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APPENDIX

Following are the highest-loading items from each subscale of the Contingencies of Self-Worth Scale:

1. I feel worthwhile when I have God's love (God's Love).
2. It is important to my self-worth to feel loved by my family (Love and support from family).
3. Doing better than others gives me a sense of self-respect (Competition).
4. My self-esteem depends on whether or not I follow my moral/ethnical principles (Virtue).
5. I don't care what other people think of me (Others' approval).
6. My sense of self-worth suffers whenever I think I don't look good (Appearance).
7. I feel better about myself when I know I'm doing well academically (Academic ompetence).

Note: The entire CSW-S consists of 65 items. The scale can be obtained from Jennifer Crocker.

8

Relational Knowledge and an Expectancy-Value Approach to Self-Esteem

Mark W. Baldwin
Jodene R. Baccus
McGill University

Evaluation is a classic example of cognition in service of motivation. This is true whether the object of evaluation is one's self or perhaps some other object such as one's car. Imagine that you are driving in your car. It is a beautiful day; you are singing along with the radio and thinking about how much you are enjoying the drive. If asked to describe your car you could list off its characteristics: the color, the model, how long you have owned it, how often you need to fill the tank, its occasional tendency to stall, and so on. At this moment, all you care about is that the seats are comfortable and the radio is loud. However, introduce a certain motive—for example, you suddenly realize that you are late for an important meeting—and your attitude toward your car can shift. Your attention will be drawn to the rough idling of the engine, which signals an impending stall. Upon noticing that the car is low on gas you might quietly curse the gas-guzzling engine that will force you to waste precious minutes at the pump. But then, introduce a different motive, and your evaluations might shift again. Perhaps you recall that you will be giving a ride later to the attractive new coworker you recently met. Now you might begin to obsess about the fading paint on the rather dented body, and feel slightly embarrassed that your car does not compare favorably with the new ones passing you by on the road.

In both cases your low car-esteem reactions can be interpreted following an expectancy-value formulation (e.g., Feather, 1982; Lewin, Dembo, Festinger & Sears, 1944; Rotter, 1954). If your expectancy that the various shortcomings of the car will make you late, or will fail to impress your coworker, is multiplied by your valuation of these likely outcomes, the result is a negative evaluation of the car. Thus, the information you attend to, the judgments you make, and the resulting negative affect, arise largely from the activated expectancy and motive. In other words, the reason you evaluate certain characteristics negatively and feel unhappy about them is that these factors matter.

Increasingly, such expectancy-value reasoning is being applied to processes of self-evaluation (e.g., Higgins, 1996; Leary & Baumeister, 2000). It is sometimes assumed that negative self-esteem feelings somehow arise directly from the process of comparing self to various standards. However, as researchers including ourselves have begun to ask "*Why* do people self-evaluate, and care so much about their self-evaluations?" the answer has often cast self-evaluation and self-esteem as a function of underlying social motives. In this chapter we consider the notion that the positivity versus negativity of the self matters to people because of expectancies about its relevance to the satisfaction of valued social motives. We contend that self-evaluations are closely linked to social expectancies, particularly expectancies structuring the motivation to achieve interpersonal goals (e.g., acceptance, respect). In this chapter, we begin by outlining the concept of the relational schema, the cognitive structure representing interpersonal expectations. We then examine a range of research findings that speak to the role of relational schemas in self-evaluation. Next, the behavioral impact of activated interpersonal goals, as well as their influence on self-evaluative processes, are considered. Finally, we explore the interplay between cognitively represented social expectancies, the motivation to attain social goals, and self-evaluation. Throughout the chapter we hope to convey the worth of using an expectancy-value model to examine self-evaluative processes.

RELATIONAL SCHEMAS AND SELF-EVALUATION

Self-esteem has long been discussed as an affect-laden evaluative attitude about oneself (e.g., Leary & Baumeister, 2000; Tesser, 2001). At the same time, many researchers believe that self-esteem feelings go beyond thoughts about the self in isolation, and are rooted in our existence as social beings. To recognize the importance of relational cognition in self-evaluation one need only recall Cooley's (1902) analysis of the looking-glass self:

> A self-idea of this sort seems to have three principal elements: the imagination of our appearance to the other person; the imagination of his judgment of that appearance; and some sort of self-feeling, such as pride or mortification.... The thing that moves us to pride or shame is not the mere mechanical reflection of ourselves, but an imputed sentiment, the imagined effect of this reflection upon another's mind. (Cooley, 1902, p. 153).

The notion that self-conception and self-evaluation are socially constructed has an extensive history (James, 1890; Mead, 1934). A cogent and influential formulation of this view has recently been made by Leary and colleagues in their Sociometer model (e.g., Leary & Baumeister, 2000; Leary, Tambor, Terdal & Downs, 1995), and we shall refer to this model periodically throughout this chapter as it fits well with our own thinking. These authors propose that self-esteem feelings arise from the underlying motive of social inclusion or acceptance: Any self-aspect signaling increased acceptance triggers positive self-esteem, whereas any self-aspect signaling rejection or exclusion triggers feelings of low self-esteem. In the case of performance outcomes, for example, "failure generally lowers self-esteem because it lowers one's relational value (and, thus, raises the possibility of rejection), whereas success increases self-esteem because it connotes greater relational value (and acceptance)" (Leary & Baumeister, 2000, p. 33). In this expectancy-value formulation, then, the relevant interpersonal expectancies involve the important motive for social inclusion or acceptance, and these expectancies shape the evaluation process. Therefore, while people can, in principle, evaluate themselves on any number of dimensions (e.g., "I do not know how to use an electron microscope"), the dimensions that people tend to focus on, and the subsequent evaluations that contribute to the affective reactions normally considered self-esteem feelings, are a function of expectancies regarding social feedback (e.g., " Because I do not know how to use an electron microscope, no one wants me in their lab group.")

