This article briefly outlines the salutary implications for psychology of the development of a science of interpersonal relationships, which has emerged as multidisciplinary in nature and international in scope. Discussed are the potentials of relationship science: to unite psychological scholars with other social, behavioral, and biological scientists; to help integrate many subdisciplines within psychology; to bridge the chasm between researcher and practitioner; to extend knowledge of human behavior to people's daily lives and natural surroundings; and to inform issues of national concern. The realization of these potentials, however, requires transcendence of psychologists' traditional individualistic orientation, as well as more research on the impact of affect on cognition and research on the impact of relationships' exterior environments on their interior dynamics.

Garrison Keillor has observed that those of us who live in Lake Wobegon country were assigned three seasons rather than the customary four—we're either getting over winter, or we're getting ready for winter, or it is winter. But he forgot to mention that we were gifted with a very special day that separates our winter season from our getting-over-winter season: We awaken one morning and discover that if we squint our eyes and cock our heads just so, we can see that overnight Mother Nature has cloaked our trees in a diaphanous haze of green. It is then that we know winter is over and that our bleak landscape has begun its magical metamorphosis.

Today, if you squint your eyes and cock your heads just so, you can see the greening of a new science of interpersonal relationships. In this article, I discuss its potential to transform the landscape of psychology and, in accordance with the 1998 American Psychological Association Convention theme of “Prevention: Building Strength, Resilience, and Health in Young People,” its potential to inform issues of national concern. If APA President Martin Seligman is correct that we psychologists, in trying “to undo the worst things in life . . . ., forget the mission of building the best things in life” (Seligman, 1998, p. 2), then psychology's contributions to the development of relationship science will go a long way to redressing that imbalance, for virtually every study of human happiness reveals that satisfying close relationships constitute the very best thing in life; there is nothing people consider more meaningful and essential to their mental and physical well-being than their close relationships with other people (see Berscheid & Reis, 1998). In outlining the potential of relationship science to change our disciplinary landscape, two nascent research areas will be highlighted—the impact of affect on cognition and the impact of relationships' exterior environments on their interior dynamics—for both are vital to realizing the promise of what many believe is not only the newest frontier of the social and behavioral sciences, but perhaps their last and greatest challenge.

In his classic work, The Psychology of Affiliation: Experimental Studies of the Sources of Gregariousness, Stanley Schachter observed that all of the social and behavioral sciences are "in good part devoted to the study of the process and products of human association" (Schachter, 1959, p. 1). Thus, it perhaps was inevitable that the evolution of these sciences would lead to a collaborative and direct confrontation of the core mysteries of human relationship. As this suggests, relationship science is not the exclusive province of psychology, or even of American social and behavioral sciences. The field has emerged as both international in scope and multidisciplinary in nature. In addition to psychology, it encompasses, for example, sociology, anthropology, communication studies, marital and family therapy, and even economics (e.g., University of Chicago economist Gary Becker recently received the Nobel Prize for his extension of microeconomic analysis to a wide range of personal relationship behavior, including marriage and divorce; Royal Swedish Academy of Sciences, 1992). Relationship science encompasses, as well, many of the health sciences, including epidemiology, traditional and alternative medicine, nursing, pharmacology, and veterinary science with its interest in human–companion-animal relationships.

Within psychology, the principal contributors to the development of relationship science have been clinical, counseling, developmental, and social psychology, with other subfields, such as cognitive psychology, playing strong supporting roles and with several others now ap-
The rhythm is not presumed to have a direct material representation. Finally, like the other great forces of nature—such as gravity, electricity, and the four winds—a relationship itself is invisible; its existence can be discerned only by observing its effects.

Thinking dyadically, about recurring interconnections between individuals rather than properties within individuals, is foreign to some psychologists. It may seem especially foreign to our brethren in the psychobiological wings of our field who are currently pressing their claims in psychology and who sometimes seem to identify more with the hard, material sciences than with the so-called softer areas of their own discipline. But it shouldn’t. Just one example of why it shouldn’t be provided by subatomic physics, the exemplar of the study of matter, or of material “things.” Physicists long ago were forced to recognize that the properties of isolated material particles are, as Niels Bohr observed, “definable and observable only through their interaction with other systems” (Bohr, 1934, p. 37).

