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Theoretical Comparisons of Forms of Exchange*

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A recent program comparing negotiated and reciprocal forms of social exchange offers important implications for theory development. Results of these investigations show that the form of exchange studied—negotiated or reciprocal—affects many of the processes and assumptions underlying contemporary theories of exchange. Three such effects are discussed here. First, the form of exchange affects the causal mechanisms underlying power use and the relation between network structure and power. Second, whether exchange is negotiated or reciprocal affects the relative emphasis on learning or rational-choice models and the breadth of motivations assumed for “self-interested” actors, including reward maximization, loss avoidance, and reciprocity. Third, the form of exchange affects the salience of the cooperative and competitive “faces” of exchange, influencing actors’ subjective experiences with exchange. These results show the limitations of theories based on any single form of exchange and the need for greater understanding of the full range of exchange forms that characterize social life.

For the past 25 years, most theory development on social exchange has concentrated on a particular form of exchange in which actors jointly *negotiate* the terms of strictly binding agreements. Classical exchange theorists, in contrast, typically excluded bargaining and negotiation from the scope of their theories. Homans ([1961] 1974) observed that explicit bargaining is rarely part of enduring relationships, while Blau (1964) argued that the absence of negotiation is what distinguishes social from economic exchange. Only a few researchers have studied the nonnegotiated, *reciprocal* exchanges of benefits that were the focus of these early theorists (Burgess and Nielsen 1974; Michaels and Wiggins 1976; Molm 1990, 1997).

Recently, a new program of theory and research has systematically compared reciprocal and negotiated forms of exchange and their effects on a wide range of exchange outcomes (Molm, Peterson, and Takahashi 1999, 2001; Molm, Takahashi, and Peterson 2000, 2002). The results of these investigations have important implications for theory. In particular, they suggest that the restricted scope of contemporary exchange research has led to some assumptions and principles that may not hold for all forms of exchange and, conversely, that other important principles have been neglected because of their irrelevance to negotiated exchange.

In this paper, I discuss three theoretical issues brought to light by these investigations. I argue, first, that the form of exchange affects the causal mechanisms underlying power use and the relation between network structure and power, thus affecting the relation of most interest to contemporary exchange theorists. Second, I reexamine the traditional actor assumptions of exchange theories, particularly the assumption

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that actors seek to maximize benefits. I propose that two other motivations—avoiding risk and loss and maximizing the probability of reciprocity rather than the value of benefits—play a much larger role in social exchange than has been recognized. Third, I discuss how the form of exchange affects the relative salience of the two “faces” of social exchange—cohesion and integration versus conflict and differentiation—and the implications of these differences for power, commitment, and affect.

BACKGROUND

Basic Concepts and Assumptions of Social Exchange

All exchange theories share a common set of analytical concepts: actors, resources, structures, and processes. Participants in exchange, called *actors*, can be individual persons or corporate groups, and specific entities or interchangeable occupants of structural positions. When an actor has possessions or behavioral capabilities that are valued by other actors, those possessions or capabilities are *resources* in that actor's relations with those others. Social exchange resources include not only tangible goods and services but also capacities to provide socially valued outcomes such as approval or status. Actors seek to obtain more of the outcomes that they value and others control, and they do so through the process of social exchange.

Actors engage in exchange within structures (relations or networks) of mutual dependence. The simplest exchange relation consists of two actors, A and B, each of whom controls resources that the other values. Most questions of interest to exchange theorists arise, however, when A and B are embedded in a larger *exchange network* of social relations that provides at least one of them with choices of alternative partners. Alternatives create opportunities to “exit” the dyadic relation, thus providing the necessary conditions for processes of power, inequality, trust, commitment, and fairness. Actors who have more or better alternatives for obtaining the same class of resource have a *power advantage* in an exchange relation, which they can use to obtain greater benefits. Studies of exchange networks in both laboratory and natural settings have focused primarily on how variations in network structures affect exchange outcomes, particularly power (see Molm (2000) for a review).

Forms of Exchange

Within a given network structure, the *form* of exchange transactions can also vary. First, the mutual dependence between actors can be either *direct* or *indirect*. In relations of *direct exchange* between two actors, each actor's outcomes depend directly on another actor's behaviors; that is, A provides value to B, and B to A. In relations of *indirect* or *generalized exchange* among three or more actors, the mutual dependence is indirect: a benefit received by B from A is not reciprocated directly, by B's giving to A, but indirectly, by B's giving to another actor in the network.

Second, direct exchange relations can be further distinguished by whether transactions are *negotiated* or *reciprocal* (Blau 1964; Emerson 1981; Lévi-Strauss 1969). In *negotiated exchange*, actors engage in a joint decision process, such as explicit bargaining, in which they seek agreement on the terms of exchange. Both sides of the exchange are agreed upon at the same time, in a discrete, bilateral transaction that gives each partner benefits of equal or unequal value. Most economic exchanges other than fixed-price trades fit in this category, as well as some social exchanges

(e.g., agreements about the division of household labor). In the negotiated exchanges studied by exchange researchers, agreements are also strictly binding.

In *reciprocal exchange*, actors' contributions to the exchange are separately performed and nonnegotiated. Actors initiate exchanges individually, by performing a beneficial act for another (such as giving assistance or advice), without knowing whether, when, or to what extent the other will reciprocate. Exchange relations evolve gradually, as beneficial acts prompt reciprocal benefit. Because the same act can complete one exchange and initiate another, discrete transactions are difficult to identify. Instead, the relation takes the form of a series of sequentially contingent acts (e.g., A assists B with work, B subsequently does a favor for A, and so on).

