

Social Exchange Theory of Emotions

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Emotions are likely to be produced when two or more people exchange valued outcomes (i.e., goods, rewards, payoffs). Emotions are internal events that occur within an actor and that stem from conditions or events external to the actor (e.g., the behavior of others, results of exchange, social context). These may take various forms, including general feelings of pleasure/satisfaction or displeasure/dissatisfaction or more specific feelings of anger, shame, pride, gratitude, and so forth. It is reasonable to presume that any emotions felt by actors due to their exchange could have important effects on their future exchanges and their relationships. For example, if the exchanges make them feel good or feel gratitude toward each other, their inclination to exchange should increase and they may develop a stronger relationship over time. On the other hand, if they feel anger or shame after concluding an exchange, their inclination to exchange in the future should decrease and a relationship may not develop at all. This chapter reviews theoretical and empirical work bearing on how and when emotions or feelings from social exchange affect the development and strength of social relations and groups.

One would not expect to find a large amount of work on emotion within social exchange theorizing, given the underlying assumptions of this tradition. Social exchange theories assume an instrumental view *of actors* (i.e., they are self-interested and oriented to increasing if not maximizing rewards) and *of social units* (i.e., relations and groups form and persist because they provide rewards or protect against punishments). Two guiding principles are as follows: (a) behaviors that generate rewarding consequences for the actor are repeated; and (b) actors stay in relations and groups from which they receive rewards that are comparatively better than rewards available elsewhere (e.g., Emerson 1972a; Molm and Cook 1995; Thibaut and Kelley 1959). Relations, groups, and larger social units are *means* for generating individual rewards (Hechter 1987), not ends in themselves. An important implication is that, in social exchange theory, social

units (relations, groups, organizations) are precarious and unstable, because members come and go as changes occur in structural opportunities, incentives, values, or preferences. This makes social order at the microlevel or macrolevel problematic because it is contingent on stable structures and incentives that motivate and shape repetitive patterns of behavior and interaction. We propose that emotional processes in exchange can “solve” this social order problem by generating affective attachments to social units, rendering those units salient and objects of value in their own right.

There are currently two microfoundations for social exchange theorizing, each reflecting a different variation on the above instrumental theme: reinforcement or operant theory (Emerson 1972a; Homans 1961) and rational-choice theory (Elster 1986; Molm and Cook 1995; Wilier 1999). An important difference between these two microfoundations is that, in a reinforcement framework, actors are assumed to “look backward” (i.e., orient their behavior to past experience), whereas in a rational-choice framework, actors are assumed to “look forward” (i.e., orient their behavior to future states of affairs or goals) (see Macy 1993). Exchange theories typically are built on one or both of these metatheoretical frameworks, implicitly or explicitly. Interestingly, based on some psychological theory and research (Izard 1991), “looking backward” and “looking forward” produce distinct emotional responses—looking backward may produces joy and comfort, whereas looking forward may produces interest and excitement. Thus, these different temporal perspectives (backward or forward) may have different consequences for relations and groups based on social exchange.

Exchange-theoretic actors are decidedly unemotional or emotionally vacuous (Lawler and Thye 1999). In exchange theory, actors process information, interpret others’ intentions, and respond to rewards, but the fact that they also emote is generally neglected in the literature (see

Homans, 1950, for a notable exception). One obvious reason for this neglect is that exchange theorists generally are inclined to eschew “internal states” in lieu of structural and behavioral explanations (Emerson 1972a, 1972b; Wilier 1999). Cognitive notions of risk and trust have been borrowed from psychology and economics (e.g., Cook 2001; Molm 1997; Yamagishi and Yamagishi 1994) and used mainly to round out and deepen instrumental explanations of behavior. Yet, even here there are potentially relevant emotions, such as fear, confidence, gratitude, or anger, that could be important to understanding risk and trust. The purpose of this chapter is to theorize emotions in social exchange, develop the implications for relations and groups, and selectively review empirical literature.

THE PROBLEM

The core problem addressed by this chapter is to examine and explain the “order-producing” effects of emotions in social exchange. We assume that a social structure is the prime context within which actors may or may not exchange; exchange is voluntary and actors engage in a process of interaction that may or may not produce an exchange. We posit that individuals respond emotionally to the “results” of a social exchange (i.e., to the fact of exchange and to the rewards received). The emotions involve general positive or negative feelings—“feeling good” or “feeling bad.” Key issues include how and when such feelings are produced by social exchange, and how and when individually felt emotions generate affective attachments to their relational or group affiliations. Person-to-group attachments would produce greater order and stability, because actors then would be more likely to stay in the relation or group, develop a collective orientation that moderates narrow self-interest, and trust others within the relation or

group. Person-to-unit ties with an affective basis transform relations or groups into expressive objects of value in and of themselves.

A Social Formations Approach

In an earlier paper, Lawler and Thye (1999) analyzed a wide range of theoretical ideas that can be applied to emotions in social exchange. The purpose was to explore different points or places where emotions are important. Some of these ideas were from social exchange theory; however, most were from other areas of sociology and psychology. More specifically, Lawler and Thye offered a framework that identifies three junctures in social exchange at which emotions play an important role: (1) as integral elements of the *social context* of social exchange; (2) as features of the *processes* of exchange; and (3) as results of the *outcomes* of social exchange. *Social context theories* analyze norms about what emotions to feel or express in a given situation (Hochschild 1979, 1983), and why status/power differentiation generates different emotional responses from higher and lower power or status actors (Kemper 1978, 1987; Ridgeway and Johnson 1990). *Process-oriented theories* emphasize the signaling effects of emotions—to self (Heise 1987) and to others (Frank 1988)—and how emotions modify cognitions (Bower 1991; Isen 1987). *Outcome-oriented theories* examine the emotional effects of achieving an exchange and the impact of these emotions on personal commitment (Molm 2003a) or commitment to the relation or group itself (Lawler et al. 2000; Lawler and Yoon 1996). Lawler and Thye (1999) refer to the latter as the “social formations” approach because it addresses the conditions under which social exchanges create, sustain, or undermine Social

formations or social units. The larger issue is to understand how social exchange contributes to the creation of social order (Lawler 2002).

This chapter emphasizes and elaborates the social formations approach—in particular, when and how emotional responses to outcomes of social exchange strengthen or weaken relations and groups. Because of this focus, the chapter should not be interpreted as a comprehensive review but, rather, a selective treatment of emotions, focused on our own line of research over the past 10-15 years (Lawler 2001, 2002, 2003; Lawler and Thye 1999; Lawler et al. 2000; Lawler and Yoon 1993, 1996, 1998; Thye et al. 2002). This focus also reflects the fact that whereas emotions play different roles at different junctures in exchange (see Lawler and Thye 1999), social exchange is fundamentally an *outcome-oriented* theory. If we can show that exchange outcomes produce emotions and these emotions affect order (i.e., cohesion, commitment, and solidarity) in relations and groups, this adds an important dimension to extant exchange theorizing. Because emotions can be associated with different social objects (e.g., self, other, relation, group), we need to explain when emotions are attached to social units whether the social unit is a relationship, group, network, organization, community, or society.

Concept of Emotion

A standard definition of emotions is that they are positive or negative evaluative states with physiological, neurological, and cognitive components (Izard 1991). Emotions are internal states of the human organism, reflecting the organism's response to external stimuli. The neurological correlates are homeostatic mechanisms often ascribed to the evolutionary adaptation of the species (Pinker 1997; Turner 2000). Damasio (1999) made an important distinction

between “feelings” and “feeling feelings.” The former entail neurological states of the organism, wired, learned, and unconscious; the latter are feelings that the individual is aware of in some minimal sense, at least aware of their bodily organism’s response (i.e., the feeling of a feeling). A unique feature of emotions is that they induce organismwide neurological effects (e.g., Damasio et al. 2000); that is, emotions activate chemical secretions that produce organismwide states. When an actor feels good, she feels good all over; when an actor feels bad or depressed, she feels bad all over. In part because of this, Damasio argued that “feeling feelings” is the most fundamental basis for consciousness—in particular the sense of a distinction between the internal states of the person as an organism (now felt) and stimuli external to the person (external environment). In this sense, the experience of feelings implies a rudimentary sense of self, juxtaposed to the external objects or events that are emotion-producing (Damasio 1999).

This chapter makes a case for treating emotions as central features of social exchange (i.e., as a third microfoundation, along with reinforcement and rational choice). Recent research of neuroscientists adds empirical weight to this point of view. There is strong evidence that elements central to social exchange theory (i.e., rewards and punishments) produce emotional counterparts (i.e., neurological or chemical manifestations) in the human brain. Rewarding stimuli activate certain emotional regions of the brain, and the regions of the brain activated by rewards versus punishments are different (e.g., Blood and Zatorre 2001; Damasio 1999; Damasio et al. 2000; Small et al. 2001). Damasio et al. (2000) observed different brain activation patterns for feelings of happiness and sadness and suggested that the subjective feeling of an emotion by an actor is correlated with changing internal states within the brain. Ashby et al. (1999) also showed that both reward and positive affect generate dopamine secretions in particular regions of the brain, and these secretions enhance cognitive flexibility, such as the capacity to look at

stimuli from different perspectives. Negative affect, in turn, is mediated by different neural pathways and fosters less cognitive flexibility. By implication, if rewards and punishments generate emotional responses that impact neurological pathways in such fundamental ways, it is reasonable to argue that emotions and feelings are as central to social exchange as behaviors and cognitions are. It is also reasonable to propose that emotions have distinguishable effects on social formations, apart from other internal states (cognitions).

SOCIAL EXCHANGE THEORIES: BACKGROUND

Homans (1950, 1961) offered the first systematic social exchange theory, and the first to include emotion in a systematic way. In Homans's (1950) work on the human group, he theorized that any social context can be analyzed in terms of what *activities* are undertaken, how often *interaction* occurs between or among given individuals, and what *sentiments* develop among those that interact frequently. Sentiment here refers to "internal states of the human body," including affection, sympathy, antagonism, and liking/disliking. The focus is solely interpersonal, person-to-person rather than person-to-unit, sentiments. Homans used interaction frequency and sentiments (emotions) to explain the formation and strength of social relations. An external context or structure generates activities (e.g., tasks) within which individuals interact regularly; more frequent interaction tends to generate positive sentiments between the actors (interpersonal), and this underlies the strength of their relationship. In the *Human Group*, Homans (1950) placed an *interaction-to-emotion-to-relation* process at the center of his analysis, and this is an important backdrop for recent work on exchange and emotion (see Lawler 2006). To him, task activity, self, and other are the primary social objects. To us, social units also

are important objects in exchange contexts and processes. We subscribe to Parsons's (1951) view that person-to-person and person-to-unit ties are fundamental to questions about social order.