As one contemporary physicist elaborated, “Subatomic particles . . . are not ‘things’ but are interconnections between ‘things,’ and these ‘things’ in turn, are interconnections between other ‘things,’ and so on. In quantum theory you never end up with ‘things’; you always deal with interconnections” (Capra, 1982, p. 80). Thus, the growing attempt by the social and behavioral sciences to transcend the study of individuals—our material “things”—to the study of interconnections between individuals, as exemplified by relationship science, is neither without precedent nor revolutionary.

That the study of interconnections is not a new endeavor in the history of science needs to be underscored for a number of reasons, including the apparent belief of some of our colleagues, and many laypersons, that such subareas of psychology as neuropsychology or psychophysiology, where the focus of study engages matter, are more susceptible to scientific analysis than a field of study that focuses on interconnections that have no material substance. Another reason is that just as the shift from the study of things to the study of interconnections in subatomic physics required a shift in methodological and analytical technique—most notably in the use of probability theory—so too does relationship science require a shift away from our own traditional methodological and analytical techniques. Reflecting psychology’s individualistic orientation, virtually all of our methodologies and statistics are predicated on the individual as the unit of analysis. As a consequence, relationship scholars often find themselves jerry-rigging old methodologies and statistics to accommodate the dyadic unit of analysis, but some, such as David Kenny and his associates (e.g., Kenny & La Voie, 1984), are creatively constructing new ones.

The most important potential of relationship science, of course, is to improve our understanding of human behavior. It cannot fail to do so because relationships with other humans are both the foundation and the theme of the human condition: We are born into relationships, we live our lives in relationships with others, and when we die, the effects of our relationships survive in the lives of the living.
reverberating throughout the tissue of their relationships. 
Relationships thus are the context in which most human behavior occurs, and so understanding and predicting that behavior is difficult, if not impossible, if that context is ignored. It is for this reason that in Close Relationships (Kelley et al., 1983), my coauthors and I characterized relationship science as an essential science—essential in the sense of being necessary to the further development of the social, behavioral, and biological sciences.

Relationship science clearly is essential to the further development of social psychology. The ultimate intended destination of social psychological insights has always been the understanding of people behaving in their natural habitat—which is to say, then, of people behaving in the context of their ongoing relationships with others. But despite our Lewinian origins, social psychology in recent years has become almost as individualistic as other areas of psychology. Social psychology’s shift from a focus on people’s behavior in relationships, at least in small groups, to a focus on the individual, has been traced by Steiner (1974) to the publication of cognitive dissonance theory (Festinger, 1957). Subsequently fueled by the cognitive revolution in psychology, it was then that social psychologists began to tunnel into the minds of individuals—albeit, of course, with the worthy purpose of learning more about how people perceive and think about other people. Experimentally, however, the other people usually were strangers to the individuals, or even hypothetical constructions of people; that is, they were people with whom the individuals had never interacted in the past, were not interacting with in the present, and did not expect to interact with in the future. In short, the other people were persons with whom the individuals had no relationship—in the past, present, or future.

Despite the remarkable achievements of cognitive social psychology, the suspicion is growing that our understanding of many social phenomena not only is incomplete but actually may be misleading in terms of its generalizability to behavior in the very situations to which we wish to predict: to naturalistic situations where people are almost always enmeshed in a web of ongoing relationships with others. The suspicion, in other words, is that the omnipresent relationship context of human behavior makes a difference—that the properties of individuals do not exert simple and sovereign effects independent of context and that, in fact, the influence of the relationship context on behavior is often so powerful that it overrules what we think we know about behavior.