How shall we conceptualize the cognitive structures contributing to such judgments? Just as people develop knowledge structures or schemas about objects (e.g., "car"), types of people (e.g. "professor"), and themselves ("me the professor"), they also have representations of their interpersonal experiences. These knowledge structures are often referred to as *relational schemas* (see Baldwin, 1992, for a review of related concepts). A schema can be thought of as a "chunk of associative network" (Carlston & Smith, 1996, p. 196), with links connecting informational nodes that represent exemplar and generic knowledge about some element or aspect of the social world. Relational schemas are assumed to consist of some aggregation of information including episodic memories about past interactions, along with generic representations of the typical people one interacts with and the way one generally experiences oneself in that interaction. Thus, a relational schema includes a representation of both the "self" and the "other," as both are perceived in a given relational context. Examples might include teacher and learner, sales clerk and customer, or needy child and nurturing mother. Similarly, a schema for self as "inadequate" might be associated in cognitive structure with a schema for other as "criticizing and rejecting," so that activation of one tends to produce activation of the other (Baldwin, 1992; see also Hinkley & Andersen, 1996).

A critical assumption of the relational schemas approach is that representations of self and other are embedded in a set of interactional expectancies, dubbed the interpersonal script, which is typically developed through repeated experiences with similar interaction patterns. It is useful to think of the interpersonal script as a set of "if...then" contingencies the person has learned. For example, if a student consistently experiences praise following good performance, he or she will come to believe that "If I succeed at something, then the teacher will praise me." Or, a child may learn that "If I am hurt, then my mother will take care of me." The interpersonal script defines people's expectancies in any given situation, thereby influencing their affective reactions and behavioral responses. As we shall see, relational schemas involving evaluative, accepting, and rejecting responses from others play a key role in the social construction of self-esteem.

ACTIVATED RELATIONAL SCHEMAS AND THE SENSE OF SELF

We now turn to several lines of research conducted to examine the influence of relational schemas on self-evaluative processes and chronic self-esteem. The first step is to determine whether self-evaluative processes are indeed embedded in relational structures. We have studied this question using priming methods, asking whether activating a representation of a certain type of relationship would have a predictable effect on people's self-evaluations and behavior. Our thinking has been that an activated relationship serves as a kind of "private audience" in the back of the person's mind, providing the internally-represented looking glass for self-appraisal (Baldwin & Holmes, 1987).

Sex, With Your Mother Looking on

What evaluative standards will an individual use in self-evaluation and self-regulation? The looking glass metaphor would imply that the standards associated with the activated private audience should exert a guiding influence. In one study, undergraduate women from the University of Waterloo were brought into the lab and taken through one of two guided visualizations, in which they were instructed to picture in their minds either "two older members of your family" or "two people you know from campus." They did so as the experimenter read the following instructions:

> Focus your attention on this person...Picture the person's face. Really try to get an experience of the person being with you... You may want to remember a time you were actually with the person, or you may already have a clear experience of what this person is like...Just try to get a good image of this person. You may find that you can see the color of their eyes or their hair, or maybe hear their voice...Imagine that this person is right there with you...Now once you have an image of the person, try to zoom in and get a close-up, focused impression...Hold this image for a little while...Imagine talking with the person...Try to feel them there with you. (Baldwin & Holmes, 1987, p. 1089)

Moments later, participants were asked to help out another graduate student, under the guise that it was for an unrelated study. They were taken to a different laboratory and asked to read and rate the enjoyableness of a number of written passages. One passage was a sexually permissive piece of fiction, describing a woman having a sexual dream about a man to whom she was attracted. Results supported the hypothesis that those who had visualized older family members (e.g., their parents) rated the sexual story as significantly less enjoyable, less exciting, and so on than those who had visualized their (presumably more permissive) friends from campus. Note that there were no condition differences on ratings of a filler story about geographic formations. When it came time to read and rate the sexually permissive passage, however, the women evidently self-evaluated and self-regulated in the context of the standards associated with the activated relationship. One woman even remarked during debriefing that she had found herself arguing with her mother, in fantasy, about the rating she should give for how "exciting" the sexual passage was.

My Advisor is Watching me From the Back of my Mind

Evaluative reactions toward the self, then, can be shaped by the values and standards embedded in our relationships. These reactions need not be based on a painstaking, deliberate self-examination. Leary & Baumeister (2000) for example, proposed that because social belonging is so important to humans, we have a built-in monitor that continuously and automatically assesses information relating to acceptance by others. This reasoning would imply that activation of relational schemas might influence self-evaluative processes even at an automatic or implicit level. A follow up study explored whether priming effects would occur if the private audience were activated subliminally. Graduate students at the University of Michigan were given several 2-millisecond presentations of a picture of either an approving or disapproving face prior to evaluating some of their own research ideas (Baldwin, Carrell, & Lopez, 1990). This particular self-evaluative task was chosen as a familiar and highly ego-involving one for students in this research-oriented department. To increase the relevance of the primes, members of the psychology department were approached and asked to lend their faces to the pictures. The disapproving expression was provided by Robert Zajonc, the authoritative chair of the department and world-renowned expert on a range of topics including subliminal processing (see Bargh & Apsley, 2001). Results showed that when students were subliminally presented with the scowling face of their department head they evaluated their research ideas significantly more negatively, giving themselves a lowly C+ instead of the A- they reported on control trials. The image of a scowling authority figure, although presented outside of conscious awareness, activated a self-critical evaluative style and a relatively negative view of the self.

Sex, With the Pope Looking on

The next study focused on the issue of whether the primed authority figure needed to be personally important or relevant to one's identity in some way to have an impact on self-evaluation. The target group of participants was Catholic undergraduate women from the University of Waterloo. They first read a sexually permissive piece of fiction. Then, under the guise of a reaction time task, one third of them were subliminally presented with a slightly disapproving face of Pope John Paul II. This condition was compared with two control conditions: In one there was no prime; in the other, the prime was the disapproving face of subliminal psychologist Robert Zajonc, who was unknown to these students. Participants then indicated their momentary self-evaluations on 15 nine-point bipolar adjective scales (e.g., immoral/moral, intelligent/unintelligent, calm/anxious). Results showed that the subliminal presentation of a disapproving face influenced subsequent thoughts and feelings about the self only if the face was that of a relevant figure. The Catholic women reported lower self-evaluations following the exposure to the picture of the Pope than following exposure to an unfamiliar scowler, or no prime at all. As further evidence that the primed authority figure needed to be relevant to the participant's identity to have an effect, internal analyses showed that the self-evaluation effect was limited to those women considering themselves actively practicing Catholics.

