concessions than less skilled persuaders? Will increased communication opportunity allow bilateral profit informed bargainers to turn unilateral profit informed opponents into bilateral profit knowledge bargainers? Will "fair" divisions of profit be more quickly agreed upon with increased communication?

Third, the control of a laboratory study could be maintained while making the bargaining less susceptible to face saving effects if real money was available for division. Perhaps two students could bargain over how to divide their pay for jointly participating in an experiment When bargaining for real money, deadlocks cost more than lost time and hurt feelings.

Fourth, bargaining could be studied with the factor of the future relationship of the bargainers in mind. Do married couples reciprocate more than friends? Do friends reciprocate more than strangers?

Researchers have much to investigate before a full understanding of the complex process of concession-making in bargaining is obtained However, to the degree that one may speculate on the basis of this experimental study, the level of aspiration hypothesis seems a fruitful initial foundation.

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Appendix A

(Pre-Initial Concession Questionnaire)

Before you decide what your first offer will be, please answer the following questions. You are not bound to the answers you give here, and this information will not be given to the other bargaining party.

What will the other bargainer's first offer be?

What do you think is the best price that you can expect to get from the buyer?

What is the absolute minimum price you will accept for the used car?

What is your estimate of your probable profit?

What number of offers do you think will be necessary to reach a settlement? (Please indicate a number.)

Remember, you are not bound to the answers you give here

Appendix B

(Post-Initial Concession Questionnaire)

Now that you have decided on your current offer, please answer the following questions You are not bound to the answers you give here, and this information will not be given to the other bargaining party.

How much profit does the other bargainer's offer give you?

If you made a counteroffer, how much profit does your counteroffer give you?

What do you think is the best price that you can expect to get from the buyer?

What is the absolute minimum price you will accept for the used car?

What is your estimate of your probable profit?

How many more offers do you think will be necessary to reach a settlement? (Please indicate a number)

What is the probability that you and your opponent will agree on a price.

NOT VERY PROBABLE 1 2 3 4 5 6 7 VERY PROBABLE

How competitive is your opponent?

VERY COMPETITIVE 1 2 3 4 5 6 7 NOT VERY COMPETITIVE

How cooperative is your opponent?

VERY COOPERATIVE 1 2 3 4 5 6 7 NOT VERY COOPERATIVE

Characterize the initial position taken by the other bargainer.

STINGY 1 2 3 4 5 6 7 GENEROUS

How reasonable was your opponent's initial bid?

VERY REASONABLE 1 2 3 4 5 6 7 VERY UNREASONABLE

How equitable was your opponent's initial bid?

VERY EQUITABLE 1 2 3 4 5 6 7 VERY INEQUITABLE

How satisfied are you with your opponent's initial bid?

VERY SATISFIED 1 2 3 4 5 6 7 VERY UNSATISFIED

How competitive was your offer?

VERY COMPETITIVE 1 2 3 4 5 6 7 NOT VERY COMPETITIVE

How cooperative was your offer?

VERY COOPERATIVE 1 2 3 4 5 6 7 NOT VERY COOPERATIVE

How important was it for you to obtain as large a profit as possible?

NOT AT ALL IMPORTANT 1 2 3 4 5 6 7 VERY IMPORTANT

Briefly describe why you made the counteroffer you did.

_____

_____

Appendix C

Perception Check of What Size Initial Concession Should Be Used In the Experiment

Fifty-two students were asked to answer a variant of the following paragraph·

"Pretend you are a used car dealer, let's say 'Western Motors.' Another used car dealer, let's say 'Eastern Motors' can buy the Mongoose from you, he plans to sell it to a customer for $3500. This Mongoose cost you $2500. What would be an extremely large first offer from 'Eastern Motors?'"

In some cases (unilateral profit knowledge condition) the $3500 value was not mentioned In other cases, the last sentence read. "What would be an extremely small first offer from "Eastern Motors?"