Although negotiation is more typical of exchange in some settings (e.g., work) than in others (e.g., families), both forms of exchange are observed in a wide range of social contexts. Even in politics, business, and international relations, unilateral initiatives are common, and the expectation of future reciprocity is often left implicit. Similarly, even in interactions among family and friends, some exchanges of favors, household work, and choices of activities are negotiated (e.g., the division of household labor, prenuptial contracts). Thus, analytically, it is possible to separate the form of exchange from the actors, resources, or structure of exchange. That was the strategy pursued in this project.

Contemporary Theory Development: The Shift to Negotiated Exchange

The importance of these variations in form was recognized by classical theorists, but their theoretical implications were never developed. For nearly 20 years after Homans (1958) first coined the term "social exchange," empirical research on *any* form of exchange was rare. The approach consisted primarily of four related but distinct theoretical statements (Blau 1964; Emerson 1972a, 1972b; Homans [1961] 1974; Thibaut and Kelley 1959), and debates over issues of rationality, tautology, and reductionism (Emerson 1976). Systematic research on social exchange did not begin until the late 1970s. Then, over a 15-year period, several programs of experimental research on social exchange emerged, all studying how the structure of exchange networks affects the distribution and use of power.

The impetus for this work was Emerson's (1972a, 1972b) theory of power-dependence relations, and his research program with Cook and their students was the first to develop. Emerson proposed that the mutual dependence of actors provides the structural basis for their power over each other. This structurally determined power produces distributions of exchange benefits that correspond to actors' relative dependencies on each other, with *less* dependent (more powerful) actors receiving greater benefit, at lower cost, than more dependent actors. To test Emerson's theory, Emerson, Cook, and their students (Cook and Emerson 1978; Cook et al. 1983; Emerson and Stolte 1977) constructed a laboratory setting that was to become the prototype for the study of power in exchange networks. In contrast to the reciprocal exchanges envisioned by the classical theorists, subjects in Cook and Emerson's setting *negotiated* the terms of exchange, through a series of offers and counteroffers, to reach binding agreements.

This laboratory setting became the blueprint for a decade of research on power in exchange networks. As new theories of power in exchange networks emerged—including elementary theory (Markovsky, Willer, and Patton 1988; Willer and Markovsky 1993), expected value theory (Friedkin 1992, 1993), and applications of cooperative game theory (Bienenstock and Bonacich 1992, 1993)—researchers adopted, with

minor modifications, the basic parameters of Cook and Emerson's setting. The study of exchange networks as bargaining structures became the norm, with researchers either implicitly or explicitly assuming that exchanges were negotiated.

Given the familiarity of many exchange researchers with game theory, this exclusive concentration on negotiated exchange is surprising. Negotiated exchanges comprise only one major category of "games"—*cooperative* games, in which strictly binding agreements are made jointly by players who can communicate. Reciprocal exchanges belong to a second category, *noncooperative* games, in which actors make choices independently, without knowledge of others' choices.¹ Thus, the focus of contemporary exchange theorists on negotiated exchanges ignored not only the classical roots of social exchange but also a major category of interaction in game theoretic formulations.

THE THEORETICAL RESEARCH PROGRAM

To address this gap, my colleagues and I initiated a new program of experimental research investigating the effects of the form of exchange on power and inequality (Molm, Peterson, and Takahashi 1999, 2001), the development of trust and affective commitment (Molm, Takahashi, and Peterson 2000), and perceptions of fairness (Molm, Takahashi, and Peterson forthcoming). The project's aim was to develop the theoretical and empirical effects of three key dimensions that distinguish between negotiated and reciprocal exchange: the contingency of outcomes, information about reciprocity, and the timing of inequality.

The first dimension, the *contingency* of actors' outcomes, is the most fundamental. In reciprocal exchange, each actor's outcomes are contingent solely on another's *individual* actions; that is, A's behavior individually produces rewards for B, and vice versa. Consequently, benefits can flow *unilaterally*: actors can initiate exchanges that are not reciprocated, and they can receive benefit from another (or from multiple others *at the same time*) without giving in return. In negotiated exchange, each actor's outcomes are instead contingent on the *joint* actions of self and other, and the flow of benefits is *bilateral*: neither actor can profit without an agreement that benefits both.

The second dimension, the *information* actors have about their partner's reciprocity, follows partly from the first. The joint task of negotiating agreements requires communication and exchanges of offers and counteroffers; consequently, actors know in advance what they are getting for what they are giving. But when actors individually give benefits to others without negotiation, they often do so without knowing what, if anything, they will receive in return.

The third dimension on which the two forms vary is the *timing* with which the equality or inequality of exchange emerges. In negotiated exchanges, each transaction produces an agreement that provides either equal or unequal outcomes for actors. In reciprocal exchanges, equality or inequality develops only over time, not on discrete transactions, and it is determined by the relative frequencies with which actors reciprocate each other's giving, as well as by the value of that reciprocity.