The disturbing corollary to this suspicion is that principles derived from studies of human behavior conducted in a relationless context cannot be expected to transfer in whole to behavior in the relationship context typical of naturalistic settings. Although there are many reasons for this, only two are mentioned here. First, encounters with others in our laboratory settings, even where actual interaction is permitted, usually are viewed by individuals as unlikely to be repeated in the future, whereas in ongoing relationships there is almost always the prospect of future interaction. The prospect of future interaction, all by itself, makes a difference along many dimensions, as three decades of research have shown (e.g., Darley & Berscheid, 1967). The second reason, not unrelated to the first, is that passive and noninteractive encounters with others, typical of our laboratory settings, are usually devoid of motivational and affective import to individuals, whereas interactions with others in ongoing relationships almost never lack this import, as reflected in the fact that people experience emotion most frequently and most intensely in the context of their close relationships (see Kelley et al., 1983). The absence in so many of our studies of just these two features of relationships can be expected to produce surprises when we attempt to transfer our findings from relationless settings to even minimal relationship contexts (see Berscheid, 1994; Reis & Downey, in press).

An illustrative case in point is a study conducted over two decades ago by Miller and Norman (1975), who examined what we now call the “fundamental attribution error,” or the tendency of people to underestimate the situational causes of another’s behavior and overestimate the extent to which it reflects the other’s dispositions, and the “actor–observer effect,” where actors are more likely to attribute their own behavior to situational causes than observers are. What made Miller and Norman’s study different from most others before or since is that some participants actively interacted with each other in a prisoner’s dilemma game, whereas other participants were simply passive observers of the other’s interaction, as is typical of attribution studies. Following the interaction, the interactants and the passive observers were asked what caused the interactants’ behavior.

Because the actor–observer effect already had been well-established, Miller and Norman (1975) predicted that in contrast to passive observers, active interactants would be more likely to attribute their own behavior to their situation—namely, the constraints of the prisoner’s dilemma game—than to their dispositions, but that is not what they found. Contrary to prediction, the interactants “attributed more behavioral responsibility to themselves and perceived more dispositional difference in their [own] behavior than did observers” (Miller & Norman, 1975, p. 507), who saw the situational constraints of the game as more responsible for the interactants’ behavior. Moreover, the interactants saw themselves as more responsible for their partners’ behavior than passive observers did, and not unexpectedly, the interactants’ affective responses to their partners’ behavior were much stronger than those of observers. In summary, the fact of relationship—even the minimal relationship of a brief laboratory interaction—made a difference. Miller and Norman gave a motivational explanation of their findings. They speculated, for example, that people need to feel in control of their interactions with others; the interactants’ tendency, relative to passive observers, to see themselves as the cause of their own and their partners’ interaction behavior may have served such a need.

Although more social psychologists are beginning to infuse motivational import into the settings in which they study social cognition, with the work of Forgas (e.g., 1994) and Clark (e.g., 1998) being prominent examples, there is
a pressing need for more studies of cognition under conditions where motivational and emotional systems are activated, as they typically are in relationship contexts. That need has been underscored by recent neuroscience findings. Arnsten (1998), for example, has reviewed neurobiological evidence suggesting that during stressful experiences often associated with emotion, catecholamine neuromodulators released in the peripheral and central nervous systems appear to activate opposing actions in the brain—actions that turn on the amygdala (long associated with the expression of emotion) and turn off the prefrontal cortex (associated with working memory and also with the inhibition of inappropriate responses and distractions, both contributors to effective problem solving). In addition, at least one possible mediator of improved memory for emotional events has been identified by Gold (e.g., 1992), who has found that the arousal accompanying emotional states may affect neuroendocrine processes regulating memory storage; specifically, he has demonstrated that epinephrine release appears to modify brain function and enhance memory storage through an increase in blood glucose level.

Such neuropsychological findings are not only consistent with clinical observations by therapists that quarreling couples sometimes seem to be behaving without the full benefit of their prefrontal cortex, but they are consistent with many previous findings by relationship researchers as well. For example, relationship-interaction events tend to be better remembered than other kinds of events (e.g., see Berscheid, 1994), and Knapp and Clark (1991) have shown that people interacting in bad moods make poor problem solvers, whereas good moods do not have a commensurate beneficial effect.

It seems likely, then, that cognitive processing in active relationship-interaction situations is different from that observed in our typical research paradigms and that some, but probably not all, of the difference is due to the fact that when people are up close and personal, as they usually are in relationships, they constitute highly "emotogenic stimuli," as Albert Ellis (e.g., 1962) so aptly put it. If only for this reason, relationship scholars cannot automatically export findings obtained from passive, interactionless settings to relationship settings without knowing much more than we currently do about the association between affect and cognition.