Results: (expressed as a mean, number of observations, range, and median)

	Unilateral Profit Knowledge	Bilateral Profit Knowledge
SMALL	$2,325 n = 13 $1,000 - $3,000 $2,500	$2,529 n = 12 $1,500 - $3,200 $2,675
LARGE	$4,347 n = 15 $3,000 = $5,000 $4,000	$2,975 n = 12 $2,500 = $3,500 $3,000

Appendix D

Manipulation Checks of Extremity of Initial Concession Manipulation

(Bilateral Profit Knowledge) Small Initial Concession Manipulation Check

"Pretend you are a used car dealer, let's say you call your company Big Blue Motors. Another used car dealer, let's say Andy's Used Cars would like to buy one of your cars, a "Mongoose." Andy's Used Cars plans to sell it to a customer he has lined up. This customer, it is known, will pay Andy $3500. This "Mongoose" cost you $2500 How would you describe a first offer from Andy's Used Cars of $2550?"

Eight students were surveyed All eight responses validate the experimenter's intention that an offer of $2550 in this situation is a small initial offer.

#1 "I would feel it is not enough profit for me and too much profit for him I would ask him to make another offer "

#2 "Ridiculous! I think he's trying to make a large profit and cut me out when I'd be the #1 person helping him."

#3. "A cheapskate deal. It is not a good business deal because Big Blue Motors could probably sell it for a higher price that would yield you more than a profit of $50."

#4· "If Big Blue Motors sells it for $2550 we'll only be making $50. Should ask for more, A bigger profit."

Appendix D (continued)

#5: "A little bit low - considering his mark up price."

#6 "Too low and I'd bargain for at least 2700."

#7: "Andy is offering the low price in case I am stupid enough to sell it. Since I'm not, we will dicker and he will end up paying around $3,000 for the car."

#8· "Andy's Used Cars's philosophy of business is something abnormal They want maximum profit for themselves and lesser profit for their fellow Business Organization "

(Unilateral Profit Knowledge) Small Initial Concession Manipulation Check

"Pretend you are a used car dealer, let's say "Western Motors." Another used car dealer, let's say "Eastern Motors plans to sell it to a customer he has lined up This "Mongoose" cost you $2500. How would you describe a first offer from "Eastern Motors" of $2550?"

Seventeen students were surveyed. Fourteen responses validated the experimenter's intention that an offer of $2550, in this situation, be viewed as a small initial offer.

#1 "The first offer of $2550 I would consider hilarious to say the least."

#2 "A joke"

#3 "Assinine"

#4· "I would describe it as a 'rip off' because he'll make a lot more money than that selling it and I should be sharing in his profits."

Appendix D (continued)

#5. "Low. Western Motors could sell it retail and make more than a $50 profit"

#6: "Lousy, he wants to make a big profit."

#7 "I would be outraged. I would demand much more money. I don't want my competition to make money of me."

#8. "I would describe it as being stingy since he is probably going to make a lot more."

#9· "As a man tring to make a profit"

#10· "Would like more money for a car that you paid 2500 for you're only making $50. Try for a better offer."

#11: "I would think that the Eastern dealer was trying to get a good deal off the Western dealer and would turn around and sell it for more."

#12. "It sounds funny. Dishonest. They have something up their sleeve"

#13. "This does not provide sufficient bargaining and negotiating room for me to make a profit. I would describe it as too low of a first offer."

#14: "Give other guy a bad rep."

Three responses indicated acceptance of $2550 as a fair price.

#1 "This would be a fair price "

#2 "I think it's a reasonable price."

#3 "I would think it was a decent offer."

Appendix D (continued)

(Bilateral Profit Knowledge) Large Initial Concession Manipulation Check

"Pretend you are a used car dealer, let's say you call your company Big Blue Motors. Another used car dealer, let's say Andy's Used Cars would like to buy one of your cars, a "Mongoose." Andy's Used Cars plans to sell it to a customer he has lined up This customer, it is known, will pay Andy $3500. This "Mongoose" cost you $2500. How would you describe a first offer from Andy's Used Cars of $2900?