In Homans' (1961, 1974) later work, he reinterpreted interaction and its effects on sentiment in reinforcement (operant psychology) terms. The focus turned to how rewards that A gives to B shape B's behavior in social interaction or exchange and vice versa (see also Emerson 1972a). Here, sentiments refer to "spontaneous" emotional responses that are felt immediately as a result of reinforcement or punishment. If repeated, they produce consistent patterns of behavior and can be interpreted in the context of the other more basic behavioral propositions (see Homans 1961, 1974; Lawler 2006). As part of his theoretical framework, Homans offered an "aggression- approval proposition" indicating that rewards or punishments, if unexpected, produce pleasure and anger. The "if unexpected" provision reflects the fact that these emotional responses are particularly useful to account for unusual circumstances or exceptions, rather than being at the center of his propositional framework. In operant-psychology terms, external reinforcements and punishments generally are sufficient to explain behavior, and sentiments or emotions are generally epiphenomenal. We adopt the idea that emotions are internal rewards and punishments, a view echoed by more recent work of psychologists (Izard 1991; Stets 2003), but we treat emotions as distinct stimuli, rather than subsuming them under standard rubrics of external reinforcement or punishment (see Damasio 1999).

The most precise of early exchange theories was offered by Thibaut and Kelley (1959). The theory focuses on dyads and suggests that social comparisons guide exchange behaviors. It presumes that individuals evaluate a dyadic relationship against an internal standard called a comparison level (CL) and, further, that individuals assess the attractiveness of other potential relations by comparing their focal relationship to the benefits expected from others (CL_{ALT}).

Consistent with Homans' focus on reward contingencies, the theory defines the power of actor A over B as A's ability to affect the quality of outcomes attained by B. There are two ways that this can occur. *Fate control* exists when actor A affects actor B's outcome by changing her (A's) own behavior, independent of B's action. For example, if B is more heavily rewarded when A chooses one behavior over another, then A has fate control over B. *Behavior control* exists when the rewards obtained by B are a joint function of both A's and B's behavior. In either case, whether A has fate control or behavior control, B is dependent on A for valued rewards and, thus, A has some power over B. Other exchange theories that emerged during that same time frame echo the importance of social comparison, valued goods, and dependence. Emotions were simply not part of the theoretical landscape.

A major theoretical shift occurred in the early 1970s, with the development of Emerson's *power dependence theory* (Emerson 1972a, 1972b). Unlike previous theorists, Emerson cast exchange processes in broader terms. He put forth the notion that relations between actors are part of a larger set of potential exchange relations (i.e., an exchange network). Thus, in analyzing a dyad, he asserted that it is important to consider its broader connection to other dyads—the larger network in which it is embedded. Emerson considered two kinds of connection. A *negative connection* exists when interaction in one dyad reduces interaction in another. A *positive connection* exists when interaction in one dyad promotes interaction in another. The focus on connectedness across dyadic sets gave Emerson's theorizing a decidedly structural theme; his were network-embedded dyads.

As with other exchange theorists of the time, dependence is the centerpiece of Emerson's theory (Emerson 1972b). He coined his approach "power dependence theory" and anchored this theory in operant psychology (see Emerson 1972a), relying heavily on the concepts of reward

and cost. The key assumption of the theory claims that the power of actor A over actor B is equal to the dependence of B on A, summarized by the equation $P_{AB} = D_{BA}$. In turn, dependence is a function of two factors: the availability of alternative exchange relations and the extent to which the actors value those relations. To illustrate, imagine a computer manufacturer (A) that must purchase specialized parts from a dealer (B). When the needed parts are not widely available from other suppliers, but computer manufacturers are abundant, then A is more dependent on B than B is on A ($D_{AB} > D_{BA}$) due to availability. When the manufacturer values parts more than the supplier values customers, then again A is more dependent on B ($D_{AB} > D_{BA}$). In both cases, the theory predicts B has power over A. Emotions, in power dependence theory, simply would be the by-product of the rewards and costs incurred by individuals as they exchange with others.

Nature of Social Exchange

In the most general sense, there are three kinds of relation at the heart of exchange theory, defined by the kinds of sanctions transmitted in each (Wilier 1999). A *sanction* is simply any action transmitted from one individual and received by another that has positive or negative consequences. *Conflict* exists when A and B each transmit negative sanctions (e.g., when disgruntled lovers insult each other). *Coercion* occurs when a negative sanction (or threat thereof) is transmitted for a positive sanction (e.g., as when a loan shark threatens bodily harm to induce repayment). *Exchange* occurs when A and B mutually transmit positive sanctions (e.g., I mow the yard, you do the dishes). An *exchange relation* exists when two individuals repeatedly transmit positive sanctions within a larger context of opportunities and constraints (Emerson 1972b; Wilier 1999). Structures and interdependencies set the stage for exchange transactions by

shaping who can exchange with whom and by incorporating incentives that make some exchanges likely to yield better payoffs than others. At issue is whether to transact and in what amounts.

Social exchanges are transactions in a network that have relational consequences. Figure 13.1 captures the fundamental sequence assumed by contemporary social exchange theorizing. Social structures generate a set of interdependencies among actors, and these interdependencies are the basis for who actually exchanges with whom and on what terms. The structure and interdependencies instantiate the opportunities and incentives for exchange, and the patterns of repeated exchange indicate what exchange relations actually form and are likely to be sustained as long as the structurally based opportunities and incentives remain constant (e.g., Cook and Emerson 1978; Markovsky et al. 1988; Wilier 1999).

Insert Figure 1 Here

Social exchange is inherently a *joint* task. This point is implied by the role of interdependence in exchange theories (Emerson 1972b; Thibaut and Kelley 1978). Homans' (1950) concept of "activities" as a fundamental dimension in interaction or group settings implicitly poses the issue of how joint are the activities in which individuals engage. Examples of joint tasks are a merger of two organizations, two parents deciding how to raise a child, or a homeowners association deciding whether to undertake the repair of common property. Exchanges occur presumably because doing something jointly with another is likely to yield better rewards or payoffs than acting alone or not acting at all. Although all exchange—or social interaction, for that matter—entails a degree of jointness, this varies with the social structure. An

important theoretical question for us is: What structural conditions vary the degree of jointness in the exchange tasks? We argue that emotions generate “order-producing” consequences, especially when exchange tasks are high in jointness.

Insert Figure 2 Here

The theoretical and empirical works reviewed in subsequent pages are guided by three orienting ideas or assumptions. First, social exchange is inherently a joint task in which actors have a common focus and engage in a “shared” activity (Lawler 2001, 2002). This is implicit in most social exchange theorizing (Emerson 1972b; Homans 1961; Thibaut and Kelley 1959; Wilier 1999). Second, joint activities generate or amplify emotional responses (e.g., uplift or excitement/enthusiasm from doing things jointly with others, from affirming a common identity or affiliation, or from achieving some success with others). Durkheim (1915) suggested this in his analysis of religious ritual, and Collins (1981) developed the idea further in his theory of “interaction ritual chains.” Third, the emotions that individuals experience as a result of a joint task are likely to be perceived as jointly produced. This makes relational or group affiliations a prospective source or cause of the emotions felt. These orienting ideas suggest some additions to the structure-interdependence-exchange process (see Figure 13.1) underlying standard exchange theory formulations. Figure 13.2 shows the modifications. The implications of Figure 13.2 are as follows: (1) Interaction or exchange has emotional effects on individual actors; (2) the emotions affect the strength of their group affiliations or attachments; and (3) these group affiliations are the context for structures that generate interdependencies (joint tasks) and patterns of exchange

in the future. The next section presents a framework for theorizing emotions and emotional processes.

EMOTION AND EMOTIONAL PROCESSES

Emotional states, at the level of immediate experience, are not under the control of actors. They essentially “happen to people” (Hochschild 1983). However, once they happen, other social processes begin to emerge. If the emotions are positive, presumably actors wish to repeat the experience; if they are ambiguous, people interpret their meaning for self, other, and the situation. The experience of emotions also has a social and cultural component, beyond the neurological bases or correlates, which leads to a number of difficult conceptual issues: Are some emotions more fundamental than others? Are some universal and some cultural? When are emotions socially constructed and when are they innate? How do emotional expressions connect to the underlying internal states (feelings)? These issues have been subjected to considerable dialogue and debate in psychology and sociology (e.g., Hochschild 1983; Izard 1991; Kemper 1978, 1987; Lutz 1988; Schachter and Singer 1962; Scheff 1990; Scherer 1984; Watson et al. 1984).

One approach of psychologists has been to conceptualize and measure emotions with reference to the words people use to interpret or describe their own feelings and those of others (see Lawler and Thye 1999). This “psychometric approach” has assessed whether there are a small number of fundamental, distinct dimensions or emotion categories that capture the feeling states underlying the variety of words actors used to describe themselves and others in given contexts or situations. The “circumplex model” arranges the universe of emotion words on a

circle around two cross-cutting (perpendicular) bipolar dimensions: pleasure/displeasure and the level of arousal (high/low) (see Russell et al. 1989; Watson et al. 1984). The form and intensity of the emotions is contingent on where they are located around this circle. There is substantial empirical evidence in support of such a formulation, although differences remain on how best to characterize or define the dimensions, especially the arousal dimension (Haslam 1995; Larsen and Diener 1992; Russell 1980, 1983). One implication is that although many different languages, words, or concepts are used by human actors to describe their emotional experiences, these boil down to a few underlying dimensions (see Heise, 1987, for a three-dimensional solution).

An alternative approach to emotions, “differentiated emotions theory,” questions the premise that emotions are continuous or dimensional in favor of the view that they are discrete, discontinuous, and differentiated qualitatively (Clore et al. 1987; Ekman 1980; Izard 1991; Kemper 1987; Wierzbicka 1992). Anger is qualitatively different from sadness, happiness or joy from excitement, and so forth. For example, sets of qualitatively different emotions tend to include the following: fear/anxiety, joy/pleasure/happiness, sadness/depression, anger, and shame (e.g., Izard 1991; Kemper 1987). With the circumplex model, anger and fear are similar, but a differentiated model takes into account the fact that anger and fear often lead to very different behaviors (i.e., fight versus flight). Some research also indicates that different emotions activate different degrees of action readiness (Frijda 1986), and this also tends to support the differentiated model or theory of emotions.

Based on the evidence, it is not possible to claim that one approach is necessarily better or more accurate than the other. The intensity and type of emotions, as experienced, may fall along two or three dimensions as proposed by the circumplex model; and, at the same time,

different emotions may produce different types of behavioral responses, as proposed by the differentiated model. The choice of approach is contingent on the theoretical or research problem to be addressed. For our theoretical purposes, we have developed a simple scheme for analyzing emotions in social exchange, borrowing both from the circumplex and differentiated models, as well as Weiner's (1986) "attribution theory of emotion."

From Weiner's (1986) formulation, we theorize a distinction between global emotions or feelings (Weiner terms these "primitive") and specific emotions (see Lawler 2001). Global emotions are positive or negative internal states produced by task activity and task success. These emotions entail immediate, involuntary responses and take the form of "feeling good" or "feeling bad." According to Weiner, these global or primitive emotions do not involve cognitive interpretations or emotion attributions. Specific emotions, in contrast, arise from the experience of the primitive or global feelings and are mediated by cognition or attribution (Weiner 1986). Weiner provided a useful way to distinguish immediate, automatic, nonvoluntary emotional responses from those that are stimulated by cognitive work and are socially constructed.