A series of experiments examined how these key differences in the two forms of exchange affect important exchange outcomes—including power and inequality, the

¹ Reciprocal exchanges constitute only one category of noncooperative games, however. Actors make choices individually and without communication in all noncooperative games, but the payoff structures of these games include relations that are not exchange.

development of trust and commitment, and the perceived fairness of exchange—and how the form of exchange interacts with the structure of exchange networks.

Experimental Setting and Procedures

All of the experiments were conducted in a standardized experimental setting in which undergraduate student subjects, who were randomly assigned to positions in exchange networks, engaged in either reciprocal or negotiated exchanges to earn money, the exchange resource in the experiments. The negotiated and reciprocal exchange settings were designed to be as comparable as possible on all dimensions other than their defining differences.

In the negotiated exchange setting, actors negotiated the division of a fixed amount of benefit within relations on a series of exchange opportunities. Each opportunity consisted of up to five rounds of negotiation; on each round, all actors in the network simultaneously made offers to all alternative partners. After the first round, actors could accept another's offer, repeat their last offer, or make a counteroffer. Negotiations continued until all potential agreements were made or the five rounds were up. As soon as an agreement was reached, both actors received the amounts agreed upon; thus, agreements were binding.

In the reciprocal exchange setting, each actor in the network gave points to one exchange partner on each opportunity. Actors made these choices simultaneously and independently, without knowing whether or when the other would reciprocate; information about benefits gained was provided only after all actors had chosen. To hold constant the potential joint benefit of reciprocal and negotiated exchanges, the number of points that each actor could give to any partner on any single opportunity was fixed and equal to one-half the total points that actors in the negotiated exchange setting could divide on each opportunity.

In all of the experiments except those specifically designed to study fairness judgments, information about actors' relative earnings was restricted to control for equity effects. In the negotiated setting, subjects knew the range of points they could request from agreements and that, in general, the more they received the less the other person received. They did not know that a fixed amount of profit was divided, nor did they know how many points the other person received from an agreement. Subjects made offers by *requesting* the number of points they wanted to receive from an agreement, and each subject's *request* for points was then converted by the computer into an *offer* of the remaining points for the other subject. In the reciprocal setting, subjects knew only the number of points they could receive from others, not the number of points they could give to others.

The experiments in the program studied variations of the two simple network structures shown in Figure 1. In all of the networks, actors occupied one of two structural positions, A or B. Relations in the networks were negatively connected, and these connections were operationalized in the traditional way (Cook and Emerson 1978); in negotiated exchanges, an agreement with one exchange partner precluded an agreement with another on that exchange opportunity, and in reciprocal exchanges, initiating exchange with one actor precluded initiating exchange with another on that opportunity.

In both networks in Figure 1, A is more powerful than B because B's only alternative to A is a low-value exchange with another B, potentially worth only one-fourth as much. Across the two networks, the strength of A's power advantage is varied. In Figure 1b, the addition of a fourth actor to the network reduces the availability

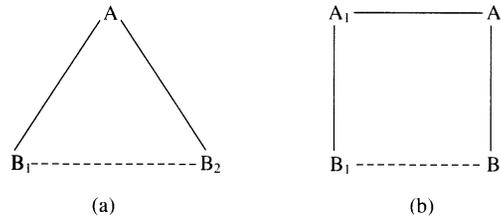


Figure 1. The basic network structures studied in the research program. Solid lines indicate potential relations with high exchange value, and dashed lines indicate potential relations with low exchange value.

of A's alternative to B; consequently, A's power advantage is weaker in Figure 1b than in Figure 1a. These two networks were compared in the first experiment on power (Molm, Peterson, and Takahashi 1999); subsequent experiments systematically varied the *value* of A's alternative to B and the *number* of A's alternative partners.

In most of the experiments, all actors in the network were real subjects who interacted with one another. The one exception was the fairness experiments; to control for the objective equality or inequality of exchange in these experiments, subjects' exchange partners were computer-simulated. Subjects in the fairness experiments also had full information about the shape of the network and the potential value of exchange with each partner, information necessary for making fairness judgments. In all other experiments, subjects' information about the network structure was restricted to knowledge of their own access to their own exchange partners and their potential benefits from these partners.²

In all experiments, power use was measured by the inequality in *total* benefits accrued over time by actors in the A and B positions. This measure takes account of both the inequality of exchanges *within* the A–B relation and the *likelihood* of their exchanges with each other and with other actors in the network. Measures of trust, affective commitment, and perceptions of fairness were derived from subjects' responses to a series of seven-point semantic differential scales administered at the conclusion of the experiment, asking for subjects' evaluations of their exchange partners and relations.

Key Findings

Six experiments compared the effects of the two forms of exchange on power, trust and commitment, and fairness. Results showed that fundamental differences between the two forms affect all of these processes. Reciprocal exchanges produce lower power use and inequality (Molm, Peterson, and Takahashi 1999), higher levels of trust and feelings of affective commitment (Molm, Takahashi, and Peterson 2000), and stronger perceptions of fairness (Molm, Takahashi, and Peterson forthcoming) than negotiated exchanges that are structurally equivalent. Furthermore, the form of exchange *interacts* with the effects of both network structure and actors' behavior in its effects on exchange outcomes. Most dimensions of network structure have weaker

²The first experiment on power also varied actors' information about the network structure, comparing conditions of full and restricted information to test whether greater information increases actors' power use in reciprocal exchange. Information had no effect, and subsequent experiments used only restricted information conditions.

effects on power use in reciprocal than in negotiated exchange, while exchange partners' behaviors have stronger effects on actors' evaluations of their partners in reciprocal than in negotiated exchange.