The Agony of Defeat

Our interpretation of these priming studies is that when participants self-evaluated they did so according to standards of what is "acceptable" in the context of the activated structure. In other words, standards for evaluation represent expected contingencies of social acceptance: "It is only to the extent that you meet certain standards of success or moral behavior that you will be approved of and accepted." Negative self-evaluative reactions then, reflect the expectancy that one is not measuring up, and so will be rejected. This theoretical focus on the *contingencies of acceptance* is derived fairly directly from the ideas of writers such as Rogers (1959) and Sullivan (1953), who saw the desire for secure acceptance as a driving force behind self-evaluation and self-regulation.

In one study that directly addressed the sense of contingent acceptance (Baldwin & Holmes, 1987), primes were designed to activate either unconditional acceptance or else acceptance that was highly conditional on success. Here, the relational structure was activated through guided visualization. Male participants visualized either someone who provided noncontingent acceptance ("imagine having lunch with a good friend ... who would stick by you and support you through good times and bad"), or highly contingent acceptance ("imagine meeting someone and then later overhearing him say 'I was really impressed. ... I really admire people who are talented; I like people like that'"). A neutral visualization was also included as a control ("imagine walking down the sidewalk"). Following this visualization, participants performed a difficult memory task that was rigged to create a failure experience, and then were made self-aware by the presence of a small mirror to trigger an acute self-evaluative state. Participants who had visualized a contingent other were significantly more likely to attribute the failure to something about themselves, to draw negative evaluative implications about the self, and to report decreased mood, when compared to those who had visualized a noncontingent other or a neutral scenario. Negative self-evaluative judgments and affective reactions to a failure, then, arose from the sense that one had to be successful to be accepted by others. When acceptance was highly contingent, failure mattered, and so aroused negative affect. In the condition where a noncontingently accepting other was primed, participants did not evaluate themselves as critically and were not as upset by their poor performance.

As an interpersonal-cognitive approach to self-esteem would suggest then, a number of priming studies have shown that relational primes can influence the dynamics of the self-evaluative process by shaping the standards chosen, the attributions made, and so on. These effects have been found using a variety of priming techniques including guided visualizations, subliminal exposures of evaluators' faces, and even subliminal exposures of a significant other's name (Baldwin, 1994). Such primes have also been shown to influence the amount of stress a person feels when considering a stressful life event (Pierce & Lydon, 1998), the type of dating partner they would choose to be with (Baldwin, Keelan, Fehr, Enns & Koh-Rangarajoo, 1996), and the degree of openness they would exhibit to negative information about a relationship partner (Mikulincer & Arad, 1999). Taken together, these studies demonstrate the social construction of self-evaluation, and confirm that interpersonal knowledge functions according to basic principles of knowledge activation and application.

ASSESSING INTERPERSONAL EXPECTATIONS

People have expectancies, then, about what will happen in social relationships. Central to the current model of relational schemas is the assumption that the critical link between self and other is an interpersonal script, or event schema, representing a typical interaction pattern. As previously mentioned, the interpersonal script can be thought of as a series of "if ... then" behavior–outcome patterns, representing, for example, interpersonal expectations of acceptance or rejection (e.g., "If I fail, then I will be rejected"). From a social cognitive point of view, both the *if* and *then* can be considered as nodes in an associative network with a strong association between them. This association serves as the conduit for spreading activation: Activation of the behavior node ("failure") spreads to the outcome node ("rejection"). As a result, the particular social outcome becomes more accessible and comes to mind more fluently. Phenomenologically, the activated outcome is perceived as having a high likelihood, as something the person "can easily imagine happening."

What's on your mind?

In a number of studies (Baldwin, Fehr, Keedien, Thomson & Seidel, 1993; Baldwin & Sinclair, 1996) we have developed a sequential-priming method for assessing the spread of activation from the *if* to the *then* of script structures. The lexical decision task, quickly becoming a standard tool of social cognitive researchers, is a reaction-time procedure that measures response latencies for identifying words. In the basic lexical decision task (Meyer & Schvaneveldt, 1971), participants read letter-strings on a computer screen and are instructed to make word/nonword judgments as quickly as possible by pressing designated keys on the computer. Reaction times are faster if the target letter-string is preceded by a related or associated context word (e.g. "nurse" is recognized faster if it is preceded by the context word "doctor" than if it is preceded by the context word "bread"). Social psychologists have adapted this method to investigate the associative links hypothesized to characterize various types of social schemas: In their early research on stereotyping, for example, Gaertner and McLaughlin (1983) found that White participants identified "ambitious" as a word more quickly if they had been primed with "Whites" than if they had been primed with "Blacks."

Baldwin and Sinclair (1996) adapted this task to examine the structure of interpersonal expectancies. The hypothesis was that success and failure tend to be cognitively linked to the interpersonal outcomes of acceptance and rejection respectively. This expectancy of performance-contingent acceptance should be most pronounced for individuals suffering from low trait self-esteem, however, because of the way their sociometer is "calibrated" (Leary & Baumeister, 2000; see also Downey & Feldman, 1996, for related work). That is, it has often been noted that a belief that acceptance by others is conditional on successful performances plays a role in depression and self-esteem disturbances (e.g., Deci & Ryan, 1995; Kuiper & Olinger, 1986; Rogers, 1959). Presumably, this belief in the contingency of acceptance is usually learned in childhood as a result of parenting styles (Higgins, 1996; Koestner, Zuroff, & Powers, 1991; Thompson & Zuroff, 1998) and then is elaborated throughout life. Anticipating that "If I succeed, people will accept me," but "If I fail, people will reject me" clearly gives performance outcomes an importance and emotional impact, which would eventually undermine the security of a person's trait or chronic self-esteem. Framing these ideas in terms of relational expectations, Baldwin and Sinclair hypothesized that individuals with low self-esteem would show stronger "if–then" links between success and acceptance, and between failure and rejection.

In a lexical decision task, undergraduate participants made word/nonword judgments on letter strings that included social outcome words such as "included" "cherished," "despised," and "criticism." Each trial was preceded by a performance context word related to either success (e.g., "win," "competent") or failure (e.g., "lose," "incompetent"). Consistent with the hypothesis that insecure self-esteem is related to conditional acceptance, people with lower self-esteem were faster to identify both positive social outcome words such as "cherished" when given in the context of success and negative social outcome words such as "despised" when given in the context of failure. People with high self-esteem did not show this contingency pattern: Their expectations of feeling securely accepted and included by others apparently were not linked to successes and failures.