Global emotions can be likened to Damasio's (1999) notion of feeling of feelings; in this sense, we construe them as reflecting the person's (i.e., organism's) overall response to success or failure at the exchange task. Global emotions are special classes of reinforcement and punishment, being internal and correlated with neurological processes. They are primary motivational forces, relatively diffuse and ambiguous, but when activated, they organize interaction and generate cognitive work to interpret and understand where the feelings come from (i.e., what external objects or events cause them). This cognitive work is tied to actors' efforts to repeat their experiences of positive emotions (an internal reinforcement) and avoid a

repeat of their experiences of negative emotions (an internal punishment). Specific emotions directed at social objects in the situation are a result of these cognitive interpretations.

Emotions and Social Objects

Whereas global emotions emerge from task activity, specific emotions are directed at social objects. Table 13.1 contains a classification scheme that identifies a specific emotion for each of the four objects of import in a social exchange context: task, self, other, and social unit. Self and other face an exchange task in the context of one or more social units (relation, network, and group). Pleasantness/unpleasantness is the overarching global emotion, generated by success or failure at the exchange task. The idea here is that success at the joint task generates an “emotional buzz,” whereas failure generates an “emotional down.” Lawler and Yoon (1996) distinguished two variants of global emotions—pleasure/dissatisfaction and interest/excitement—which were designed in part to correspond to the two primary dimensions of the circumplex model (pleasure and arousal). The sense of comfort from satisfaction is more “backward looking,” and the sense of anticipation from interest/excitement is more “forward looking.”

The specific emotions take different forms, contingent on the object perceived as causing the global feelings. If global positive feelings are attributed to self, the specific emotion is pride; if global positive feelings are attributed to the other, the specific emotion is gratitude. In a parallel way, if global negative emotions are attributed to self, the specific emotion is shame; if global negative emotions are attributed to the other, the specific emotion is anger. The emotions associated with the social unit are affective attachment or detachment. If positive emotions

(global or specific) are attributed to the social unit, the affective attachment to that unit is increased; if negative emotions are attributed to the social unit, affective detachment is increased. These six emotions and the associated objects represent distinct interpretations for pleasant or unpleasant feelings (i.e., feeling good, feeling bad). To the extent that the social unit is perceived as the context for or source of positive emotions and feelings, it becomes an object of value in its own right, and actors are inclined to engage in collectively oriented behavior (e.g., staying in the social unit despite equal or better alternatives, giving rewards to others unilaterally and without strings attached, and cooperating in a social dilemma).

There are alternative explanations for such collectively oriented behavior that reflect the different microfoundations for social exchange. A rational-choice interpretation is that the relation or group becomes a part of the actor's utility function. A reinforcement explanation is that the relation or group becomes a discriminative stimulus, learned through repeated experiences within that group. A third interpretation is that the relation or group becomes an expressive object, symbolic of an affiliation with others, and an important source of social or personal identity (Collins 1981; Lawler 2001, 2003). These interpretations are not contradictory. All three processes could generate stable relations and groups in a complementary way. These alternative explanations reflect different ways an emotional/affective process can contribute to explanations of how and when social exchange generates social order.

Insert Figure 3 Here

We argue, therefore, that the attribution of emotion to social units is central to understanding how social formations develop and are sustained by social exchange. However, the focus of attribution theory and research in psychology is on inferences *about individuals* from those individuals' behavior (Jones and Davis 1965; Kelley 1967; Weiner 1986). Social units are not viewed as possible objects of attribution. The key comparison is between internal or dispositional attributions and situational or external attributions of the individual's behavior. Our theory indicates that social unit attributions are possible and particularly important when individuals are engaged in a joint task such as social exchange.

A key finding and principle of attribution research—namely that attributions are self-serving—suggests that social unit attributions are likely to be uncommon and rare. Individuals are prone to give themselves credit for success at a task and blame others or the situation for task failure, regardless of interdependencies or task jointness. The premises of social exchange theory (i.e., actors are self-interested and instrumental) resonate with this attribution principle. From standard exchange theory notions, one would expect actors to credit self primarily when they succeed at the exchange task and blame the partner or situation when they fail. With reference to the emotions in Table 13.1, pride in self and anger toward the other would be more common in social exchange than shame in self and gratitude toward the other. In the next subsection, we theorize conditions under which the jointness of exchange promotes jointness of responsibility and a sharing of credit/blame for success/failure at exchange.

Theoretical Assumptions

The assumptions of our theorizing capture many of the underlying themes in the above discussion. Specifically, there are five assumptions (see Lawler 2001:327): First, social exchange produces global emotions and feelings (along a positive or negative dimension). Second, global emotions constitute immediate, internal, reinforcing or punishing stimuli. Third, given reinforcement and rational choice principles, actors strive to reproduce positive emotions and avoid negative emotions. Fourth, global emotions from exchange trigger cognitive work to identify the sources (causes) of global emotions and feelings. Fifth, actors interpret and explain their emotions partly with reference to social units (e.g., relations, groups, networks) within which the emotions are felt.

The first two assumptions indicate that social exchanges generate global feelings and that these are special classes of reinforcement and punishment. The third and fourth assumptions portray global emotions as motivational forces (Izard 1991). When activated, they unleash cognitive efforts to interpret where they come from, with the potential sources being self, other, and the social unit. The fifth assumption indicates that in the context of joint tasks, actors interpret global emotions as produced in part by social units, and this is the foundation for stronger or weaker affective attachments to those units (e.g., relations, groups, networks, organizations). These assumptions flesh out the reasons for the modifications of the standard exchange theory position portrayed in Figure 13.2 (i.e., the addition of an exchange-to-emotion link and an emotion-to-group link).

Next, we present two theories that are informed by the above emotions framework and assumptions: *relational cohesion theory* (Lawler and Yoon 1996; Thye, Yoon, and Lawler 2002)

and the *affect theory of social exchange* (Lawler 2001). Some of the above theoretical assumptions (especially the second and fifth) were implicit and undeveloped when relational cohesion theory was formulated and tested (see Lawler and Yoon 1996, 1998). The affect theory of exchange (Lawler 2001) made these assumptions explicit and jumped off from the fifth assumption. Relational cohesion theory addresses the question of how and when power dependencies produce relational or group commitments through an emotional/affective process. The affect theory of social exchange develops broader principles for analyzing structural conditions under which actors attribute their emotions to social units and, therefore, develop stronger person-to-unit ties and greater group solidarity.

RELATIONAL COHESION THEORY

Exchange is historically a theory about both *transactions* and *relations*. Exchange theories explain patterns of social interaction and relations in terms of transactions (i.e., the flow of benefits between actors); transactions are explained in terms of the relations or networks within which these are embedded (Emerson 1972b, 1981; Wilier 1999). Emerson (1981), in fact, defined an “exchange relation” as a pattern of repetitive transactions among the same actors over time. He posited further that dyadic exchanges must be understood in the context of networks of exchange opportunities. Three or more interconnected actors are the minimal theoretical unit of analysis for Emerson. In the vast body of research on exchange networks over the past 20 years, repetitive or frequent exchange among the same pairs of actors is generally assumed; what is problematic is the division of payoffs. Thus, the development or strength of exchange relationships has received relatively scant attention, with the exception of more recent theory and

research on commitment and trust (Buskens 2002; Cook and Emerson 1984; Kollock 1994; Molm 2003a).

Relational cohesion theory changes the emphasis of theorizing. First, the “fact” of exchange (frequency) is conceptually and empirically distinguished from the nature of exchange (i.e., the division of profits) and is important in its own right. Second, the key problematic is reaching agreement in exchange and, thus, the primary dependent variable is repetitive exchange (frequency). Third, exchange frequencies are construed as the principal basis for the formation and resiliency of exchange relations (Collins 1981; Homans 1950). Fourth, the focus is on when people become committed to their relation. Commitment is defined as an attachment to a social unit (i.e., relation, group, organization, community, or society) (Kanter 1968). The standard exchange theory explanation for commitment is uncertainty reduction or trust; that is, repeated exchange with the same partners makes them more predictable and, potentially, more trustworthy. Reduced uncertainty or increased trust generates a “bias” toward exchanging with the same partners one has successfully exchanged with in the past (Buskens 2002; Cook 2001; Kollock 1994; Molm 2003b). Relational cohesion theory proposes an emotional/affective explanation for such commitment. The theory is intended to complement, not displace, uncertainty reduction explanations (Lawler and Yoon 1996, 1998).

Relational cohesion theory developed from a line of theory and research on power dependence in bargaining and negotiation (Bacharach and Lawler 1981). That work distinguished zero-sum and nonzero dimensions of power, capturing these with concepts of relative and total power. Relative power is the comparison of each actor’s power in a relationship vis-a-vis the other (the zero-sum dimension), and total power refers to the sum or average of both actors’ power in the relation. Power dependence theory (Emerson 1972b) implies that both

dimensions are important because mutual dependencies or interdependencies in a relationship can vary, as can the distribution of power across actors. Total power captures an integrative dimension of power (i.e., an aspect of power that promotes collaboration, cooperation, and cohesion). With this integrative dimension of power, it is a short step to posing the questions: Will some power dependence conditions promote relational commitments more than others and through what process might this occur? These questions motivated the development of relational cohesion theory.

Insert Figure 4 Here

The theoretical model in Figure 13.3 captures the main ideas of relational cohesion theory. The overall message is that exogenous structural power (dependence) conditions generate relational commitments *indirectly* through an endogenous process. Emotions are central to that process. The two power dependence dimensions include relative power (equal-unequal) and total (average) power in the relation (Bacharach and Lawler 1981; Molm 1987). Higher total power reflects greater interdependence, and equal power reduces the problems posed by equity and justice issues in the exchange process. These power conditions determine the frequencies of exchange in any given dyad. The core of the theory is the endogenous process, the *exchange-to-emotion-to-cohesion* sequence in the model that indirectly links structural power to behavioral commitment. Specifically, more frequent exchange generates (global) positive emotions and feelings, and positive emotions, in turn, produce cohesion (i.e., the perception that the relation is a unifying force in the situation). The result is various forms of commitment behavior: staying in

the relation despite equal or better alternatives, providing benefits unilaterally and without explicit expectations or contingencies, undertaking new ventures in the context of a social dilemma and therefore the potential for malfeasance.

Empirical Evidence on Relational Cohesion Theory

Evidence bearing on the emotional mechanism of relational cohesion theory actually predates the theory's 1996 original publication date. In 1993, Lawler and Yoon published experiments designed to evaluate the impact of agreement frequency on positive emotions and commitment. These experiments involved two actors who could negotiate with one another under various conditions of power and exchange. In each condition, one individual was attempting to buy both iron ore and zinc from another individual who supplied these resources. Thus, the issues at stake were simply the price of iron ore and the price of zinc. The subjects occupied separate rooms, and each was instructed to maximize his or her benefit in the relation. In the event that subjects could not reach an agreement on one of the issues, each subject automatically earned some level of profit from a "standing alternative partner" that was in fact a simulated other.