Below, I examine these findings in more detail and consider their implications for three theoretical issues: the dynamics of power in exchange structures; assumptions about actor motivations in exchange theories; and the cooperative and competitive "faces" of exchange.

IMPLICATIONS FOR THEORETICAL ISSUES

The Dynamics of Power in Network Structures

As Emerson (1972a) noted, a striking feature of the exchange approach is the manner in which it directs attention to power and inequality. Contemporary theories of power in exchange networks depart in two important ways, however, from the classical tradition on which Emerson built. First, although these theories share an emphasis on actors' alternatives and their effects on the use of power (Skvoretz and Willer 1993), contemporary theories emphasize different dimensions of alternatives than does Emerson's 1972 formulation. Second, some of the explicit assumptions of one of the leading contemporary theories—elementary theory (Willer and Markovsky 1993)—are directly opposed to Emerson's original assumptions. As I will show, both shifts can be traced to the contemporary focus on negotiated exchanges, rather than the reciprocal exchanges that Emerson, like the classical theorists, undoubtedly had in mind.

Emerson (1972a) proposed that B's dependence on A varies inversely with the *number* and *value* (i.e., "degree") of B's alternatives to exchange with A. But since Cook and Emerson's (1978) first negotiated-exchange experiment, the characteristic of alternative partners that has received the most attention is their *availability*. The "availability" of actors as exchange partners depends on their own alternatives; alternative partners whose own alternatives are poor or nonexistent are more "available" (and more dependent) than those whose alternatives are good or plentiful. The *value* of alternatives has rarely been studied (for exceptions, see Bonacich and Friedkin 1998; Molm, Peterson, and Takahashi 2001), and the *number* of alternatives is considered relatively unimportant (Cook et al. 1983; Cook and Yamagishi 1992; Willer 1992).³

Emerson (1972a) further argued that the initiation of exchange varies directly with dependence: A is more likely to initiate exchange with an actor on whom A is more (rather than less) dependent, and if B is the more dependent partner in a relation between A and B, then B will be the more frequent initiator of exchange. In other words, the *less* powerful actor will initiate exchange with the *more* powerful actor. Over time, A's use of power will increase, and unequal ratios of exchange, with B giving more frequently than A, will emerge.

In contrast, axiom 2 of Markovsky, Willer, and Patton's (1988) original formulation—based on conditions of exchange that assume negotiation of binding, bilateral agreements—states that *i* seeks exchange with *j* if and only if *i*'s power is greater than *j*'s, or if *i*'s power relative to *j* equals or exceeds that in any of *i*'s other relations.

³Both the equi-resistance solution of Willer and his associates (e.g., Skvoretz and Willer 1993) and Cook and Yamagishi's (1992) equi-dependence solution predict that the number of A's alternative partners should have no effect on the division of benefit within the A-B relation when exchanges are negotiated: what matters is an actor's "best alternative," not the number of alternatives.

In other words, *more* powerful actors are predicted to initiate exchange with *less* powerful actors—the opposite of Emerson's prediction.

While this may appear to be a fundamental difference between power-dependence theory and elementary theory, it is really a difference between assumptions governing initiations in reciprocal exchange and negotiated exchange. Whether benefits can flow unilaterally (as in reciprocal exchange) or only bilaterally (as in negotiated exchange) affects which exchange patterns will maximize powerful actors' benefits, the effect of those patterns on the costs imposed on the weaker partner, and the power use that results. Consequently, both assumptions about the initiation of exchange and predictions of the relations between dimensions of network structure and power use vary for the two forms of exchange.

In negotiated exchanges, in which benefits are obtained only through bilateral agreements, actors should make agreements with those who offer greater rewards. More dependent, less powerful partners will typically offer better deals than less dependent, more powerful partners. Hence, elementary theory's axiom 2: in negotiated exchange, seeking exchanges with less powerful actors is indeed a more profitable strategy and one that self-interested actors should follow. But in reciprocal exchanges, in which benefits flow unilaterally, initiating exchange with a partner who is more dependent on an actor is *not* the best strategy—precisely because, as Emerson predicted, more dependent partners should initiate exchange more frequently, even in the absence of equal reciprocity. Consequently, because advantaged actors can receive benefits from multiple partners at the same time, the best strategy for obtaining maximum benefit from *all* of A's partners is to give more frequently to those partners who are less dependent, and less frequently to those who are more dependent.

This difference between the two forms of exchange in the partners with whom self-interested actors should seek to exchange and the patterns that will maximize powerful actors' benefits also explains the shift in focus to the *availability* of alternatives. More available alternatives are more dependent alternatives; therefore, if the relation between dependency and the initiation of exchange is reversed, the relation between availability and power use should also be reversed. To the extent that actors follow the patterns that maximize rewards in both forms of exchange, the availability of A's alternatives should be positively related to A's power use in negotiated exchanges, and negatively related in reciprocal exchanges. It is not surprising, then, that a shift to the availability of alternatives—rather than Emerson's original focus on the number and value of alternatives (which affect the dependence of the actor, not the partner)—has accompanied the shift to the study of negotiated exchange.