Two additional studies replicated and extended these lexical decision findings. First, a simple mood or valence interpretation of the findings was ruled out by the inclusion of positive and negative—but noninterpersonal—target words. The contingency finding was only evident on the acceptance and rejection targets (Baldwin & Sinclair, 1996, Study 2). Second, a priming manipulation was added to test whether the results in fact reflected the processing dynamics of a relational schema, as we proposed, rather than perhaps reflecting some sort of semantic associations not truly related to interpersonal expectations. In this study (Study 3) some participants first visualized a contingently accepting significant other from their own life who "tends to be very evaluative of you and seems to accept you only if you live up to certain standards of performance." Others visualized a nocontingently accepting significant other, who "tends to be very accepting and nonevaluative of you and simply accepts you for who you are." When they then performed the lexical decision task, only the former group--primed with a relationship characterized by contingent acceptance--showed the contingency pattern of response facilitation for failure-rejection trials. In other words, the same type of prime that had been shown in previous research to produce self-critical evaluative styles (e.g., Baldwin, 1994; Baldwin & Holmes, 1987) also produced the contingency pattern, in which activation spread from failure to rejection. This finding supports the interpretation that the expectancy of contingent acceptance from others is represented within the relational schema as an association between behavior and outcome. When the overall relational structure is activated, the association between elements is activated as well (see e.g., Baldwin, 1992), so the individual processes information in a manner similar to that of chronically low self-esteem individuals.

How Quickly can I Assume That you Will Reject me?

In recent work we have examined the degree to which the failure-rejection association displayed by individuals with low self-esteem represents an immediate, gut-level response versus a more reflective view of social dynamics. This work fits with other developments in the literature toward a dual-process model of self-esteem (e.g., Bosson, Swann, & Pennebaker, 2000; Greenwald & Farnham). Our specific interest has been in the automatic versus controlled processing of if–then contingencies (Baldwin, Baccus, & Fitzsimons, 2001). Here we used a slightly more elaborate version of the lexical decision task, modifying it to examine both automatic and controlled processing of context-target associations. This was done by simply varying the stimulus onset asynchrony (SOA) or, the length of time the context word is shown before the target word is presented. Research in this area has found that an SOA of less than half a second does not allow enough time for controlled processing of the context word (Neely, 1991). If, with a very short SOA, a context word facilitates the participants' word/nonword judgment on the target letter string, one can assume that there is an associative effect at the level of automatic processing. In contrast, an SOA of well over a second provides time for an individual to engage in controlled processing of the context-target pair (Neely, 1991), and thus reaction time effects can reflect strategic, deliberate responses. In the earlier studies (Baldwin & Sinclair, 1996), an SOA of one second was used—a duration that arguably is not conclusive in terms of automatic versus controlled processing. In our more recent study we used an identical procedure, but included both shorter and longer SOAs to examine the processing mechanisms at work within "if–then" contingencies.

Our results showed that individuals with low self-esteem demonstrated "if–then" contingencies of interpersonal acceptance primarily at an automatic level. (Consistent with the earlier findings, individuals with high self-esteem did not show the "if-then" contingency relationship in either automatic or controlled processing conditions.) This suggests to us that self-evaluative thoughts, for people with low self-esteem, are closely related to their automatic perceptions of interpersonal evaluations. This conclusion fits well with the results of the priming studies reviewed earlier, in which an activated relational schema—even if activated outside of awareness—shaped the self-evaluative process.

We believe the lexical decision findings reveal the spreading activation mechanism underlying implicit social expectancies. Thoughts of failings or personal shortcomings automatically activate an implicit anticipation of social rejection: It is the possibility of rejection that makes negative self-evaluations so unpleasant, presumably because humans strongly value acceptance over rejection. Self-evaluative feelings, then, arise from social expectancies.

INTERPERSONAL GOALS

Thus far, we have focused on the expectancy element in the expectancy-value framework. We now turn to the value or goal element. Various writers (e.g., Fiske, Chap. 11, this volume) have noted that many of the key motives that drive humans are social, including goals of belonging, respect, attachment, and power, and most of the research reviewed thus far has dealt primarily with the goal of belonging or relatedness. There may well be other motives that play a significant role: For example, recent work by Tafarodi & Swann (2001) has examined two relatively independent dimensions of self-esteem, emphasizing agentic motives (which involve the pursuit of "self-competency") and more communal motives (which give rise to the "self-liking" component of global self-esteem). Also Kirkpatrick and Ellis (2001; see also Barkow, 1980; Gilbert, Price, & Allan, 1995) stress that self-esteem feelings can arise from assessments of one's social rank or status, and from one's expectancy of being accepted by others (arguing from an evolutionary psychological point of view they actually posit several other self-evaluative processes as well, such as those signaling one's ability to attract potential mates). We concur with the spirit of these analyses, and have examined the hypothesis that self-esteem feelings arise from expectancies involving at least two social goals: being accepted and being respected.

We investigated the impact of the goals of acceptance and respect on social behavior and affective reactions when the goals were expected to be met. Consider as an illustration walking into a party where you do not know many people, when a friend points out two partygoers, Mary and Susan, whom she thinks you might like to meet. She has given these people some information about you, and has told them what you are like. Mary has replied that she respects your qualities, but doesn't particularly want to be friends with you. Susan has indicated that she doesn't really respect you too much, but would be quite happy being friends with you. In this scenario, Mary would fulfill the agentic goal of social respect, and Susan would fulfill the communal goal of social acceptance. Which person would you choose? This was essentially the situation created in a study by Rudich and Vallacher (1999), who wished to examine the effect of chronic self-esteem on social choices. We used the paradigm to instead investigate the behavioral and self-evaluative impact of temporarily activated social goals.

We built on recent research (e.g., Bargh, Gollwitzer, Lee-Chai, Barndollar and Trotschel, 2001) that has used priming techniques to test the influence of activated goals on behavior. We wanted to see if we could increase the accessibility of the social goals of acceptance or respect, thus increasing their momentary value to the individual. We hypothesized that doing so would lead people to select behavior that would fulfill the specific motive, which in this case would involve choosing the goal-facilitating interaction partner. We also hypothesized that expecting their activated motive to be satisfied by an interaction partner would provide a boost to self-esteem feelings. Using the procedure developed by Rudich and Vallacher (1999), we placed people in a situation where they believed they would be interacting with another person; however in our study we first primed them using a word-search priming technique (Bargh et al., 2001).