The primary independent variables were power/dependence (equal versus unequal) and the type of bargaining (integrative versus distributive). Power/dependence was manipulated by varying whether the amount of profit available from the standing alternative partner was the same for both partners (equal power) or not (unequal power). The kind of bargaining was manipulated by varying whether the two products, ore and zinc, were worth the same to both individuals (distributive) or different, which would make trade-offs possible (integrative). At

issue is whether or not conditions of equal power and integrative bargaining produce higher agreement frequency, positive emotions, and commitment behavior (i.e., gift giving and staying in the focal relationship despite exit options).

The results of the experiment affirm the importance of emotions in producing commitment. Under conditions of equal relative power and integrative bargaining, subjects were more likely to reach agreement with one another. In turn, agreement frequency was significantly related to interest/excitement though not related to pleasure/satisfaction (the nonfinding for pleasure/satisfaction has rarely occurred since this investigation). Finally, the data verify that positive emotion in the form of interest/excitement indeed predicted commitment behavior (both staying in the relation despite alternatives and gift giving). Overall, this was the first published evidence in support of the linkage among exchange frequency, positive emotion, and commitment behavior.

In 1996, Lawler and Yoon published the first tests designed specifically to evaluate the theory of relational cohesion, as portrayed by Figure 13.3. This project entailed three distinct experiments, each addressing a different form of commitment behavior (i.e., gift giving, stay behavior, and contribution to a joint venture involving a two-party social dilemma). As before, all sessions involved two subjects who negotiated exchange from separate rooms, each attempting to buy some resource possessed by the other. In accord with Figure 13.3, the experiment manipulated conditions of total power (high versus low) and relative power (equal versus unequal). The experimental setting simulated negotiations across a number of “years” or episodes. At select points in the study, as specified by the theoretical model (Figure 13.3), measures of key concepts were taken. These measures included (a) agreement frequency, (b) positive emotions in the form of interest/excitement and pleasure/satisfaction, (c) relational

cohesion, and (d) commitment behavior. The temporal sequence specified by the theory was created in the experimental context, and the research tested the set of relations predicted by the model.

The results of the study provided strong and consistent support for the theory (Lawler and Yoon 1996). Conditions of high total power and equal relative power tended to produce more frequent agreement between the individuals. In turn, frequent exchange had a positive direct effect on both pleasure/satisfaction and interest/excitement, as predicted. Also, as predicted, positive emotions had a positive direct effect on relational cohesion. Finally, there was uniform support for the notion that relational cohesion is the proximate cause of commitment. In fact, with all variables in the model included (see Figure 13.3), relational cohesion was the strongest and most significant predictor across all three forms of commitment—stay behavior, gift giving, and contribution to a joint venture. The theory makes strong claims about the sequence of indirect steps through which structural power conditions promote commitment, and these were confirmed at each step by the research.

There is an interesting affinity between our findings on positive emotion and the broader sociology of emotions literature. The theory of relational cohesion focuses explicitly on two dimensions of positive emotion: pleasure/satisfaction and interest/excitement. Empirically, Lawler and Yoon's 1996 study showed that both dimensions have direct positive effects on relational cohesion when *each* emotion was included as the sole predictor of relational cohesion. However, when *both* emotions were included simultaneously to predict relational cohesion, only pleasure/satisfaction was significant. Since then, pleasure/satisfaction consistently has played a stronger role in predicting relational cohesion (Lawler et al. 2000; Lawler and Yoon 1998). This pattern might suggest that pleasure/satisfaction is a more prominent emotion flowing from

exchange. In fact, pleasure/satisfaction was treated as one of four “primary” emotions by Kemper (1987), a distinction that is echoed in Turner’s (2002) scheme of basic emotions and by psychologists (Ekman and Freisen 1975; see also Stets 2003). In the context of these theories and their evidentiary basis, the fact that pleasure/satisfaction plays a stronger role may reflect its more “basic” or fundamental nature.

To summarize, the theory and research on relational cohesion identify an *endogenous* process through which structures of dependence affect relational commitments. This process begins with the frequency of exchange; the second step is the occurrence of positive emotions, and the third is a perception of the relation as a cohesive object. These three moments are tied together, forming a conceptual unit. By implication, a structural condition that changes the frequency of exchange should correspondingly change the strength of this endogenous process; moreover, a structural condition under which exchanges do not produce positive emotions should inhibit or prevent the process from operating, and if the emotions experienced are not attributed in part to the relation, they will not generate perceptions of cohesion. This conceptual unit can be used to understand how relations within a network (or the same relation over time) stabilize to produce social order at the microlevel.

EXTENSIONS OF RELATIONAL COHESION THEORY

Since the basic series of tests in 1996, several other projects have sought to expand the basic theory and scope of application. Here we review two lines of work. First, in 1998, Lawler and Yoon studied whether dyads embedded in a larger social network would become committed to one another. Whereas previous work explicitly focused on a single dyadic exchange relation,

the move to “network embedded” dyads broadened the scope of the theory and forged deeper connections to other branches of exchange theory (e.g., Cook and Emerson 1978; Cook et al. 1983; Markovsky et al. 1988) and to social identity theory (Rabbie and Horowitz 1988; Tajfel and Turner 1979, 1986). The question was whether “pockets of relational cohesion” would develop in exchange networks, particularly for dyads that have the highest frequency of exchange. Pockets of cohesion should fragment the network.

This extension dealt with dyadic-level commitments in two networks: the branch and the stem (see Figure 13.4). In the Figure 13.4 networks, each letter represents a person and each line represents an exchange relation. When each position can make only one exchange per round, the branch is a *strong-power* network because A can never be excluded while two of the more peripheral actors (B, G, or D) always are. This causes the low-power actors to make increasingly favorable offers to A to avoid exclusion, and as such, the central actor enjoys large profit advantages over time. Overall, the branch can be seen as a network consisting of three dyadic relations (A-B, A-G, and A-D) in which A has a relative power advantage.

Insert Figure 5 Here

In contrast, the stem is a *weak-power* network because no single individual must be excluded (Markovsky et al. 1993; Thye et al. 1997). Weak-power networks are characterized by more moderate profit differentiation. Studies show that the stem tends to “break” into two distinct exchange relations: an equal power dyad (B-G) and an unequal power dyad (A-D). Thus, the stem represents a network that contains both equal and unequal relative power dyads embedded in the same social context; thus, relational cohesion predicts a pocket of cohesion in

the structurally equal power relation. At issue is how *network-based* power in each network alters the relational cohesion process.

A second aim in this project was to determine how the relational cohesion process is affected by an overarching group identity. Research in the identity tradition finds that when social identities are activated in a group context, a variety of pro-social behaviors are likely to ensue. For instance, individuals sharing a common group identity are more likely to be cooperative, collectively oriented, altruistic, and responsive to group goals rather than to purely egoistic ones. Relational cohesion in dyads should be weaker if actors in a network share a common group identity and, by implication, so should the network-fragmentation effects. In the branch network, an overarching group identity should reduce exploitation by the central, powerful actor.

Lawler and Yoon (1998) tested these ideas using four experimental conditions in which subjects negotiate exchange in either the branch or stem network, with or without a common group identity. The theory predicts that all relations in the branch will be used with equal frequency and, thus, no differences in cohesion and commitment should occur. However, exchange in the B-G relation of the stem was predicted to occur with greater frequency than A-D. The more frequent exchange along B-G should, according to the chain logic of relational cohesion theory, produce greater positive emotion, stronger relational cohesion, and higher behavioral commitment relative to A-D. To implement this idea, in half of the experimental sessions the members of the network were portrayed as “departments” within a larger organization. In the other half, the participants were simply told that they were competitors with an interest in trading with others (Lawler and Yoon 1998).

The results support the theory. First, there were no differences in exchange frequencies across any dyadic relations in the strong-power branch. However, when the members of the branch shared an exogenous group identity, profit taking by the central actor was reduced. Thus, as predicted, it appears that a common group identity may induce more pro-social behavior. With respect to the stem, as predicted, actors in the equal power B-G relation reached agreement more frequently than actors in the unequal power A-D relation. Further, actors in B-G experience greater pleasure/satisfaction, interest/excitement, and relational cohesion compared to the actors in the A-D relation; that is, the endogenous process operated more strongly for the equal power dyad (B-G) than for the unequal power dyad (A-D), and these effects were not weaker when network actors shared a group identity. Further analysis of A-D showed that the endogenous process breaks down at the very first moment or step in the theory: Frequent exchange did not produce positive emotions. This affirms the importance of the exchange-to-emotion process that is central to the theory (see Figure 13.3).

The next significant development in the relational cohesion research program came 2 years later, with a project that simultaneously expanded the theory along two fronts (Lawler et al. 2000). First, the theory was tested in a new *productive exchange* context. Productive exchange is one of four basic forms of exchange identified by exchange theorists (Emerson 1981; Molm and Cook 1995). The other forms include negotiated, reciprocal, and generalized exchange (see below for details). The second contribution of this research was to compare empirically the emotional- affective process of relational cohesion theory to an *uncertainty reduction* process (Lawler et al. 2000). The traditional exchange theory explanation for commitment is that frequent exchanges reduce uncertainty (Cook and Emerson 1984); that is, actors who exchange frequently should learn more about one another, come to find one another's behavior more

predictable, and come to learn that they are similarly oriented to the exchange (Cook and Emerson 1984; Emerson 1981; Kollock 1994, 1999). Building on this idea, we expanded the relational cohesion model to test whether uncertainty reduction is a distinct, yet complementary, pathway to commitment vis-a-vis emotion. In other words, we incorporated uncertainty reduction in the theoretical model (Figure 13.3) as a second intervening pathway leading from exchange to cohesion.

The two endogenous paths reflect different phenomena. The *frequency-to-emotion-to-cohesion* pathway reflects a *social bonding* process. The positive emotion from frequent exchange can be construed as “rewards” generated by the exchange and completion of joint activity. As such, actors should strive to reproduce these rewards and also think about their proximate causes. To the extent that the group is perceived as a cause of the positive emotional experience, the group itself should come to take on expressive value in its own right (Tyler 1990, 1994). In contrast, the *frequency-to-uncertainty reduction-to-cohesion* pathway can be construed as a *boundary-defining* process wherein exchange partners become salient, distinctive, and set off relative to other potential partners. Social identity theorists frequently use this term to describe in-group versus out-group distinctions, and we adopt their terminology. At issue was whether the two processes were complementary explanations or if one had greater explanatory power.

A modification to the basic experimental setting was required to create a productive exchange context. Here, three actors faced a task in which they could produce greater joint benefits if they all collaborated than if they operated alone or worked with another group. The exchanges were structured such that (a) actors in this context were deciding whether to engage in a single collaborative effort that would produce a pool of joint profit; (b) for an exchange to be

consummated, all actors had to agree to the exchange; (c) the exchange would allocate the pool of profits across actors; and (d) offers were made simultaneously and independently, which posed significant coordination problems. Overall, joint collaboration produced profits at the group level (actor-to-group flow of benefits) that benefited each of the actors (group-to-actor flow of benefits).