Empirically, however, this reversal in the direction of the relation between availability and power use does not occur. Instead, a *positive* relation is observed for *both* negotiated and reciprocal exchanges (i.e., power use increases with availability of alternatives), although the relation is much weaker for reciprocal than for negotiated exchange (Molm, Peterson, and Takahashi 1999). This finding poses a theoretical puzzle. If we begin with the assumption that actors pursue patterns of exchange that maximize their rewards, then a positive relation between availability and power use for reciprocal exchange does not logically follow. Internal analyses of reciprocal exchange relations support this reasoning: powerful actors earn more money the more frequently they exchange with *less* available partners rather than with *more* available partners, and weaker (more dependent) actors earn more the more frequently they give to their powerful partner (Molm, Peterson, and Takahashi 1999).

Yet, to varying degrees, both more and less powerful actors failed to employ these more profitable patterns of exchange.

These findings, and others that I discuss below, challenge the assumption that actors are primarily motivated to maximize rewards. They strongly suggest that in reciprocal exchanges, other motivations—not necessarily opposed to the traditional assumption of self-interested actors—come into play.

Assumptions about Actor Motivations

Virtually all exchange theories, from classical to contemporary, assume that actors are self-interested, seeking to increase outcomes they positively value and decrease outcomes they negatively value. They differ in the extent to which they assume a “rational actor model,” derived from microeconomics, or a “learning model,” adopted from behavioral psychology. In the former, actors cognitively weigh the potential benefits and costs of alternatives, based on available information (including results of past actions), and make rational choices that seek to maximize outcomes over the long term. In the latter, actors respond only to the consequences of past choices, without conscious weighing of alternatives, and often without maximizing outcomes—especially if short-term and long-term consequences are at odds.

Different exchange theories have placed varying degrees of emphasis on the assumptions of these two models. Homans, Blau, Thibaut, and Kelley, and Emerson all adopted, to some extent, assumptions derived from learning theories. Homans’s and Emerson’s theories were specifically derived from operant psychology, Thibaut and Kelley combined learning theory with some of the cognitive flavor of decision theories, and Blau adopted an eclectic mix of psychology, economics, and normative sociology.

With the rise of theorizing based on negotiated exchanges, however, assumptions about actors have taken on more of a rational-choice flavor. Cook and colleagues (1983:286) assumed that actors use power in a “rational” way that marked a departure from Emerson’s operant formulation:

[B]y “rational” we mean that each actor in the network explores alternative sources of benefit in the network (a) through extending offers to others and (b) by comparing offers and counteroffers from others. Each actor maximizes benefit by (a) accepting the better of any two offers, (b) lowering offers when offers go unaccepted, and (c) holding out for better offers when it is possible to do so.

Those are consciously calculated decisions, not easily derived from learning principles. Markovsky, Willer, and Patton (1988:223) similarly assumed that “actors consistently excluded from exchanges raise their offers . . . those consistently included in exchanges lower their offers . . . actors accept the best offer they receive, and choose randomly in deciding among tied best offers.” Friedkin’s (1992:214) expected value model also assumes “*rational actors* who seek to maximize their net receipt of resources over any set of transaction opportunities provided to them,” and Bienenstock and Bonacich’s (1992) proposal to use the core as a game theoretic solution to power in negatively connected networks is explicitly based on conceptions of rationality (individual rationality, coalition rationality, and group rationality) that assume actors seek to maximize rewards over the long term.

While both models of the actor are useful for understanding behavior in different contexts, the assumptions of a rational actor may be more compatible with negotiated transactions, which encourage actors to calculate and compare the relative benefits of

different options (Molm 1994). In reciprocal transactions, in which actors respond sequentially to one another without agreements, learning principles may provide a better fit. Neither context rules out one model or another, of course, but assumptions based on these two models will not always lead to the same predictions.

In addition to influencing the use of learning or rationality assumptions to model actor behavior, differences between negotiated and reciprocal forms of exchange may affect assumptions about actor motivations in a more basic way. While virtually all contemporary theories assume that actors try to *maximize benefits* or *profits* (i.e., net receipts of gains minus costs or losses), the results of this research program suggest instead that (1) *reducing risk or loss* may be a stronger motivation than increasing gain, and (2) the *act of reciprocity* may be more valuable than the particular benefits gained. In negotiated exchanges, these distinctions have tended to be irrelevant: reciprocity is a trivial byproduct of a bilateral trade, and the same actions that reduce the risk of loss also increase gain. But in reciprocal exchange, reciprocity is not taken for granted, and actions that minimize risk and maximize gain are sometimes at odds. Below, I discuss each of these, and review the findings that raise questions about actor motivations.

Risk. All forms of exchange involve uncertainty and risk. Yet, there is surprisingly little discussion of risk in the contemporary exchange literature (for exceptions see Kollock 1994; Molm 1997; Thye, Lovaglia, and Markovsky 1997). Risk has primarily been considered in relation to trust, as a necessary condition for the demonstration of trustworthiness and, thus, for the development of trust (Kelley and Thibaut 1978; Kollock 1994; Yamagishi, Cook, and Watabe 1998). As Bonacich (1995) has noted, trust is unnecessary in negotiated exchanges because terms are known in advance and guaranteed. Reciprocal exchange offers greater opportunity for the development of trust because of the inherent risk of exploitation. In support of this logic, experiments in this program show higher levels of trust and affective commitment in reciprocal than in negotiated exchange, and stronger relations of trust and commitment to behavior (Molm, Takahashi, and Peterson 2000).