Female undergraduate students at McGill University came to a study on "First Impressions." They were asked to fill out a few questionnaires with the understanding that two other female participants would be reading over their questionnaires and forming a first impression based on their responses. Participants were informed that after receiving some feedback from the others, they would have to select one of them with whom to have a short chat. During the time the other women were ostensibly evaluating the questionnaires, the participants were given one of three word-search primes made up of a matrix of letters concealing numerous words. One version had embedded in it 12 words relating to respect (e.g., valued, honored), one had 12 words relating to acceptance (e.g., wanted, liked), and the third, control condition, had 12 words unrelated to interpersonal motives (e.g., freedom, music). After this prime, which was presented as a filler task, participants were to choose between the potential interaction partners based on written feedback from them—feedback that was in fact originally prepared by Rudich and Vallacher as their instantiation of the two social motives. In the "respect" feedback the respondent saw the participant as very positive on some socially valued traits (self-confidence and social competence), but nevertheless did not foresee getting along well together or being friends. In the "acceptance" feedback the respondent saw the participant as less than completely adequate on the same traits, but nevertheless thought they might make good friends. We found that the minimal word-search prime influenced which partner participants chose to interact with. People in the control, unprimed condition were fairly evenhanded in their preference of partner. However, participants primed with acceptance words overwhelmingly chose the partner who offered them liking and belonging. Conversely, very few of the people primed with the respect motive chose the person offering acceptance, with most instead choosing the partner offering respect.

Following this choice, we asked participants to rate their self-esteem using the State Self-Esteem Scale (Heatherton & Polivy, 1991). Interestingly, both groups primed with one of the relational motives reported higher self-esteem than the control, unprimed group. Examination of subscales showed that both groups were higher than controls on the subscale measuring social self-esteem, and the respect-primed group also showed higher ratings on performance self-esteem. Thus, having a social goal (e.g., respect) strongly activated, and expecting this goal to be met ("I have characteristics that will make someone down the hall respect me") appeared to provide a boost to self-esteem feelings, in accord with an expectancy-value framework. That this effect occurred with both the acceptance and respect primes suggests a need to focus on expectancies about both of these motives in research on self-esteem, as we shall discuss later in the chapter. We are continuing with this research direction, to try to clarify the behavioral and self-evaluative impact of activated motives.

LEARNING THEORY AND RELATIONAL EXPECTATIONS

We have conceptualized contingency expectations as arising from simple associations between some action by self and a social response of others. Such associations are, of course, precisely the same as those central to modern learning theory (e.g., Tolman, 1955; Dickenson, 1989): A rat or a dog learns through repetition that certain behaviors increase the likelihood of receiving a food pellet or a pat on the head. Or in a different paradigm, an animal learns that certain environmental cues or signals, such as a particular tone or light signal, tend to be followed by an electric shock. Learned associations then guide behavioral tendencies and produce affective reactions.

We recently explored the possibility of applying basic learning techniques to the issue of modifying relational expectancies. Our goal is not to argue that human responses should be equated with the behavior of lab animals. Human expectancies obviously have several unique characteristics, notably due to the capacity for symbolic thought, and particularly due to the capacity to entertain complex thoughts about the self. Higher level human thought is overlaid on a substrate of the same basic processes that shape animal cognition however, and it is useful to examine the simple associations that shape and give affective quality to thoughts about the self.

Nobody Likes Golfers

The building block of learning is the simple association, of course, so in one study (Baldwin, Baker, Hirsh, & Charbonneau, 2001) our first question was whether participants could indeed learn contingencies of acceptance and rejection. We created a computer game in which they received social feedback contingent on various aspects of themselves. We asked them to imagine that they had just moved in to a new residence, and were meeting their new neighbors. Each time they met a new person they would, at some point in the conversation, mention one of their hobbies, fishing and playing golf. The neighbor would either accept them or reject them in response to this avocational disclosure. On one trial of the game, for example, the participant would read on the computer screen the statement "You mention that you like fishing," followed a few seconds later by a frowning, rejecting face. On other trials they would mention golf, or both hobbies, or neither hobby, each followed by a smiling or frowning face. By simply pairing specific hobbies with specific patterns of social feedback, then, we were providing learning trials for acquiring interpersonal expectancies.

The manipulation consisted of giving different participants different contingencies of acceptance and rejection. For all participants, fishing was moderately predictive of rejection across the 48 trials: That is, mentioning fishing was more often than not followed by a frowning response. The manipulation involved the other hobby: golf. For some participants, golf was totally uncorrelated with rejection, in that half the time golf led to rejection but half the time golf led to acceptance. However, for some participants golf was perfectly correlated with rejection. Each and every time their golfing proclivity was mentioned the neighbor responded negatively.

By manipulating the contingencies in this way we examined whether our participants' responses would conform to a previously established learning phenomenon known as *cue-competition* (Baker, Mercier, Vallee-Tourangeau, Frank, & Pan, 1993). In many situations there are multiple cues predicting an outcome of some kind, and research has shown that the presence of strong, clear cues tends to interfere with the learning of weaker cues. In the condition where nobody liked golfers, then, the strong predictor (golf) was expected to undermine the learning of the other, only moderate, predictor (fishing). Thus we expected that in this condition participants would accurately recognize that golf was a strong predictor of rejection, but at the same time they would underestimate the degree to which fishing also led to rejection.

Our first question was answered clearly in the affirmative, in that participants learned contingencies of rejection quite readily. When explicitly asked to estimate the likelihood of being rejected if they mentioned one of their hobbies, they were generally accurate (as has been found in previous research using similar, non-social paradigms). At the same time, however, their assessments were somewhat distorted by the hypothesized cue-competition effect: When golf was a strong predictor, people underestimated the predictiveness of the moderate cue, fishing.

We added an extra twist to this study as well: Participants were also asked to perform a lexical decision task, in which target words relating to acceptance and rejection were preceded by the prime word "fishing" or "golf." We did this to assess their automatic, implicit associative learning of social contingencies, in addition to the explicit learning assessed by the self-reports. Here we found that only individuals previously classified as having low self-esteem showed a contingency pattern such that fishing facilitated identification of rejection targets in the basic condition, but did not in the condition where golf was the stronger predictor of rejection. Presumably, achieving social acceptance and avoiding rejection were particularly salient motives for low self-esteem individuals (see, e.g., Rudich & Vallacher, 1999), so these inviduals were more attentive to the contingencies predicting these outcomes. All participants, including their high self-esteem counterparts, were able to explicitly report on the patterns they had encountered, but only the low self-esteem individuals seemed to learn these contingencies at an implicit, automatic level.