As with earlier tests, structural power conditions were manipulated by varying the relative (equal versus unequal) and total (high versus low) dependence of each member on the group (see Lawler et al. 2000), and dependence was operationalized as the quality (expected value) of a fixed outside offer that could be accepted in the event that the focal group did not reach agreement. Under these conditions, subjects exchanged for a total of 16 episodes. At select points, measures were taken of exchange frequency, positive emotion, predictability, and relational cohesion. Additionally, two kinds of commitment behavior were studied. After episode 13, subjects could either give one another small token gifts as a symbol of their relationship (i.e., gifts of small pieces of candy) or they could invest some of their earnings in a new joint venture that involves considerable risk but could provide substantial benefits (i.e., investment in a three-person prisoner's dilemma game).

Overall, the data clearly support the relational cohesion theory account of commitment in exchange. First, as predicted, the data indicate that structural power conditions significantly impact exchange frequency. Under conditions of high total dependence (i.e., the expected payoff from the alternative group is smaller than the expected payoff from the focal group) and equal relative dependence (i.e., the expected payoff from the alternative group is the same for each member of the focal group), more exchanges were consummated in the three-actor setting. In turn, frequent social exchange had a significant direct effect on *both* positive emotion and

uncertainty reduction (i.e., predictability). These findings are important because they replicate and further verify the emotional effects of frequent exchange, and they support the hypothesis that exchange also generates uncertainty reduction or predictability. The latter finding is consistent with standard exchange-theoretic explanations for commitment and supportive empirical tests (e.g., see Kollock 1994).

The next step in the causal chain suggests that both uncertainty reduction and positive emotion increase perceptions of group cohesion. The results indicate that positive emotion has a significant effect on perceptions of group cohesion, as hypothesized, but uncertainty reduction does not. In short, it seems that when both theoretical constructs are included to predict the development of cohesion, positive emotion simply carries more explanatory power. This does not necessarily mean that uncertainty reduction is unimportant, but whatever impact it has on commitment is operating through paths separate from perceptions of cohesion. In short, the emotional affective process at the core of relational cohesion theory receives significant support. The role of uncertainty reduction is clarified below.

Finally, the theory predicts that group cohesion is the proximate cause of gift giving and contributions to a social dilemma—our measures of commitment. The results for this prediction are mixed, but, interestingly, help clarify the unresolved role of uncertainty reduction. Consistent with virtually all research in the relational-cohesion program, perceived cohesion had a significant effect on gift giving. However, group cohesion did not significantly affect the propensity of actors to invest in a new venture (i.e., cooperate in the social dilemma). In previous work on dyads, relational cohesion effects have been found for this form of commitment behavior (Lawler and Yoon 1996). The difference could be due to the fact that the obstacles to cooperation are known to be more difficult in a three-person prisoners' dilemma than in a two-

person prisoners' dilemma. The addition of a third person heightens uncertainty and makes trust more difficult for actors under these conditions. At the outset of the project, we anticipated that this would make it even more likely that uncertainty reduction would be related, directly or indirectly, to this form of commitment behavior. Given that the indirect relationship was not observed, we suspected that a direct relationship might be present.

To investigate this, we changed the original theoretical model to include several new pathways suggested by prior theory and by our data. The results revealed a direct effect of perceived predictability on the investment form of commitment. Thus, uncertainty reduction does operate in the productive exchange context, but not in the way that we originally theorized. It is important to note that this alternative pathway to commitment can be interpreted in terms of trust. *Trust* is defined as the expectation of cooperation by others (Pruitt and Kimmel 1977) and is one of the best predictors of whether and how individuals resolve social dilemmas (Axelrod 1984; Kollock 1994, 1999; Komorita and Parks 1996; Yamagishi 1986). To be trusted, one must first be predictable, so in this regard, predictability can be construed as a necessary (though not sufficient) condition for the emergence of trust. If so, we should observe a direct relationship between predictability and investment, as we did.

To summarize, this project suggests that dual processes operate to produce commitment behavior. The data indicate that emotional affective and uncertainty reduction mechanisms promote different forms of commitment behavior. Of particular importance for relational cohesion theory is that the emotional/affective process operates as a separate and independent mediating process leading to commitment behavior. Other processes such as uncertainty reduction, trust, and norm formation have been emphasized in research on exchange, contracting, and social dilemmas (e.g., Cook and Emerson 1984; Macy and Skvoretz 1998; Williamson 1981;

Yamagishi 1986). Relational cohesion theory, with its emphasis on the emotional-affective consequences of exchange, provides explanatory power above and beyond these alternative approaches.

AFFECT THEORY OF SOCIAL EXCHANGE

The *affect theory* of social exchange proposes that the *jointness* of the exchange task determines whether actors perceive the social unit as a source of global emotions (Lawler 2001). The main idea is that individuals attribute their individually felt emotions to their relation or group affiliation if the task is high in jointness. The jointness of the tasks likely varies, objectively and subjectively. For example, an organization may define the tasks of a work group in individual or joint terms and, in the process, highlight individual or collective responsibility for the results. A series of objectively individual tasks may be defined in more joint or collective terms within an overarching organizational framework. Both the objective task conditions and the subjective definitions put forth are important. To concisely address this issue, the affect theory of social exchange proposes a fundamental structural (objective) and cognitive (subjective) condition for social unit attributions.

The structural dimension is the degree that individual contributions to task success (or failure) are separable (distinguishable) or nonseparable (indistinguishable). This contrast is from Williamson's (1985:245-247) analysis of work structures. He argued that, in a work setting, when contributions are nonseparable, employees cannot assign individual credit or blame to one another for work group success or failure; such *task jointness* generates "relational teams" as a governing mechanism. Relational teams are structures of informal control that develop if the

shared responsibility for group success is more salient to employees than their individual responsibility. The affect theory of social exchange adopts this as a fundamental principle for analyzing how social structures shape individual emotions and their consequences for relations, groups, and networks. Implied here is an underlying macro-to-micro and micro-to-macro process (Lawler 2002).

The cognitive dimension of jointness is the degree to which the exchange task promotes the sharing of responsibility for success at exchange. Our argument is that if exchange generates a sense of shared responsibility, actors are more likely to interpret their individual feelings as jointly produced in concert with others and, therefore, more likely to attribute those feelings to relationships with those others or to common group affiliations. Thus, if employees perceive a shared responsibility for group performance, a work group should generate greater emotion-based cohesion, group commitment, and group solidarity. Overall, additive tasks strengthen the sense of individual responsibility, whereas conjunctive tasks strengthen the sense of shared responsibility. Discrete, specialized, independent roles draw attention to individual responsibility; whereas overlapping, collaborative roles highlight shared responsibility (see Lawler 2003). The theory suggests an emotional affective explanation for the fact that systems of accountability that “target” individual performance have different consequences for group-level collaboration than systems of accountability that “target” group performance.

Based on the above reasoning, the core propositions of the affect theory of social exchange (Lawler 2001) are as follows:

Core Proposition I: The greater the nonseparability of individuals’ impact on task success or failure, the greater the perception of shared responsibility.

Core Proposition 2: The greater the perception of shared responsibility for success or failure at a joint task, the more inclined actors are to attribute resulting global and specific emotions to social units.

The key implication is that a sense of shared responsibility generates relational or group attributions of emotion and these, in turn, foster stronger person-to-social-unit affective attachments. In addition, these core propositions imply particular relationships among the specific emotions (see Table 13.1). To the degree that individuals attribute their emotions to joint activities, they can both feel pride in self and gratitude toward the other (e.g., “When we get together, good things happen.” Giving gratitude to the other does not reduce the sense of pride or vice versa. If failure occurs in this context, individuals feel anger toward the other but also shame in self; thus, each emotion moderates the other, which is a potential basis for a collective response to failure. On the other hand, if members of a work group attribute positive emotions to their own individual contributions, they feel pride in self but little gratitude toward others, reducing cohesion or solidarity effects (e.g., “I did most of the work and made this happen”). If they fail at a group task, they may direct anger toward others and direct little shame at self (e.g., “They didn’t do their part”).

In sum, the sign of the relationships among specific emotions is determined by the relative weight or strength of social unit and self-serving attributions. Social unit attributions generate positive relationships between self-other emotions, whereas individual attributions generate negative relationships. In the context of joint tasks and social unit attributions, positive experiences (task success) would have an even stronger effect on cohesion and group commitment than otherwise, whereas negative experiences (task failure) would have a less

detrimental effect on cohesion and group commitment. Applying the theory's above core propositions, social unit attributions are most likely to occur when the structure of exchange entails high nonseparability and fosters a strong sense of shared responsibility. Social structures determine whether social exchanges entail nonseparability and, therefore, are likely to generate a sense of shared responsibility. The core propositions should apply to any structural dimension that varies the degree that individual efforts and contributions are nonseparable (Williamson 1985).

To date, the affect theory of social exchange has focused on two structural dimensions: the *form* of social exchange between actors and the *network connections* between exchange pairs. The structural form of exchange refers to the way that the behaviors of individuals are interconnected (e.g., negotiated versus reciprocal exchange). Network connections refer to the connections between different dyadic exchanges or prospective relations in a network (e.g., positively or negatively connected). These are basic structures in the social exchange tradition (e.g., Molm and Cook 1995). Theoretical predictions for each are detailed below.

Structural Forms of Exchange

There are four structural forms of exchange and two types of network connection analyzed in the original formulation of the affect theory of social exchange (Lawler 2001). The forms of exchange are as follows: productive, negotiated, reciprocal, and generalized (Emerson 1981; Molm 1994; Molm and Cook 1995). Productive exchange is a context in which actors coordinate their behaviors to generate a joint, private good. Examples are a business partnership or co-authors on a paper or book. Negotiated exchange is a context in which actors form an

explicit agreement that specifies the terms of a trade (i.e., who gives and receives what and how much). Reciprocal exchange involves sequential giving of rewards (unilaterally), essentially becoming interconnected and expected over time. Finally, generalized exchange occurs when actors give and receive benefits from different partners. Overall, productive exchange is person to group, whereas negotiated and reciprocal exchanges are direct, person to person. Generalized exchange has been termed indirect and impersonal (Emerson 1981; Molm and Cook 1995). The analysis of the theory (see Lawler 2001) indicate that the degree of jointness varies across these four forms of exchange as follows: productive > negotiated > reciprocal > generalized.

Thus, the theory makes the following predictions for forms of exchange:

Prediction 1: Productive exchange generates stronger perceptions of shared responsibility and stronger global emotions than direct or generalized exchange.

Prediction 2: Direct exchange produces stronger perceptions of shared responsibility and stronger global emotions than generalized exchange.

Given the above predictions and core propositions;

Prediction 3: The strength of person-to-group attachments (solidarity) is ordered as follows across forms of social exchange:

productive > negotiated > reciprocal > generalized

Prediction 4: Direct exchange structures—negotiated and reciprocal—generate stronger dyadic relations than group relations, whereas productive or generalized exchange generates stronger group relations than dyadic relations.