But results of this research also suggest that risk is involved in a more basic way in *both* forms of exchange, affecting exchange behavior in general and power use in particular. Central to this argument is the assumption that actors seek not only to increase rewards or gains, but also to decrease costs or losses. Although that is a long-standing assumption of exchange theories, the latter part of the assumption—that actors seek to avoid loss—has typically been ignored by researchers or incorporated in the concepts of profit or net receipts: that is, the benefits actors receive from negotiated exchanges are assumed to represent net profits after the subtraction of costs. Thibaut and Kelley (1959) adopted a similar heuristic, combining rewards and costs into a single “goodness of outcome” scale that implicitly assumed the two are weighted equally.

As Kahneman and Tversky’s work shows, however, the subjective weights of gains and losses are not equivalent: individuals are *loss averse*, weighting the subjective value of losses more heavily than the subjective value of equivalent gains (Kahneman and Tversky 1979, 1984; Tversky and Kahneman 1991). Numerous studies by economists, psychologists, and sociologists support this principle (e.g., Fishburn and Kochenberger 1979; Gray and Tallman 1987; Hershey and Schoemaker 1980; Molm 1997). But most contemporary work on social exchange, focusing exclusively on reward exchanges under relatively risk-free conditions (i.e., negotiated exchanges with binding agreements), does not consider the possibility that actors are motivated more by avoiding losses than by seeking gains.

Both negotiated and reciprocal forms of exchange involve risk, but their sources of risk are different and the strategies that actors (particularly disadvantaged actors) should use to reduce risk are different. In reciprocal exchange, the primary risk is the *risk of nonreciprocation*—of giving benefit without receiving benefit in return. In negotiated exchange, where binding agreements secure known terms, the primary risk is instead the *risk of exclusion*—of failing to make an agreement with a desired partner.

Efforts to reduce these two forms of risk—the risk of nonreciprocation and the risk of exclusion—should have opposite effects on power use. In negotiated exchange, disadvantaged actors can reduce the probability of exclusion by *increasing the amount offered*, thus increasing power use by increasing the inequality of the negotiated agreement and increasing the powerful actor's benefits. In reciprocal exchange, disadvantaged actors can reduce the occurrence of nonreciprocity by *decreasing unilateral giving*—that is, by limiting how often or how much they give to a partner without reciprocation, a response that *decreases* power use by decreasing the inequality in the rate of exchange and decreasing the powerful actor's benefits.

In support of this logic, experiments show lower power use overall in reciprocal than in negotiated exchange (Molm, Peterson, and Takahashi 1999). Further experiments, varying other dimensions of network structure (the value and number of alternatives), confirm this finding. Power use is lower for reciprocal exchange under virtually all unequal power structures, regardless of the source of inequality, and the relation between power imbalance and power use is generally weaker. The two forms of exchange produce similar levels of power use only when power imbalance is very low; when power imbalance is increased to moderate or high levels, the increase in power use is greater for negotiated than for reciprocal exchange. Substantial evidence also suggests that risk avoidance *dominates* behavior in reciprocal exchange, with actors opting for reciprocity even when it does not maximize their outcomes. *Both* power-advantaged and power-disadvantaged actors—rather than only the disadvantaged, as expected—tend to give to others as others give to them. Although this pattern reduces risk and increases predictability for both actors in the relation, the opportunity costs are far greater for powerful actors.

These comparisons of negotiated and reciprocal exchange raise an important question: Is reducing risk and minimizing loss a stronger incentive than seeking rewards and maximizing gains? Typically, the behavior of actors in negotiated exchanges has been explained in terms of reward-seeking, not risk-avoiding. In negotiated exchanges, it is difficult to differentiate these two motives, because the same behaviors may satisfy both: that is, when disadvantaged actors increase their offers to powerful partners, they reduce the risk of exclusion but also increase their chances of obtaining some reward. Tougher bargaining is not a winning strategy for these actors, even if they persist in the long term. But in the reciprocal exchanges in these studies, risk-reduction strategies and maximizing strategies were clearly in conflict: behaviors that reduced risk (opting for steady and predictable commitments, avoiding unilateral exchanges) also decreased benefits for both more and less powerful actors. Some patterns of reciprocal exchange will develop only if actors are willing to accept some temporary and short-term costs and uncertainty; by opting for greater predictability, actors sacrificed greater profit over the long term.

Risk reduction, however, is not the only possible explanation of actors' failure to engage in maximizing patterns in reciprocal exchanges. The other explanation—one that poses an even greater challenge to the assumption of reward maximization—is that actors preferred reciprocity over profit.

The Value of Reciprocity. Reciprocity is one of the defining characteristics of social exchange. Whether reciprocity is established and maintained through norms (Gouldner 1960) or learning (Emerson 1972a), a core assumption of all social exchange theories is that “benefits obtained through social process are contingent upon benefits provided ‘in exchange’” (Emerson 1981:32). Reciprocity, then, is common to all forms of exchange. But reciprocity is comprised of multiple dimensions: that is, reciprocal acts can be compared on their equivalence in (a) *function* (i.e., good is repaid by good and harm by harm), (b) *magnitude of value*, and (c) *probability or frequency of occurrence*.