A better understanding of behavior in relationship contexts will help us realize another potential of relationship science, and that is to inform public policy. Many issues of concern to state and federal policy makers engage close relationships, with the high rate of dissolution of marital and parental relationships in this country perhaps the most central. But legislative remedies depend on the identification of causes, and these, at least with respect to marital instability, still remain the subject of speculation and contentious debate, as was illustrated by a recent *Meet the Press* (Dukert, 1997) panel discussion.

The panel included Laura Schlessinger, a radio talk show host and columnist, also known as Dr. Laura; Reverend Jerry Falwell; Representative Jesse Jackson, Jr., congressman from Illinois; and Mario Cuomo, former governor of New York. After initial discussion, all agreed that the source of many of this country’s troubles is, as one panel member put it, “the virtual extinction of the family as we know it.” The threatened extinction of the family was the last thing they agreed on, however, for they then proceeded to expound their personal views of the causes of the problem and likely remedies. According to Schlessinger and Falwell, the cause is a deterioration of strong personal moral values, especially a sense of personal responsibility. Jackson and Cuomo, on the other hand, put the cause in widespread environmental changes that have weakened family relationships.

As for remedies, Schlessinger and Falwell, in line with their individualistic causal attributions, argued vigorously for actions that would change individuals’ dispositions (e.g., Schlessinger emphasized educating people on the need to “honor covenantal vows”). In contrast, Jackson and Cuomo argued that the debilitating environment in which many marital and parental relationships are currently embedded needs to be changed. As Jackson put it, “The United States government can provide an environment for families to survive,” a view subsequently elaborated by Cuomo but loudly protested by Schlessinger and Falwell, who argued that governmental actions to improve stability would be ineffectual and therefore a waste of time and money.

It is not only the promise but the obligation of relationship science to inform such debates. And, as a matter of fact, the question of relationship stability in general, and marital stability in particular, has been the single most frequently addressed question by relationship scholars. However, this massive body of research isn’t contributing much to public debate. It isn’t—and it can’t—because the lion’s share of our stability research looks as though it was personally designed by Schlesinger and Falwell; that is, it overwhelmingly reflects an individualistic orientation to the question, and unfortunately, our myriad attempts to find an association between stability and properties of the individual haven’t been very successful (see Glenn, 1990). As Karney and Bradbury (1995) detailed in their review of the stability literature, even the association between an individual’s satisfaction with a marriage and its stability is not large; these authors concluded that “although there can be little doubt that an unstable marriage is marked by dissatisfaction, the experience of dissatisfaction does not strongly predict instability” (p. 20).

Political psychologists would not be surprised that the causes and remedies endorsed by the *Meet the Press* panel members broke along political lines. They have found that with respect to causal attributions for social problems, conservatives take an individualistic view and see the individual as responsible, whereas liberals are more likely to causally implicate the environment (e.g., Sitka & Tetlock, 1993). What is surprising, however, is that the stability literature suggests that relationship scholars are dyed-in-the-wool conservatives. More likely, we have been prey to the fundamental attribution error in our overemphasis on the causal role of individual dispositions and our neglect of...
relationships' environments—a neglect fostered by our individualistic perspective.

Still, it is disconcerting that social psychologists have neglected the impact of relationships' environments, because most of us are Lewinians and subscribe to his thesis that behavior is a function of the interaction between the properties of people and the properties of their environments (e.g., Lewin, 1951). Lewin (1951), it will be recalled, was inspired by the revolutionary experiments of Faraday and Maxwell, who banished the concept of ether from physics by demonstrating that knowing the properties of an individual particle (e.g., its mass and velocity) was not sufficient to predict its behavior; one also needed to know the properties of the electromagnetic field in which it was embedded because the particle's behavior was a function of the interaction between its properties and the field's properties. Given the present individualistic orientation of stability research, as well as most other relationship research, relationship science thus currently resembles prefield theory in physics; that is, a relationship's environment currently tends to be viewed just as ether was—as a nebulous, undifferentiated, and causally innocuous surround.