The basic cue-competition phenomenon, reminiscent of the discounting effect in attribution theory, has been demonstrated in rats as well as humans (Baker, et al., 1993). In rats, who are notoriously reluctant to give accurate self-reports, expectancies have been assessed behaviorally by measuring, for example, the amount of freezing displayed in response to a cue that had been paired with electric shock. A strong tendency to freeze is interpreted as indicating the activation of a representation for the anticipated outcome, electric shock (Dickenson, 1989). In humans the lexical decision task gives a similar behavioral window into implicit expectations regarding contingencies relevant to important outcomes, using reaction times to index the cognitive accessibility of those outcomes. Greater accessibility reflects a stronger link between predictor and outcome. Theoretically, any outcome can support only a limited amount of "associative strength" from various possible predictors: Thus, if one cue becomes strongly associated to the outcome, other cues become less strongly associated. Practically, this suggests that if a low self-esteem person could learn that people are sometimes rejecting because they are in a bad mood or have a toothache, this could lead to a weakening of the perceived link between social rejection and personal shortcomings. This kind of attributional retraining seems obvious and easy enough at an explicit level, but as countless therapists can attest, people's automatic reactions are not so easily modified, at least through logic or argumentation. It may be that automatic contingency expectations need to be recalibrated according to basic principles of associative learning (see e.g., Brewin, 1989).

Pavlov's Dog was Very Secure

A kissing cousin of low self-esteem is the phenomenon of social anxiety, an apprehension about social interaction of various kinds. Evaluative thoughts and feelings preoccupy the socially anxious individual. Chronically socially anxious people believe that others hold standards for them that they cannot meet. Pozo, Carver, Wellens, and Scheier (1991) found that highly socially anxious people perceived ambiguous feedback from an interaction partner as less accepting than did their low anxious counterparts. Ryan, Plant, and Kuczkowski (1991) found that socially anxious individuals believed that others saw them as passive, shy, sad, and insecure. Various researchers have described how socially anxious individuals' high level of vigilance regarding the way others view them can result in a number of cognitive or attributional errors, such as overestimating the extent to which their behavior will be scrutinized, overestimating the likelihood of rejection, and unrealistically assessing another person's response to their anxiety (Hartman, 1983; Taylor & Arnow, 1988). Such expectations of being evaluated can lead highly anxious individuals to become inhibited and withdrawn (Alden, Teschuk, & Tee, 1992).

Leary and colleagues (Leary & Kowalski, 1995; Schlenker & Leary, 1982) have analyzed social anxiety from an expectancy-value perspective. Social anxiety is hypothesized to arise from the combination of two factors: an expectation that one will make an unwanted impression on others, and a powerful desire to avoid making that impression. This model is broader than the Sociometer Model of self-esteem, in that there is an allowance for any number of social motives including but not limited to belongingness or inclusion. Still, at the heart of the model is an expectancy-value equation combining interpersonal expectancies and valued social motives. It will come as no surprise that we believe the expectancy element in this formulation can be conceptualized as arising from a relational schema. Therefore, Baldwin and Main (2001; see also Baldwin & Fergusson, 2001) examined social anxiety as a function of activated relational schemas.

In this study, relational schemas were activated using a novel technique. Research has already established that it is possible to temporarily activate different relational schemas fairly directly using standard priming techniques. In the real world however, schemas are activated by all sorts of indirect cues or triggers, such as contexts, an interaction partner's characteristics, even a song on the radio or a whiff of a familiar perfume. Andersen and her colleagues, for example (see Andersen & Berk, 1998, for a review), have demonstrated that exposure to a small number of features associated with a significant other can activate relational information so that it is applied or transferred to a new person. In one study (Andersen, Reznik, & Manzella, 1996), participants who were going to meet someone who reminded them of someone they knew transferred expectations about how accepting the person would be, and reported greater motivation to interact with someone who reminded them of a well-liked significant other. Such cueing phenomena should, in principle, be broader than this specific transference example however, and might extend to almost any cue. Is it possible to create or modify such triggers, ultimately with an eye to modifying which schemas get activated for people at critical moments in their day-to-day lives?

Baldwin and Main employed basic classical conditioning techniques to create an association between specific relational schemas and specific, previously neutral, environmental cues. These conditioned cues were then played later to see if they would have any impact on feelings of social anxiety. Participants first completed a bogus computerized questionnaire about their preferences (e.g. "What is your favorite flavor of ice cream?"), allegedly "to see if people's opinions and attitudes line up with those that a survey of university students identified as the ideal or most likeable answers." They were instructed that because people often want to know how well they are doing when answering questions, they would periodically receive feedback about whether their responses were indeed socially highly desirable. Feedback consisted of a row of approving or disapproving faces, displayed on the computer screen for 1 second. This feedback was given every few questions in a fixed random order unrelated to their actual answers. The conditioning procedure involved the computer emitting distinctive tone sequences 500 milliseconds before the faces were displayed. One tone sequence (the "CS-acceptance") was paired 100% with approval feedback, on 10 trials; the other sequence (the "CS-rejection") was paired with disapproval feedback (the two tones were counterbalanced across participants).

A pilot study assessed whether the CS-acceptance and CS-rejection cues did in fact influence the accessibility of acceptance and rejection information. A lexical decision task showed that after conditioning, participants identified rejection related words faster following the CS-rejection than following the CS-acceptance. As predicted, then, the lexical decision task revealed the cued activation of interpersonal knowledge as a result of a brief conditioning procedure.

The next question was whether these same cues would have any impact on participants' self-evaluations and feelings of social anxiety, during an awkward social interaction. In this study we examined a second factor in addition to expectations. Recall that in an expectancy-value framework, self-evaluative feelings are not merely a function of interpersonal expectations but also the value placed on the social outcome. According to Leary and colleagues' expectancy-value model of social anxiety, the cueing of such expectancies should lead to changes in anxiety only to the extent that the individual cares about being accepted by others in the situation. A measure of public self-consciousness was therefore administered, as an indicator of how much participants generally cared about making a good impression on someone. In the experimental session, participants completed the conditioning procedure. Ten minutes later, they took part in an anxiety provoking interaction with a confederate, who behaved in a civil but aloof manner. This manipulation has been used by other researchers to induce social anxiety (see e.g., Stopa & Clark 1993), and our participants confirmed that the interaction was quite awkward.