In negotiated exchanges of rewards, the only dimension that can vary is *value*. Functional equivalence is assumed, and probability becomes trivial: negotiated exchanges of rewards are, by definition, bilateral. Each actor receives something of positive value from the other, and the only uncertainty involves the *magnitude* of value that each receives—the terms of exchange that actors negotiate. Thus, inequality in the value of benefits received has been the focus of contemporary exchange work and the operational definition of power use.

But in reciprocal exchanges, the *act* of reciprocity per se—that is, the probability or frequency with which A reciprocates B’s giving—is uncertain. *Both* the value and probability of reciprocity can vary. Our initial research on these two dimensions suggests that in reciprocal exchanges, the probability of reciprocity is more important than the magnitude of its value. Three findings contribute to this conclusion. First is the finding I have already discussed: in low-availability networks, powerful actors opt to exchange with more available, more dependent partners rather than engaging in the pattern that would maximize their outcomes (exchanging more frequently with less available partners and less frequently with more available partners) (Molm, Peterson, and Takahashi 1999). Second, actors evaluate their partner’s behavior as more fair in reciprocal than in negotiated exchanges, even when the benefits exchanged are equal in value (Molm, Takahashi, and Peterson forthcoming). Third, in reciprocal exchanges, actors’ judgments of their partners’ fairness are unaffected by the value of benefits received; only the frequency with which the partner reciprocates an actor’s giving matters. Partners who consistently reciprocate others’ giving are perceived as very fair, regardless of the value of their exchange. In negotiated exchanges, on the other hand, the opposite is true: only the terms of the agreement reached, not variations in the process of bargaining, matter (Molm, Takahashi, and Peterson forthcoming).

All of these findings show actors behaving in ways that suggest they value the *act* of reciprocity, per se, *over and above the instrumental benefits of exchange*. Two mechanisms may underlie this effect. One, consistent reciprocity may be valued because it reduces uncertainty and makes inherently risky reciprocal exchanges more predictable. Two, voluntary acts of reciprocity may provide expressive benefits (feelings of group solidarity, of being valued by another) that are not acquired through negotiated exchange, and that may substitute for the value of other benefits foregone. Indeed, not only the act of reciprocity, but also the *obligations* created by the unilateral giving that precedes reciprocity, may add value to reciprocal exchanges. As a form of social capital, outstanding obligations contribute to the continuity and stability of relationships (Coleman 1988). In negotiated exchanges, obligations never exist: each transaction is complete in itself, creating no need for further interaction.

The Two “Faces” of Exchange

Social exchange occurs because much of what we need and value can be obtained only from others. Thus, dependency on others, and interdependencies between actors,

underlie all forms of social exchange. But dependence has two sides: on the one hand, it can produce social integration (relations of mutual dependence bring people together, creating attraction, cohesion, and enduring relationships), but on the other hand, it also leads to social differentiation (unequal dependencies create inequalities in power, producing conflict and opposition). This duality is inherent in “mixed-motive” structures like exchange, in which actors’ interests partially correspond and partially conflict: both actors are better off with exchange than without it, but each benefits in *inverse* proportion to what he or she gives the other. In negotiated exchange, the more A offers B, the less A obtains from an agreement; in reciprocal exchange, the more frequently A gives to B, the less A obtains from exchanges with other partners (i.e., A’s “opportunity costs” are higher).

Lawler and Yoon’s (1993, 1996, 1998) series of studies on affective commitment in negotiated exchanges makes a strong case for the inherent “cooperativeness” of this form of exchange. They argue that frequent, successful negotiations between two actors produce positive emotions that are attributed, in part, to the relationship itself. As a result, the relationship becomes an object of affective attachment, distinct and valued in its own right—an outcome they define as relational cohesion. Recently, Lawler (2001) has proposed that two conditions affect the likelihood that individuals will attribute their emotions to social units: (a) the jointness of the task, a structural condition varying with the degree to which individual contributions to task outcomes (success or failure) are inseparable or undistinguishable, and (b) individuals’ sense of shared responsibility for the results of the exchange, a perceptual condition. He further proposes that (b) varies directly with (a), and that both should be stronger in negotiated than in reciprocal exchange. Consequently, he predicts that successful exchange will produce weaker positive emotions in reciprocal than in negotiated exchange partners, and weaker affective attachments to the relation.

Structurally, there is no question of this argument’s validity. The process of negotiation transforms the structure of outcomes in an exchange relation, creating a cooperative relation in which *each* person’s outcomes depend on *both* persons’ efforts (Molm 1994). Neither person can obtain benefits from negotiated exchange without a joint agreement that benefits both. This is the dimension that I referred to earlier as the *contingency of outcomes*—whether outcomes are contingent on the exchange partner’s individual efforts or on both persons’ efforts. But what seems a reasonable assumption—that the necessity for joint action will create a sense of shared responsibility, and thus counter self-serving attribution biases—is more questionable. The process of negotiation is a double-edged sword. The same features that make negotiated exchange more structurally cooperative than reciprocal exchange—joint decision-making, the bilateral flow of benefits, the two-party unit created by the task of negotiation—also bring into sharp relief the inherent conflict of interests between actors in exchange relations. This conflict, I argue, has the opposite effect on actors’ perceptions of the exchange relation, increasing the tendency toward self-serving biases and increasing perceptions of the partner as an adversary rather than a cooperative partner.