Prediction 1 is based on the fact that productive exchange is the most cooperative and group-oriented exchange structure. Each of the other structures has mixed motive interests or a significant trust problem. Prediction 2 assumes that in direct exchange relations, the person-to-person feature enables actors to solve trust problems more readily than generalized exchange. This proposition contradicts Ekeh's (1974) idea that generalized exchange generates the greatest group solidarity, but we argue that Ekeh's prediction assumes an already existing group (see Lawler 2001:339). Generalized exchange entails a high separation of individual "contributions" and *Oceteris paribus*) generates lower shared responsibility and affectively based solidarity; at the same time, the solidarity that does occur will be at the group level, as prediction 4 indicates. Prediction 3 stems from the notion that shared responsibility promotes relational or group attributions of emotion. Prediction 4 is based on the notion that, in direct relations, emotion is attributed to the exchange relation, whereas in productive or generalized exchange, emotion is attributed to the network or group.

Types of Network Connection

Emerson (1972b) distinguished two types of connection: positive and negative. Assume a four-actor box network—A, B, C, D—in which each actor can exchange with two of the others. If the network is positively connected, then an exchange between A and B increases the probability that A and B will also exchange with the others (C and D). If the network is negatively connected, an exchange between A and B excludes the possibility that A or B will exchange with any others. These two forms of connection involve different structural incentives to exchange with one or more partners in the network.

Wilier (1999) clarified and specified the incentives underlying different network connections by proposing a tripartite distinction among exclusive, inclusive, and null connections. Exclusive connections are similar to Emerson's negative connections (i.e., an exchange of any two excludes exchange with others). Inclusive and null connections are two versions of what Emerson would term "positive connections." With inclusive connections, all exchanges that are possible must be completed in order for any given exchange to yield rewards for partners. Thus, in the four-actor box network, all possible exchanges in the network would have to occur in order for an exchange between A and B to yield benefits. A "null" connection signifies that there is no prior relation between exchange in one relation and exchange in another; transactions in the two relations are independent. Actors have an incentive to exchange with as many others as possible in the network. If actors want to exchange with all others in an exclusively (negatively) connected network, they have to do it sequentially across transaction periods, but they have no structural incentive to do so. With a null connection, they can exchange within the same transaction period and, in fact, have an incentive to do so. The overall implication is that at the network level, the jointness of the exchange task is highest in an inclusively connected network and lowest in an exclusively connected network. A null-connected network would be in between. This has important implications for the emotional effects of exchange and for the transformation of networks into tacit or explicit groups.

The explanation for network-level effects is that emotions diffuse across relations in a network (Lawler, 2001, 2002, 2003; Markovsky and Lawler 1994). In a three-person network (A, B, C), if A feels good from an exchange with B and then enters an exchange with C, A's positive feelings from A-B spread to the A-C interaction; if A feels bad from an exchange with B and then exchanges with C, A's negative feelings spread. This assumption is plausible, given that

considerable psychological research on affect and mood shows that global, diffuse feelings (good or bad) from interaction with one person carry over to interaction with others, even if there is no connection or similarity between the situations or persons (Isen 1987). Moreover, those in a positive mood are likely to cooperate more, use more inclusive categories for others, take more risks, and employ heuristics in processing information (Bless 2000; Forgas 2000; Isen 1987). Because positively connected networks promote exchanges with as many others as structurally possible, positive emotions in each relation reinforce and strengthen those in other relations. The main implications are as follows:

Prediction 5: In positively connected exchange networks, dyadic exchanges generate group formation at the network level and strengthen affective attachments to this unit; in negatively connected networks, exchanges in dyads generate the pockets of cohesion in exchange relations and strengthen affective attachments to the relation rather than the network or group.

Prediction 6: Cohesion and solidarity at the network level will be ordered as follows across the three types of network connection: inclusive > null > exclusive.

Evidence Bearing on the Affect Theory

To date there are no direct tests of the affect theory, although we are currently in the process of collecting experimental data that will do just that. Even so, there are a number of theoretical and empirical studies that bear on the underlying logic of the theory. For example, the affect theory indicates that structural conditions that give actors a sense of shared responsibility

for the collective result should trigger positive emotions and person-to-group attachments. The most immediate unit in any two-party exchange is the relation itself, but insofar as there is common activity and experience across interdependent dyads in a broader network, the emotions should make salient the *group attachments across the entire network*. Thus, the theory has implications for when individuals comprising an exchange network come to view themselves as members of a common group and behave with regard for one another.

One recent study took up the question of when and how networks of individual agents come to see themselves as belonging to a common group and behave in pro-social ways (Thye and Lawler 1999). We have developed a concept of *network cohesion* that captures two such network conditions: (a) the proportion of relations within a network that are equal in power and (b) the degree of relational density in the network (Thye and Lawler 1999). The main assertion is that exchange networks containing a high degree of equal power relations and many direct ties among actors will unleash the endogenous process of relational cohesion theory at the *network level*. As such, we predicted that individuals exchanging within highly connected networks composed of many equal power relations should be more likely to sense a common experience and shared responsibility with the others, even if they interact and exchange with select partners. The results of this new study were supportive. In networks with high network cohesion, dyadic exchanges generate positive feelings, and these promote group formation at the network level. From the perspective of the affect theory, the underlying reason is that such networks promote a sense of common experience, interdependence, and a corresponding sense of shared responsibility.

In terms of the strength of person-to-group attachments, recall that the affect theory orders the four forms of exchange as follows: productive > negotiated > reciprocal > generalized.

This stands in contrast to Ekeh's (1974) theory, which asserts that generalized exchange is a fundamental basis for social order at the macrolevel because it creates obligations to the larger collectivity. Ekeh argued that in systems of generalized exchange, wherein individuals are unilaterally giving to (and reaping benefits from) others in the system, *trust* is likely to emerge and become normative. Trust, as such, should encourage pro-social behavior and regulate the temptation to act out of self-interest. However, as Lawler (2001) noted, Ekeh's analysis centered more on the consequences of generalized exchange provided that it has emerged and is part of the normative context. The affect theory focuses more on the fact that generalized exchange entails distinct individual contributions and, thus, is fragile. As such, the theory predicts that it is less likely to have the emotional consequences of direct exchange and promote perceptions of shared responsibility.

On a related note, the order specified for negotiated versus reciprocal exchange is controversial (see Molm 2003a). An argument can be made that commitment and cohesion, all else being equal, will be greater in reciprocal rather than negotiated exchange because reciprocal exchange involves greater risk and a more serious trust problem (Molm 2003a, 2003b). The issue of risk and trust in reciprocal exchange comes down to the following: When one actor gives unilaterally, he or she has no assurance that the other will reciprocate. Negotiated exchange typically involves binding agreements, which, by definition, resolve the trust problem and minimize risk. The key obstacle in negotiated exchange is to balance one's motive to profit against the fear of being excluded. Experiments by Molm et al. (1999) have found that reciprocal exchange produces more positive affect directed at the exchange partner and more commitment to that partner relative to negotiated exchange.

However, it should be noted that prediction 3 of the affect theory is based *solely* on the presumption that jointness is more salient in negotiated than in reciprocal exchange. Our focus is on the development of *person-to-unit* affective attachments, which we believe are theoretically driven by jointness of task and perceptions of shared responsibility. In contrast, Molm and colleagues (1999) have theorized and studied *person-to-person* processes involving the development of trust, risk aversion, and perceptions of fairness. Molm has shown empirically that these processes operate differentially across negotiated and reciprocal exchange contexts and, thus, clarifies some of the theoretical differences across these forms of exchange (see Molm, 2003b, for a review). In short, the two theoretical research programs address different conceptual and empirical issues. Taken together, they offer complementary perspectives that promise to illuminate important differences across these (and other) forms of exchange.

CONCLUSION AND FUTURE DIRECTIONS

Since the early 1950s, with rare exception, the actors of traditional social exchange theory have been portrayed as calculating and unemotional beings. The emphasis has been on theorizing purely instrumental actors that are either backward looking agents driven by environmental reinforcement schedules or forward looking agents who rationally calculate the potential to maximize gains and avoid losses. Our research program introduces a new kind of social actor: one who interacts with others lodged in a social structure, experiences and seeks to understand her or his emotional reactions, and attributes these emotions to self, other, or the larger social unit. The primary aim is to understand how, in the latter case, exchange processes

trigger emotions and attributions that render dyads, networks, and groups as expressive objects of value.

Over time, our theoretical research program has evolved from one concerned with dyadic encounters (Lawler and Yoon 1993, 1996) to a broader emphasis on exchange within social networks (Lawler and Yoon 1998) and fundamental links to the varieties of social exchange and the nature of commitment (Lawler 2001; Lawler et al. 2000). In many regards, the research program is a textbook example of cumulative theory growth in that the questions and problems addressed by the program today emerged directly from those of yesterday. Although we have made substantial progress in understanding the emotional underpinnings of commitment and solidarity, there are a number of questions that still remain. In closing, we review some of the general implications of our work and how these connect to broader literature.

A recurrent theme in our research is that people experience emotions from accomplishing or not accomplishing an exchange task, and these trigger efforts to understand the emotions. We agree with Hochschild (1979) that emotions are involuntary reactions that simply “happen to people,” but what is most important is not *that* emotions happen, but *to what* they are attributed (i.e., task, self, other, or social unit). Our research calls attention to the fact that under certain exchange conditions, positive emotions will be attributed to the social unit, resulting in affective attachment to that unit. The forms of exchange most likely to produce affective attachments are those in which the task success is not clearly attributed to one actor or the other but, instead, to the joint activity, and perceptions of shared responsibility are high.

The emotional processes at the center of our research are distinct, yet complementary, to the rational-choice and behavioral orientations that are fundamental to exchange theory. Our research has implications for the relationship of social exchange and social order, even when

such order seemingly contradicts otherwise rational action. To illustrate, consider combat units in the armed services that depend on social order among rank-and-file soldiers to effectively implement military strategies. Social order, in this context, depends on individual soldiers who obey commands, even when those commands fly in the face of their immediate self-interest (i.e., advancing on the enemy when there is some probability that you yourself could be shot). Our theory and research program suggests that order will be established and maintained to the extent individual soldiers possess strong affective ties to social units (i.e., company, brigade) in which they frequently interact and exchange items of value. If strong enough, such ties regulate self-interest and provide a common emotional/affective basis for coordinated social action (see also Collins 1989). From our work, this is most likely to occur when task success depends on the existence of joint activities for which there are perceptions of shared responsibility.

In closing, the theoretical research program reviewed here uniquely emphasizes the role of emotions in social exchange and focuses on the processes through which social structures strengthen or weaken affective attachments to relations, networks, and groups. In comparison to other exchange-based theories, our work brings together the rational and emotional consequences of social interaction. The incentives lodged within social structures provide rational incentives for agents to interact and exchange with one another so that they can jointly accomplish tasks that are otherwise unobtainable. However, such interaction carries emotional consequences, and these determine when individuals come to see the relation, network, or group as an expressive object of value in its own right. Implicit in this approach is that micro social encounters create affective ties to more macrounits (i.e., groups, networks, communities), which, in turn, provide a basis for solidarity, stability, and social order.