The manipulation involved the incidental presentation of different cues. During the interaction, a computer on the other side of the room repeatedly emitted one of the two tones (CS-acceptance or CS-rejection) or a novel control tone repeatedly, ostensibly because the computer was being reprogrammed. Dependent measures showed the impact of the expectations triggered by the tones being played in the background during the interaction. There were effects on participants' self-reports of anxiety, their self-evaluations and expectations about how they thought the confederate perceived them, and even their behavior, as indexed by the confederate's ratings of how anxious they seemed (the confederate was, of course, blind to condition). In general, the CS-rejection made people more anxious than the novel tone in the control condition, whereas the CS-acceptance made people less anxious. Importantly, and in line with the expectancy-value formulation, the activated expectancies produced affective responses only to the extent that the person cared about, or valued, the outcome of making a good impression: Low public self-conscious individuals reported fairly low levels of social anxiety regardless of cue condition. Among high self-conscious individuals, however, the CS-rejection produced high levels of anxiety during the interaction but the CS-acceptance calmed people considerably—rendering them no more anxious than their low self-conscious counterparts.

As the lexical decision studies indicate, expectancies can be conceptualized as associative links between specific cues (e.g., one's own behavior or cues in the environment) and specific outcomes. The effect of such links is not limited to several-millisecond reaction-time differences in perceiving words on a computer, as a critic of social cognitive research might suggest. They translate into cognitive and emotional responses in the midst of a highly involving, anxiety-producing interaction with a stranger. They have an impact on social behavior, even influencing the interaction partner's first impression. The impact of social expectancies is often profound, sometimes troublesome, and occasionally mysterious. Recent research, however, indicates that such expectancies function according to basic principles that have been identified in the social cognitive and learning literatures. What gives expectancies their power is their relevance to goals and values—such as social acceptance—that matter to the individual.

DISCUSSION

Our goal in this chapter was to explore an expectancy-value view of self-esteem, and locate self-evaluative processes within social-relational goal structures. We reviewed research pertinent to various aspects of this formulation. Several priming studies, for example, have shown that the activation of a relational schema, through a guided visualization or subliminal prime, can shape the self-evaluative process. Individuals self-evaluate according to standards associated with the primed relationship, and they report lowered feelings of self-esteem if a "private audience" that is highly judgmental or critical has been primed, compared with one that is unconditionally accepting. Sequential priming studies have revealed the structure of social expectancies: Performance contingent acceptance, for example, involves an "if–then" structure whereby activation of thoughts of failure spreads to activation of negative, rejecting social outcomes, leading to subsequent expectations of interpersonal rejection following failure. A study in which various goals were primed showed that linking such outcome expectancies with important social motives produced predictable shifts in self-evaluations and social anxiety. Finally, several lines of research have shown the possibilities of changing relational expectations via the application of simple learning principles.

People's tendency to evaluate themselves, then, is part of the process of regulating behavior vis-à-vis their relational goals (see also Higgins, 1996). And as this research has shown, familiar self-evaluative procedures such as attribution and comparison with standards are part of this self-regulatory function. That is, the self is evaluated in certain ways because those types of evaluations are relevant to achieving the particular social goal. If my goal is to be accepted by my father, for example, I try to evaluate myself in the same manner as he would when he thinks about me. I consider the standards he would likely use (Baldwin & Holmes, 1987, Study 1), and my attributions and social comparisons are shaped by his evaluative style (Baldwin & Holmes, Study 2). My affective reactions to my failures and shortcomings will be particularly negative to the extent that his acceptance is contingent on success (Baldwin & Holmes, Study 2).

What about noncontingent, unconditional self-esteem? We have been focusing on people's contingency expectations about the factors that lead to positive or negative social outcomes, but various researchers (e.g., Brown, 1993; Deci & Ryan, 1995) have suggested that there is also a baseline component of self-esteem that is not derived from contingencies of any kind. Brown (1993) for example, argues that self-esteem is primarily a feeling of affection for oneself, rather than a judgment based on strengths and weaknesses. We concur with the view that "noncontingent" high self-esteem is at least as, and probably more, beneficial than contingent self-esteem. In line with other interpersonal theories of self-esteem, we propose that such feelings still reflect expectancies regarding important social motives. In this case however, expectancies are not based on specific behaviors, characteristics, or performances, but are predicated on the self as a whole. The expectancy is simply that "I am/will be, accepted," rather than "I am/will be accepted because of my abilities, successes, attractiveness, and so forth." In other words, the whole self can become a cue for acceptance, producing a feeling of self-esteem that is not contingent on specific self-evaluations. Indeed, we agree with Brown that there may be no evaluations at all in this source of self-esteem feelings: Through simple association a person could learn that "I tend to be accepted" without this acceptance being based on any evaluative process. Even in the absence of evaluative contingencies, then, we propose that self-esteem is socially constructed, and derives from expectancies regarding important social motives. And, as shown in studies where the sense of noncontingent acceptance was primed, the anticipation that acceptance is not conditional on performances leads people to be much less concerned and self-critical about their shortcomings (e.g., Baldwin, 1994; Baldwin & Holmes, 1987; Baldwin & Sinclair, 1996).

Regarding motives, most of the work reviewed here has focused on those related to the communal aspects of interpersonal relations, involving expectancies of acceptance versus rejection. We tend to agree with Leary & Baumeister (2000) that the need for social relatedness in various forms—whether conceptualized as belonging, acceptance, or attachment—is one of the most profound human motives, and one of the key determinants of self-esteem. At the same time, we suspect that other writers are correct in their assertion that agentic motives also play a significant role in self-esteem. As mentioned, recently we have been examining the contribution of a motive for status or rank, which translates into the social expectancy of respect versus contempt. Kirkpatrick and Ellis (2001; see also Barkow, 1980; Gilbert, Price, & Allan, 1995; but see Leary & Baumeister, 2000 and Leary, Cottrell & Phillips, 2001, for counterarguments) made the case that just as chickens observe pecking orders and chimpanzees regulate their behavior within dominance hierarchies, humans perceive and respond to status elements in their social relations. Therefore, self-esteem feelings may arise from positive expectancies about social feedback regarding status and respect, or feedback regarding acceptance. It seems reasonable to us to hypothesize that humans have been fashioned through natural selection to attend to status as well as inclusion aspects of relationships. Still, these hardwired motives presumably are mediated by cognitively represented goals, such as acceptance and respect; goals which can be activated much as any other goal, and which are monitored following expectancy–value thought processes. Indeed, in the study we reviewed in which respect and acceptance were primed for different groups of participants, both led to increases in feelings of self-esteem.