Three key factors contribute to this effect, by making the relative salience of the competitive, conflictual aspects of exchange more pronounced for actors in negotiated than in reciprocal exchange. First, actors’ outcomes are more easily compared in negotiated than in reciprocal exchange. Such comparisons increase awareness of inequalities and heighten competition. Because each transaction produces either equal or unequal outcomes for actors in negotiated exchanges, “success” or “failure” is more obvious. In reciprocal exchanges, it is more difficult for actors to keep track of

who fares better, or who owes whom, because the equality or inequality of the relation develops only over time.

Second, the relative costs of exchange are more transparent in negotiated than in reciprocal exchange, and the relation of one actor's gain to another's loss is more direct. In negotiated exchange, the more an agreement favors one actor, the less it favors another.⁴ In reciprocal exchange, this "zero-sum" component is less evident because the costs incurred involve the loss of potential benefits from other relations, rather than reduced profit from the focal relation. That is, because disadvantaged actors must give more frequently to maintain their powerful partner's intermittent reciprocity, they must forgo more of the potential rewards from alternative activities.

Third, when exchanges are unequal, the inequality is more likely to be perceived as an intentional consequence of the partner's behavior in negotiated exchange. In the context of bargaining, acts of one party are, by definition, acts of commission, directed at the other party, with known consequences for self and other. In reciprocal exchanges, inequality results instead from acts of omission—from *not* acting—rather than from tough bargaining. Consequently, intent is more ambiguous: inequality may be the result of an actor's intentionally paying less for another's favors, or an unanticipated side effect of an actor's exchange with another partner.

Greater awareness of the conflict between actors' interests can have important consequences for actors' subjective experiences with exchange, potentially affecting a wide range of behaviors, cognitions, and emotions. While Lawler (2001) argues that a shared sense of responsibility will reduce or eliminate self-serving biases—at least those involving credit for success—heighted conflict has the opposite effect, *increasing* actors' tendencies to interpret exchange processes in a self-serving manner (Hegtvedt and Killian 1999; Thompson and Lowenstein 1992). Self-serving attribution biases also make actors less likely to perceive the situational causes of others' behavior than those of their own behavior (Nisbett and Ross 1980; Ross 1977). The more an actor attributes responsibility for inequality to the partner and perceives the partner's behavior as intentional and dispositional, the more likely that the actor will perceive the partner's behavior as unfair, evaluate the partner in a negative light, and resist making unequal exchanges with the partner. Our research program has documented all of these effects: greater resistance to unequal negotiated exchanges than to unequal reciprocal exchanges; perceptions that negotiated exchanges are more unfair than reciprocal exchanges even when exchanges are equal; and less positive affect, lower trust, and weaker feelings of commitment to the partner (Molm, Takahashi, and Peterson 2000, forthcoming).

Thus, the analysis of different forms of exchange makes an important contribution to the classic distinction between the cooperative and competitive faces of exchange. While contemporary exchange theorists have concentrated on analyzing how the structure of power affects the relative strength of these two forces, this analysis shows that the *process* of exchange can affect the *subjective* strength of the conflictual and cohesive aspects of exchange relations, *independent* of the objective structure of outcomes. And actors' perceptions of exchange as competitive or cooperative can affect behaviors and emotions.

In addition, the relative salience of these two faces may affect the outcomes on which researchers tend to focus. During the era of research on negotiated exchange, the dominant topic has been power and inequality. Earlier exchange theorists, who

⁴Integrative issues that offer the opportunity for agreements that provide greater total benefit for both actors through "logrolling" tactics are an exception (Lawler and Yoon 1993).

conceptualized social exchange in terms of reciprocal exchange, paid far more attention to the integrative aspects of exchange relations: attraction, sentiments, cohesion, group formation. If attention to reciprocal (and generalized) forms of exchange increases, attention may once again shift to include more of the cooperative aspects of social exchange relations.

CONCLUSIONS

For two decades, most theory development in social exchange has been based on analyses of negotiated exchange. I have argued that the form of exchange studied affects how researchers view exchange relations and the theories they construct. Using data from recent experimental comparisons of negotiated and reciprocal forms of exchange, I have discussed three such effects here. First, the form of exchange affects the mechanisms that underlie the use of power, including the patterns of exchange that maximize actors' outcomes and the relations between structural dimensions of alternatives and power use. Second, whether one studies reciprocal or negotiated exchanges affects the relative emphasis on learning or rational-choice models of exchange and the breadth of motivations encompassed by the assumption of "self-interested" actors. Third, the form of exchange can affect both the objective and subjective salience of the cooperative and competitive faces of exchange, influencing both how actors experience and respond to exchange and what topics researchers pursue.

Neither the forms of exchange compared here nor the three effects discussed are intended to be exhaustive. Instead, they illustrate some of the theoretical consequences of restricting empirical investigations of exchange—and, consequently, the contemporary development of theories of exchange—to *any* particular form of exchange. Generalized and productive forms of exchange have also been understudied, quite possibly with similar consequences. The basic mechanisms underlying many of our theories may hold only for particular forms of exchange, and they may operate in different ways under different conditions. In recent years, we have seen considerable progress in the sophistication of exchange theories and the precision of predictions. But that progress has come at the cost of the breadth of social phenomena that were once part of social exchange theories. Not only do many aspects of social exchange deserve more attention, but our *theories* might look quite different if we widened the lens through which we view the social world.

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