Figure 1

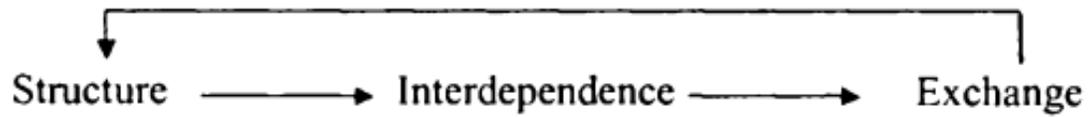


FIGURE 13.1. Standard Social Exchange Model

Figure 2

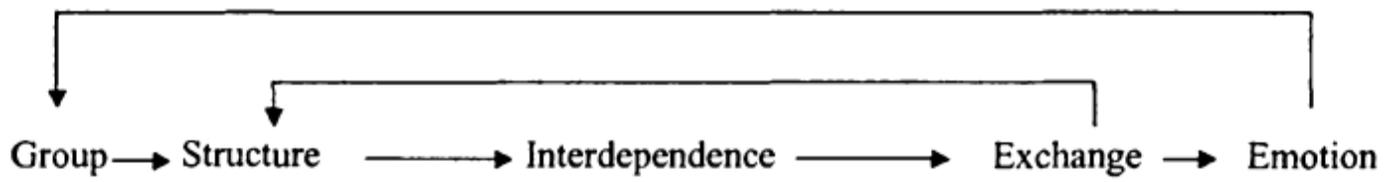


FIGURE 13.2. Modified Social Exchange Model

Figure 3

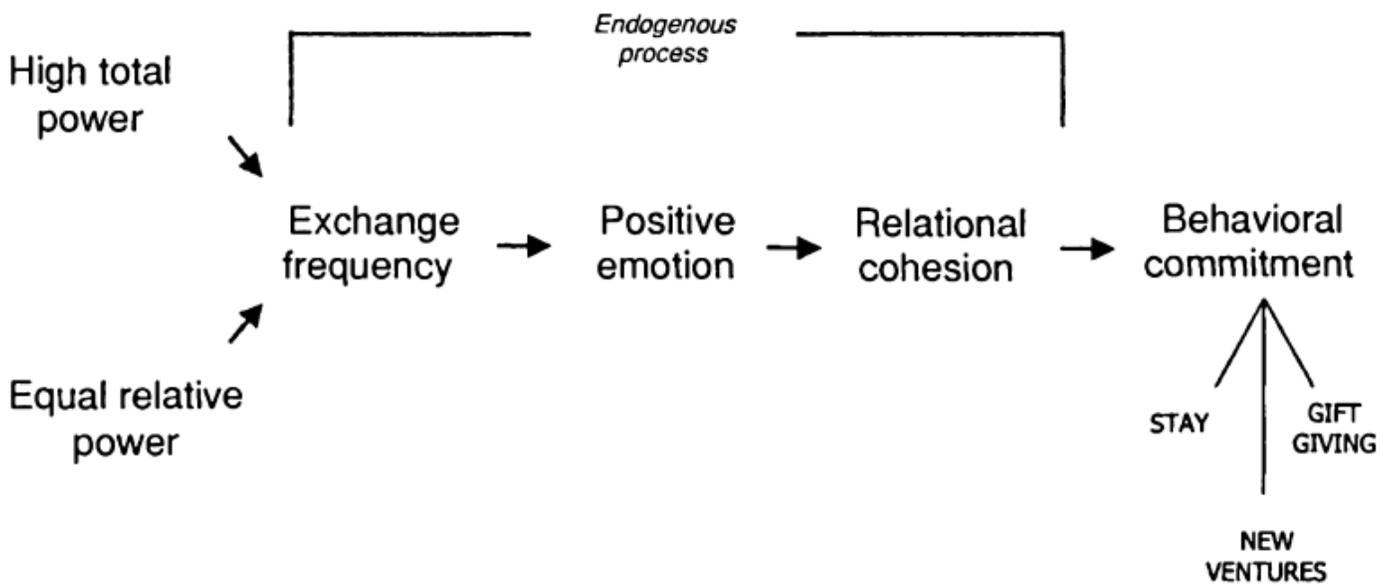
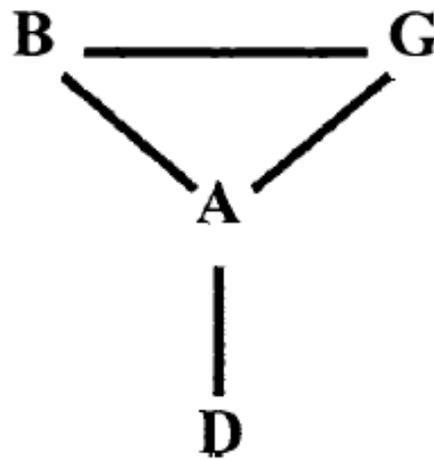
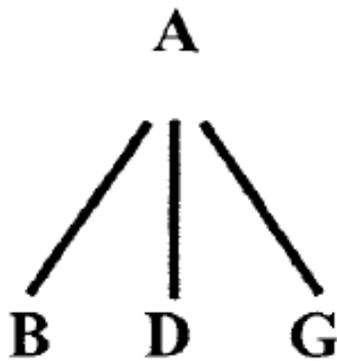


FIGURE 13.3. Relational Cohesion Theory.

Source: Reprinted from Lawler and Yoon 1996

Figure 4



Strong Power—Branch

Weak Power—Stem

FIGURE 13.4. Branch and Stem Networks

References

- Ashby, F. Gregory, Alice Isen, and U. Turken. 1999. "A Neuropsychological Theory of Positive Affect and Its Influence on Cognition." *Psychological Review* 106: 529-550.
- Axelrod, Robert. 1984. *The Evolution of Cooperation*. New York: Basic Books.
- Bacharach, Samuel B., and Edward J. Lawler. 1981. *Bargaining: Power, Tactics, and Outcomes*. San Francisco: Jossey- Bass.
- Bless, Herbert. 2000. "The Interplay of Affect and Cognition: The Mediating Role of General Knowledge Structures." Pp. 201-222 in *Thinking and Feeling: The Role of Affect in Social Cognition*, edited by J. Forgas. Cambridge: Cambridge University Press.
- Blood, Anne J., and Robert J. Zatorre. 2001. "Intensely Pleasurable Responses to Music Correlate with Activity in Brain Regions Implicated in Reward and Emotion." *Proceedings of the National Academy of Sciences USA* 98: 11,818-11,823.
- Bower, George H. 1991. "Mood Congruity of Social Judgments." Pp. 31-53 in *Emotion and Social Judgments*, edited by J. Forgas. Oxford: Pergamon.
- Buskens, Vincent. 2002. *Social Networks and Trust*. Boston: Kluwer.
- Clore, Gerald L., Andrew Ortony, and Mark A. Foss. 1987. "The Psychological Foundations of the Affective Lexicon." *Journal of Personality and Social Psychology* 53: 751-766.
- Collins, Randall. 1981. "On the Microfoundations of Macrosociology." *American Journal of Sociology* 86: 984-1014.
- , 1989. "Toward a Neo-Meadian Sociology of Mind." *Symbolic Interaction* 12: 1-32.
- Cook, Karen S. 2001. *Trust in Society*. New York: Sage.

- Cook, Karen S., and Richard M. Emerson. 1978. "Power, Equity, and Commitment in Exchange Networks." *American Sociological Review* 27: 41-40.
- , 1984. "Exchange Networks and the Analysis of Complex Organizations." Pp. 1 -30 in *Research on the Sociology of Organizations*, edited by S. B. Bacharach and E. J. Lawler. Greenwich, CT: JAI Press.
- Cook, Karen S., Richard M. Emerson, Mary R. Gillmore, and Toshio Yamagishi. 1983. "The Distribution of Power in Exchange Networks: Theory and Experimental Evidence." *American Journal of Sociology* 89: 275-305.
- Damasio, Antonio. 1999. *The Feeling of What Happens*. New York: Harcourt Brace.
- Damasio, Antonio R., Thomas Grabawski, Antoine Bechara, Hanna Damasio, Laura L. B. Ponto, Josef Parvizi, and Richard D. Hichwa. 2000. "Subcortical and Cortical Brain Activity during the Feeling of Self-Generated Emotions." *Nature Neuroscience* 3: 1049-1056.
- Durkheim, Emile. 1915. *The Elementary Forms of Religious Life*. New York: Free Press.
- Ekeh, Peter. 1974. *Social Exchange Theory: The Two Traditions*. Cambridge, MA: Harvard University Press.
- Ekman, Paul. 1980. *The Face of Man: Expressions of Universal Emotions in a New Guinea Village*. New York: Garland STMP Press.
- Ekman, Paul, and Wallace V. Friesen. 1975. *Unmasking the Face: A Guide to Recognizing Emotions from Facial Cues*. Oxford: Prentice-Hall.
- Elster, Jon. 1986. "Introduction." Pp. 1-33 in *Rational Choice*, edited by J. Elster. Albany: New York University Press.

- Emerson, Richard M. 1972a. "Exchange Theory Part I: A Psychological Basis for Social Exchange." Pp. 38-57 in *Sociological Theories in Progress*, edited by J. Berger, M. Zelditch, Jr., and B. Anderson. Boston: Houghton Mifflin.
- . 1972b. "Exchange Theory Part 11: Exchange Rules and Networks." Pp. 58-87 in *Sociological Theories in Progress*, edited by J. Berger, M. Zelditch, Jr. and B. Anderson. Boston: Houghton Mifflin.
- . 1981. "Social Exchange Theory." Pp. 30-65 in *Social Psychology: Sociological Perspectives*, edited by M. Rosenberg and R. H. Turner. New York: Basic Books.
- Forgas, Joseph. 2000. "Affect and Information Strategies." Pp. 253-280 in *Thinking and Feeling: The Role of Affect in Social Cognition*, edited by J. Forgas. Cambridge: Cambridge University Press.
- Frank, Robert H. 1988. *Passions within Reason: The Strategic Role of Emotions*. New York: W. W. Norton.
- Frijda, Nico H. 1986. *The Emotions*. Cambridge, MA: Cambridge University Press.
- Haslam, N. 1995. "The Discreteness of Emotion Concepts: Categorical Structure in the Affective Circumplex." *Personality and Social Psychology Bulletin* 21: 1012-1019.
- Hechter, Michael. 1987. *Principles of Group Solidarity*. Berkeley: University of California Press.
- Heise, David R. 1987. "Affect Control Theory: Concepts and Model I' *Journal of Mathematical Sociology* 13: 1-33.
- Hochschild, Arlie R. 1979. "Emotion Work, Feeling Rules, and Social Structure." *American Journal of Sociology* 85: 551-575.
- . 1983. *The Managed Heart: Commercialization of Human Feeling*. Berkeley: University of California Press.