As well as there being multiple types of goals that underlie self-esteem, there surely exist multiple types of contingencies that people might perceive in relation to those goals. Much of the work we reviewed focused on contingencies of performance, that is, success and failure. In some studies however, the focus was on morality, for example with respect to sexual behavior. Recent writings on the contingencies of self-esteem (e.g., Wolfe & Crocker, Chap. 7, this volume) make the point that other factors such as likeability and attractiveness also play a strong role in determining many individuals' self-esteem reactions. We agree wholeheartedly with this emphasis on different kinds of self-evaluative contingencies. We reiterate our view though, that for the most part such contingencies of self-worth ultimately reflect perceived contingencies of social acceptance. Even if the individual is not conscious of the interpersonal associations surrounding a given self-evaluative domain, we suggest that it is precisely these associations that result in the translation of the domain-specific evaluations into a global sense of self-worth. Consistent with this interpersonal assumption is research by Leary et al. (1995), in which people's ratings of how they would feel about themselves after performing certain actions were significantly correlated with their ratings of how they thought others would feel about them. Our lexical decision and priming research has shown that these interpersonal underpinnings of self-evaluation can even function automatically or implicitly, so that people's answers on a self-report questionnaire might actually underestimate the true influence of social factors. Future research should continue to examine whether implicit interpersonal cognition is indeed critical in defining people's explicitly experienced self-worth contingencies.

As has been apparent throughout the chapter, with the exception of the issue of whether acceptance/belonging is the only motive underlying the self-esteem system, our reasoning falls well in line with Sociometer Theory (Leary & Baumeister, 2000) as well as classic interpersonal approaches to self-esteem (e.g., James, 1890; Sullivan, 1953). We suggest that adopting an expectancy-value framework ties the interpersonal view of self-esteem to parallel work on attitudes and learning, and opens the theory to a consideration of additional types of expectancies and motives. More important, we suggest that the notion of the relational schema ties interpersonal theory in general, and its expectancy-value aspects in particular, to the social cognitive literature on the representation, activation, and application of social knowledge. This is a powerful literature, which gradually is becoming more so with increasing attention being paid to issues of affect and motivation, as this volume demonstrates.

We are particularly excited by the conditioning findings. People seem to learn new social contingencies with remarkable facility, such that even after just a handful of trials in a fairly artificial game they develop automatic expectancies of acceptance and rejection. Social outcomes can be associated with meaningful behaviors (e.g., playing golf), or with otherwise meaningless environmental cues (e.g., specific tone sequences). Later presentation of these cues activates the social expectancy, influencing affective reactions. In our future research we hope to explore the application of these and other principles of learning theory to the goal of increasing self-esteem and reducing relational insecurity. In the social anxiety study reviewed earlier (Baldwin & Main, 2001), people engaging in an awkward interaction were less anxious if a conditioned stimulus activating social acceptance was played in the background. This same approach, combined with other learning principles, might be developed into a technique to try to reconfigure the relational knowledge that is activated by particular situations, cues, or sensations (see, e.g., Baldwin & Fergusson, 2001). We would not advocate a direct application to therapy: Social success would hardly be facilitated by the periodic sound of a doorbell tone emanating from a handheld computer. As the cue-competition results indicated, however, self-related stimuli such as one's hobbies or other characteristics might be reconditioned to become cues activating positive rather than negative expectations (see Baldwin & Meunier, 1999, and also related conditioning research in the stereotypes literature, e.g., Kawakami, Dion, & Dovidio, 1998).

We realize that an agenda of applying learning principles to modify human implicit expectancies, thereby influencing self-esteem, may seem wildly optimistic—at best. We have been consistently impressed, however, by the remarkable impact of minimal interventions such as primes or conditioning trials. We assume that a key reason for this impact is the fact that the procedures have been carefully directed at the key relational structures that shape people's self-evaluations.

In conclusion, as we said at the outset people tend to evaluate themselves, and they care about their self-evaluation, because it matters. We argue that what makes a positive or negative self-aspect matter is the expectancy that it will facilitate or block the satisfaction of an important social goal. Relational schemas, the cognitive representations of interpersonal situations, link the self to those social goals. We hope that future research into the basis of self-esteem will focus on interpersonal cognition, therefore, and further delineate the processes whereby the activation and application of relational knowledge shape the self-evaluative process.

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9

The Self, Online

John A. Bargh
Grainne M. Fitzsimons
Katelyn Y. A. McKenna
New York University

The Internet offers many venues for social interaction, from topical newsgroups and chat rooms to electronic mail and interactive games. More and more, Internet entrepreneurs are discovering that although people do use it as an information source, much like a fabulous home library, the most popular use of the Internet is to interact with other people. Social interaction has become the number one home use of the Internet (Kraut, Mukopadhyay, Szczypula, Kiesler, & Scherlis, 1998; Moore, 2000). Nearly 80% of those going online in a typical day in 2000 did so in order to send an e-mail to another person (Pew Internet Report, 2000). And access to (and therefore social interaction on) the Internet is no longer solely a North American phenomenon; according to the most recent Nielsen-NetRatings survey, 33% of homes in the Asia-Pacific region now have Internet access, and 25% of European homes do so ("Net access growing," 2001); and although access in Latin America and Africa currently lags behind, it is growing at a rapid rate (Tomlinson, 2001).

With all of these electronic venues available for interaction, combined with people's evident motivation to use the Internet for that purpose, it is to be expected that individuals will meet each other there for the first time, and thereby make new acquaintances. One of the most important current concerns with the explosive growth of the Internet has been the quality of these relationships, and whether they are of lower or impoverished quality compared to "real", face-to-face relationships. Some have described 'virtual' interactions as being of lower quality, people talking online with relative strangers in superficial relationships, taking time away from the deeper discussion and face-to-face comradeship of their relationships with family and friends (e.g., Putnam, 2000). This weakening of social ties would be to the detriment of the social fabric of society as well as the psychological well being of the individual (Kraut, Kiesler, Mukhopadhyay, Scherlis, & Patterson, 1998; Nie & Erbring, 2000).

Not surprisingly, then, there has been much discussion in both the popular