Nine students were surveyed. Six viewed $2900 as a moderate offer and three viewed it as a little low.

#1 "Acceptable."

#2: "Sounds fair - Big Blue's should get a profit, but so should Andy's when he make his sale."

#3· "Since Andy has lined up the customer, and is doing the work and assuming the responsibility for it, I would describe it as fair."

#4· "It is reasonable, because both of them are dealers who, anyway, try to earn money, and because both the two dealers will be able to get some benefit from the deal."

#5· It would be the best offer as compared to $3500."

#6· "Fair but about $100.00 low"

Appendix D (continued)

Three viewed $2900 as a little low.

#1 "Too low of an offer because Andy's Used Cars will profit $600 while Big Blue Motors will only make a profit of $400."

#2· "It is a fair offer on Andy's side but if I were "Big Blue" I would push up the price. Long live capitalism."

#3 "The offer is rather low because his profit is high compared to my."

(Unilateral Profit Knowledge) Moderate Initial Concession Manipulation Check

"Pretend you are a used dealer, let's say "Western Motors." Another used car dealer, let's say "Eastern Motors" would like to buy one of your cars, a "Mongoose." "Eastern Motors" plans to sell it to a customer he has lined up. This "Mongoose" cost you $2500. How would you describe a first offer from "Eastern Motors" of $2900?

Fifteen students were surveyed Eight viewed it as a fair offer, an acceptable offer. Seven did not.

#1. "More than fair"

#2 "A pretty good offer"

#3: "I would say great but I would hold out for 3 grand!"

#4· "The car would cost you $2900. It's a good deal"

#5: "I would take it"

Appendix D (continued)

#6· "The offer from "Eastern Motors" is a bonus of $400. And I think I would be satisfied with it."

#7 "I would say that the offer of $2900 is better."

#8: "The offers higher in that if the customer talks him down, he would still be near price its really worth"

#1 "I think the offer is too small"

#2 "It would seem the man was after a profit"

#3 "Bias, trying to give the other dealer a bad reputation"

#4. "I would think the car would be a lot more than $2900. I would he would offer a lot more. Really chap guy."

#5 "ridiculous"

#6: "A scam by the man from Eastern Motors."

#7: "Way too low. It needs to be more like $3900. Than I might consider it."

Appendix E

Manipulation Check of Competitive / Cooperative Motivational Orientation

Thirteen students were given the "Instructions" (see attached sheet) to the experiment that encourage a competitive orientation. Twelve were given the cooperative orientation. Each was asked to answer a small questionnaire aimed at measuring the competitiveness or cooperativeness of the student. This questionnaire is attached It consisted of four questions to be answered on a scale from 1 to 7 A composite score could therefore theoretically range from 4 - 28. A 4 would be extremely cooperative A 28 would be extremely competitive A t-test revealed that the thirteen students given the competitive instructions did answer the four self-report questions about their competitiveness in a different way than the twelve students given the cooperative instructions. The difference in means was significant beyond the 01 level.

Appendix E (continued)

Competitive	Cooperative
23	13
22	22
18	13
17	15
17	11
16	15
16	15
12	16
23	16
21	16
18	17
18	18
12	187
233	
Mean = 17.92	Mean = 15 58

t = 3.606

p < .01

Appendix E (continued)

1. How cooperative are you in this situation?

VERY COOPERATIVE 1 2 3 4 5 6 7 NOT VERY COOPERATIVE

2. How competitive are you in this situation?

VERY COMPETITIVE 1 2 3 4 5 6 7 NOT VERY COMPETITIVE

3. How competitive is this situation?

VERY COMPETITIVE 1 2 3 4 5 6 7 NOT VERY COMPETITIVE

4. How much do you value a cooperative relationship with the other person?

VERY MUCH 1 2 3 4 5 6 7 NOT VERY MUCH