- Homans, George L. 1950. *Human Group*. New Brunswick, NJ: Transaction Publishers.
- . 1961. *Social Behavior: Its Elementary Forms*. New York: Harcourt Brace Jovanovich.
- . 1974. *Social Behavior: Its Elementary Forms*. New York: Harcourt Brace Jovanovich.
- Isen, Alice M. 1987. "Positive Affect, Cognitive Processes, and Social Behavior." Pp. 203-253 in *Advances in Experimental Social Psychology*, edited by L. Berkowitz. New York: Academic.
- Izard, Carroll E. 1991. *The Psychology of Emotion*. New York: Plenum.
- Jones Edward E., and Keith E. Davis. 1965. "From Acts to Dispositions: The Attribution Process in Person Perception." Pp. 219-266 in *Advances in Experimental Social Psychology*, edited by L. Berkowitz. New York: Academic.
- Kanter, Rosabeth M. 1968. "Commitment and Social Organization: A Study of Commitment Mechanisms in Utopian Communities." *American Sociological Review* 33: 499-517.
- Kelley, Harold H. 1967. "Attribution Theory in Social Psychology." Pp. 220-266 in *Nebraska Symposium on Motivation*, edited by D. Levine. Lincoln: University of Nebraska Press.
- Kelley, Harold H., and John W. Thibaut. 1978. *Interpersonal Relations: A Theory of Interdependence*. New York: Wiley.
- Kemper, Theodore D. 1978. *A Social Interactional Theory of Emotions*. New York: Wiley.
- . 1987. "How Many Emotions Are There? Wedding the Social and the Autonomic Components." *American Journal of Sociology* 93: 263-289.
- Kollock, Peter 1994. "The Emergence of Exchange Structures: An Experimental Study of Uncertainty, Commitment, and Trust." *American Journal of Sociology* 100: 315-345.
- . 1999. "The Production of Trust in Online Markets." *Advances in Group Process* 16: 99-123.

- Komorita, Samuel S., and Craig D. Parks. 1996. *Social Dilemmas*. Boulder, CO: Westview.
- Larsen, Randy J., and Edward Diener. 1992. "Promises and Problems with the Circumplex Model of Emotion." Pp. 25-59 in *Emotion*, edited by M. S. Clark. Newbury Park, CA: Sage.
- Lawler, Edward J. 2001. "An Affect Theory of Social Exchange!" *American Journal of Sociology* 107: 321-352.
- . 2002. "Micro Social Orders." *Social Psychology Quarterly* 65: 4—17.
- . 2003. "Interaction, Emotion, and Collective Identities." Pp. 135-149 in *Advances in Identity Theory and Research*, edited by P. J. Burke, T. J. Owens, R. T. Serpe, and P. A. Thoits. New York: Kluwer Academic/Plenum.
- . 2006 "Exchange, Affect and Group Relations." Pp. 177-201 in *George C. Homans: History, Theory, and Method*, edited by J. Trevino. Boulder, CO: Paradigm.
- Lawler, Edward J., and Shane R. Thye. 1999. "Bringing Emotions into Social Exchange Theory." *Annual Review of Sociology* 25: 217-244.
- Lawler, Edward J., Shane R. Thye, and Jeongkoo Yoon. 2000. "Emotion and Group Cohesion in Productive Exchange." *American Journal of Sociology* 106: 616-657.
- Lawler, Edward J., and Jeongkoo Yoon. 1993. "Power and the Emergence of Commitment Behavior in Negotiated Exchange." *American Sociological Review* 58: 465^481.
- . 1996. "Commitment in Exchange Relations: Test of a Theory of Relational Cohesion." *American Sociological Review* 61: 89-108.
- . 1998. "Network Structure and Emotion in Exchange Relations." *American Sociological Review* 63: 871894.

- Lutz, C. 1988. *Unnatural Emotions: Everyday Sentiments on a Micrones 'tan Atoll and Their Challenge to Western Theory*. Chicago: University of Chicago Press.
- Macy, Michael W. 1993. "Backward-Looking Social Control." *American Sociological Review* 58: 819-836.
- Macy, Michael W., and John Skvoretz. 1998. "The Evolution of Trust and Cooperation Between Strangers: A Computational Model." *American Sociological Review* 63: 638-660.
- Markovsky, Barry, and Edward J. Lawler. 1994. "A New Theory of Group Solidarity." *Advances in Group Processes* 11: 113-134.
- Markovsky, Barry, John Skvoretz, David Wilier, Michael J. Lovaglia, and Jeffery Erger. 1993. "The Seeds of Weak Power: An Extension of Network Exchange Theory." *American Sociological Review* 58: 197-209.
- Markovsky, Barry, David Wilier, and Travis Patton. 1988. "Power Relations in Exchange Networks." *American Sociological Review* 53: 220-236.
- Molm, Linda D. 1987. "Extending Power Dependency Theory: Power Processes and Negative Outcomes." *Advances in Group Processes* 4: 178-198.
- , 1994. "Dependence and Risk: Transforming the Structure of Social Exchange." *Social Psychology Quarterly* 57: 163-189.
- , 1997. *Coercive Power in Social Exchange*. Cambridge: Cambridge University Press.
- , 2003a. "Power, Trust, and Fairness: Comparisons of Negotiated and Reciprocal Exchange." *Advances in Group Processes* 20: 31-66.
- , 2003b. "Theoretical Comparisons of Forms of Exchange." *Sociological Theory* 21: 1-17.

- Molm, Linda, and Karen Cook. 1995. "Social Exchange and Exchange Networks." Pp. 209-235 in *Sociological Perspectives on Social Psychology*, edited by K. S. Cook, G. A. Fine, and J. S. House. Boston: Allyn and Bacon.
- Molm, Linda, Gretchen Peterson, and Nobuyuki Takahashi. 1999. "Power in Negotiated and Reciprocal Exchange." *American Sociological Review* 64: 876-890.
- Parsons, Talcott. 1951, *The Social System*. New York: Free Press.
- Pinker, Steven. 1997. *How the Mind Works*. New York: W. W. Norton.
- Pruitt, Dean J., and M. J. Kimmel. 1977. "Twenty Years of Experimental Gaming: Critique, Synthesis and Suggestions for the Future." *Annual Review of Psychology* 19: 172-202.
- Rabbie, Jacob M., and Murray Horowitz. 1988. "Category versus Groups as Explanatory Concepts in Intergroup Relations." *European Journal of Social Psychology* 19: 172-202.
- Ridgeway, Cecilia, and Cathryn Johnson. 1990. "What Is the Relationship between Socioemotional Behavior and Status in Task Groups?" *American Journal of Sociology* 95: 1189-1212.
- Russell, James A. 1980. "A Circumplex Model of Affect." *Journal of Personality and Social Psychology* 39: 1161-1178.
- , 1983. "Pancultural Aspects of the Human Conceptual Organization of Emotions." *Journal of Personality and Social Psychology* 45: 1281-1288.
- Russell, James A., Anita Weiss, and George A. Mendelsohn. 1989. "Affect Grid: A Single-Item Scale of Pleasure and Arousal." *Journal of Personal and Sociology Psychology* 57: 493-502.
- Schachter, Stanley, and Jerome E. Singer. 1962. "Cognitive, Social and Physiological Determinants of Emotional State." *Psychology Review* 69: 379-399.

Scheff, Thomas J. 1990. *Microsociology: Discourse, Emotion and Social Structure*. Chicago: University of Chicago Press.

Scherer, Klaus R. 1984. "Emotion as a Multicomponent Process: A Model and Some Cross-Cultural Data." *Review of Personality and Social Psychology* 5: 37-63.

Small, Dana M., Robert Zatorre, Alain Dagher, Alan C. Evans, and Marilyn Jones-Gotman. 2001. "Changes in Brain Activity Related to Eating Chocolate: From Pleasure to Aversion." *Brain* 124: 1720-1733.

Stets, Jan E. 2003. "Emotions and Sentiments." Pp. 309-335 in *Handbook of Social Psychology*, edited by J. DeLamater. New York: Kluwer Academic/Plenum.

Tajfel, Henri, and John C. Turner. 1979. "An Integrative Theory of Intergroup Conflict." Pp. 33-47 in *The Social Psychology of Intergroup Relations*, edited by W. G. Austin and S. Worchel. Monterey, CA: Brooks/Cole.

-----, 1986. "The Social Identity Theory of Intergroup Behavior." Pp. 7-24 in *Psychology of Intergroup Relations*, edited by S. Worchel and W. G. Austin. Chicago: Nelson-Hall.

Thibaut, John W., and Harold H. Kelley. 1959. *The Social Psychology of Groups*. New York: Wiley.

Thye, Shane R., and Edward J. Lawler. 1999. "Collaborative Research on Social Exchange and Network Cohesion." Proposal to the National Science Foundation (funded May 15, 1999).

Thye, Shane R., Michael J. Lovaglia, and Barry Markovsky. 1997. "Responses to Social Exchange and Social Exclusion in Networks." *Social Forces* 75: 1031-1047.

Thye, Shane R., Jeongkoo Yoon, and Edward J. Lawler. 2002. "The Theory of Relational Cohesion: Review of a Research Program." *Advances in Group Processes* 19: 139-166.

- Turner, Jonathan H. 2000. *On the Origins of Human Emotions*. Stanford, CA: Stanford University Press.
- , 2002. *Face-to-Face: Towards a Sociological Theory of Interpersonal Behavior*. Stanford, CA: Stanford University Press.
- Tyler, Tom R. 1990. *Why People Obey the Law: Procedural Justice, Legitimacy, and Compliance*. New Haven, CT: Yale University Press.
- , 1994. "Psychological Models of the Justice Motive: Antecedents of Distributive and Procedural Justice." *Journal of Personality and Social Psychology* 67: 850-863.
- Watson, David, Lee Anna Clark, and Auke Tellegen. 1984. "Cross-Cultural Convergence in the Structure of Mood: A Japanese Replication and a Comparison with U.S. Findings." *Journal of Personality and Social Psychology* 47: 127-144.
- Weiner, Bernard. 1986. *An Attributional Theory of Motivation and Emotion*. New York: Springer-Verlag.
- Wierzbicka, A. 1992. "Defining Emotion Concepts." *Cognitive Science* 16: 539-581.
- Wilier, David. 1999. *Network Exchange Theory*. Westport, CT: Praeger.
- Williamson, Oliver E. 1981. "The Economics of Organization: The Transaction Cost Approach." *American Journal of Sociology* 87: 549-577.
- , 1985. *The Economic Institutions of Capitalism*. New York: Free Press.
- Yamagishi, Toshio. 1986. "The Provision of a Sanctioning System as a Public Good." *Journal of Personality and Social Psychology* 51: 110-116.
- Yamagishi, Toshio, and Midori Yamagishi. 1994. "Trust and Commitment in the United States and Japan." *Motivation and Emotion* 18: 129-166.