Our treatment of relationships' environments as ether is both reflected in, and reinforced by, laypersons' beliefs that close, committed, and loving relationships are impermeable and unsinkable vessels that can sail through any environmental storm with impunity. The adages that "love conquers all" or "no third party can break up a happy relationship" reflect this popular belief, as do the results of studies my students and I have been conducting on the causally attributions people make for the quality of their relationships, including their ongoing romantic relationships (Berscheid, Ammazzalorso, Langenfeld, & Lopes, 1998). Few spontaneously mention their relationships' physical and social environments as having any impact whatsoever on the quality of their relationships. Their attributions focus not on their relationships' environments, or even on their own dispositions or on their partners' dispositions. Rather, they make Person × Partner causal attributions; that is, they almost invariably refer to the felicitous (or sometimes disastrous) fit between their own properties and their partners' properties to account for relationship quality.

When our respondents looked in the rearview mirror at one of their past (and now defunct) romantic relationships, however, we found, just as Heider (1958) would predict, that the role their relationship's environment played in producing its quality was then significantly more apparent to them. Consistent with the thesis that psychological distance allows the influence of the surround to be better appreciated, they also were significantly more aware of the impact of the environment on a friend's romantic relationship than on their own relationship. When people are deep in the woods of an ongoing relationship, apparently they can't see the contextual forest for the tree of the relationship.

The problem this presents, of course, is that to the extent that people believe their relationships are unsinkable Titanic invulnerable to environmental assault, the probability that the partners will be vigilant for icebergs decreases and the chance that the relationship will drift into dangerous waters increases. Kelley (1992) has observed that the commonsense psychology people use to guide their behavior typically resides at the mesolevel of analysis; causal events occurring at the microlevel (i.e., rapidly occurring events invisible to the eye) and causal events at the macrolevel (i.e., events occurring slowly and at a distance) are much harder for people to detect and incorporate into their personal causal theories. Perhaps even relationships' immediate physical and social environments are too macro—too diffuse and slowly changing—for people to be aware of their effects on their relationships. If so, relationship scholars have the important job of mapping out the locations of environmental icebergs that will cripple if not sink relationships—environmental features that people need to avoid or change if they can and that legislators, who are in the business of changing environments, might try to modify to increase the stability of societally valued relationships.

Unfortunately, and congruent with our treatment of relationships' exteriors as ether, information about the effects of the physical and social environments in which relationships are embedded is sparse, as Levinger (1994) has eloquently detailed. But at least with respect to the stability question, some scholars are now turning their attention to the environments of relationships. For example, one iceberg deservedly receiving more attention is the extent to which the social environment contains attractive alternative partners to a present partner. The importance of this factor to stability was first empirically reported by Udry (1981), who found that spouses' perceptions of their marital alternatives not only predicted disruption longitudinally, but it independently was a better predictor of stability than was satisfaction with the relationship. More recent testimony to the potency of alternatives in the environment was reported by South and Lloyd (1995), who found that the risk of marital dissolution in this country is highest in geographical areas where there is an abundance of potential alternatives to a present spouse.

Other evidence of the influence of environmental conditions on relationships is slowly accumulating. For example, several recent studies have shown that the degree to which people in the partners' social environment approve of the relationship is a significant factor in premarital romantic relationship dissolution (e.g., Sprecher & Felmlee, 1992), and other studies, some recently conducted by Conger and his associates (e.g., Conger et al., 1990), have shown that economic strain not only promotes hostility in marital interaction but reduces the frequency of supportive behaviors. Not surprisingly, job stress also influences couple interaction; for example, Repetti (1989) found a significant association between air traffic controllers' exposure to job stressors and anger and aggression in their family interactions.

However, much more research on the effects of environment on relationships is needed. Happily, the prospect for obtaining such research has been enhanced by Karney and Bradbury's (1995) stability model. Their vulnerability—
stress model assumes that different couples inhabit different environments, different environments present different stressors, and different couples possess different vulnerabilities to those stressors. The fate of a relationship is theorized to hinge on the interaction between a couple's vulnerabilities and the nature of the stressors present in their relationship's environment. Another recent environmental stability model assumes that a single relationship is likely to inhabit several different environments as it moves through time, and it attempts to predict the temporal interplay between such changes in a relationship's environment and changes in the nature and quality of its interior dynamics (Berscheid & Lopes, 1997).

Although the predictive usefulness of these environmental models remains to be seen, at the least they may broaden our view of constructs traditionally associated with stability. "Commitment" and "closeness" are examples, with the current assumption being that the more committed the partners are to the relationship and the closer it is, the stronger and thus the more enduring the relationship will be. But both commitment and closeness tend to be measured as properties of individuals; that is, we measure individuals' intent to maintain the relationship or individuals' subjective feelings of closeness. But environmental models of stability suggest that our predictions might be enhanced if we adopted the perspective of civil engineers who typically calculate a structure's durability relative to the environmental forces it can withstand without disintegrating; that is, the strength of a bridge is calculated relative to the force of wind and water to which it will be exposed, a car relative to the speed with which it can hit a brick wall without crumbling, and as memorably demonstrated by John Cameron Swayze, a Timex watch by its grating; that is, the strength of a bridge is calculated relatively to the environmental forces it can withstand without disintegrating; that is, the strength of a bridge is calculated relative to the force of wind and water to which it will be exposed, a car relative to the speed with which it can hit a brick wall without crumbling, and as memorably demonstrated by John Cameron Swayze, a Timex watch by its plunge into a washing machine where it "took a licking but kept on ticking."

In short, it is not enough to know partners' vulnerabilities, or strengths, in a vacuum—or in ether, as it were. To predict a relationship's future, we also have to predict the nature of the environments the relationship will inhabit as it moves through time. About this we currently know little, but for certain types of relationships, especially romantic relationships, there may be relatively common environmental progressions over a relationship's life span (see Berscheid & Lopes, 1997). In addition to our need to learn more about the impact of relationships' exteriors, environmental models also suggest that our discourse, both among ourselves and with the public, should acknowledge more than it has that some fragile relationships survive forever because they never encounter a relationship-toxic environment, but some very strong relationships dissolve—not because they weren't close, or committed, or loving—but because fate, or the partners' ignorance of the vulnerability of their relationships to external forces, or perhaps even uninformed governmental policy decisions put their relationships in harm's way.

As new environmental models of stability suggest, there is reason to believe that one fine day, relationship scholars will have identified the environmental conditions that are healthy and those that are especially toxic to marital and parental relationships, and that not only will therapists be able to provide relationship risk probabilities to couples considering actions whose secondary result will be a change in their relationships' environments, but "environmental therapy" will be added to therapists' treatment arsenals for troubled relationships. Perhaps, then, we also can look forward to the day when legislators, before taking actions that change the environments of important relationships, routinely obtain environmental impact statements similar to those they now mandate for the Spotted Owl and the Mississippi Darter Fish.

If public opinion leaders and policy makers really believe that the family as we know it is threatened with extinction, and if they view this constellation of close relationships to be as precious and vital to human welfare and to the future of our culture as they obviously believe endangered species of wildlife are, then they will put their money and their influence alongside their beliefs and support the further development of relationship science. For example, they might well consider investing in a far-ranging big science initiative for the social, behavioral, and biological sciences focused on close relationships, especially marital and parent-child relationships.

In summary, the emergence of relationship science is a salutary event for psychology. In addition to its potential to unite psychological scholars with other social, behavioral, and biological scientists, to help integrate many subdisciplines within psychology, to narrow the gap between psychological researchers and practitioners, and to extend our knowledge of human behavior to people's daily lives and natural surroundings, it also has the potential to inform many issues of national concern. The emergence of relationship science represents the flag of a higher truth that has now been planted in the individualistic soul of our discipline. Whether that flag will continue to stand or even someday wave over a new synthesis in psychology depends on whether future generations of scholars can conquer the daunting problems relationship science presents. About these problems, I have said little because—for those of us who personally are concerned about the future of valued human relationships, as well as those of us who professionally believe that our discipline needs to better address the fact that most human behavior occurs in the causally potent context of relationships—it is that very special morning when, at long last, we truly can see the green of a science of relationships.

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