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Love in the Fourth Dimension

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Annu. Rev. Psychol. 2010. 61:1–25

The *Annual Review of Psychology* is online at
psych.annualreviews.org

This article's doi:
10.1146/annurev.psych.093008.100318

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0066-4308/10/0110-0001\$20.00

Key Words

companionate love, romantic love, compassionate love, adult attachment, temporal course, interpersonal relationships

Abstract

Psychologists' efforts to understand love began in the mid-twentieth century. The fact that they continue apace in the twenty-first century reflects increased awareness of the importance of love to understanding relationship phenomena and acknowledgment that an understanding of love has yet to be achieved. This article (*a*) describes one source of increased recognition that the present confusions surrounding love must be transcended if progress is to be made in understanding many relationship phenomena; (*b*) discusses the failure to explicate the love construct, which constitutes the major obstacle to the study of love phenomena; (*c*) discusses the need for a temporal model of love in relationships; and (*d*) suggests that it is important to consider the presence or absence of four types of love, each of which appears to be associated with different causal conditions and thus is likely to have a different temporal course as an adult relationship moves through time.

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INTRODUCTION

Some anthropologists and social psychologists maintain that love is a cultural universal. They believe that at least one variety of love, romantic love, is likely to have appeared in all human groups at all times in human history (see Hatfield & Rapson 2002). As evidenced by ancient human artifacts, it is clear that love, in one form or another, has always been on people's minds. It also has been on some of the finest scholarly minds of every age, with Plato's Symposium, circa 400 BC (Waterfield 2001), being one of the earliest and most often cited examples. Until the second half of the twentieth century, however, and excepting Freud's scant remarks about “normal” as opposed to “neurotic” adult love (1912/1963), psychologists were not among those minds.

The absence of any serious psychological treatment of love had become obvious to many

by the mid-twentieth century, and psychologists were scolded by one of their own for neglecting the discipline's “particular obligation” to further its understanding (Maslow 1954, p. 235). At the time Maslow was castigating psychologists for their neglect of a phenomenon central to people's lives, two of psychology's most talented theoreticians and empirical researchers, Harry Harlow (e.g., 1958) and John Bowlby (e.g., 1969), were, independently, endeavoring to fill the void. At that time, too, the subdiscipline of social psychology was coming into its own. Fritz Heider, whose classic work, *The Psychology of Interpersonal Relations* (1958), was highly influential in shaping the developing field, observed that “Sentiments are such an integral part of interpersonal relations that one hardly need explain why they are to be discussed in a book such as this” (p. 174). By the late 1960s, sufficient social psychological theory and research on the conditions that “attract” one person to another (e.g., as evidenced by an expression of “liking” for that person or a desire to interact with him or her) had been conducted to permit their compilation in the first edition of the *Handbook of Social Psychology* (Lindzey & Byrne 1968) and also in a thin book titled *Interpersonal Attraction* (Berscheid & Walster 1969). The former had nothing to say about love and the latter very little.

Reflecting the prevailing theoretical approach to attraction—social exchange theory, which posits that people exchange rewards and punishments in their interactions—each chapter of *Interpersonal Attraction* focused on a kind of reward shown to generate attraction. The last chapter departed from the pattern. Titled “Courtship and Love” and a mere nine pages in length, it began by saying that “little experimental research exists to tell us about the antecedents of a strong form of interpersonal attraction—romantic love” (p. 105). This apologia was telling in at least three respects: First, it reflected the emphasis on experimentation—as opposed to survey, interview, observational, and other data collection methods—at a time when fledgling social psychology was eager to be accepted by “real”

psychologists who wore white coats and experimented with rats. Second, it reflected the fact that of the many varieties of love, it was romantic love that was, and still is, of primary interest. And, third, it reflected the belief of most attraction researchers that romantic love was “a strong form of attraction.”

Underlying the belief that romantic love was a strong form of attraction was the assumption that such mild forms of attraction as liking and such strong forms as romantic love were simply different points along the same quantitative continuum of positive sentiment and, therefore, the causal determinants of liking and love were the same, differing only in their magnitude. The causal forces that could be generated only weakly in the laboratory to produce liking were believed to be amplified sufficiently in the “real world” to sometimes produce romantic love.

The assumption that the same causes that produce liking also produce romantic love soon came under attack. Rubin (1970) published a romantic Love Scale, partially validating that scale by showing that responses to it and to his Liking Scale were only moderately correlated. Berscheid & Walster (1974), too, had been having their doubts that more and more liking led to anything but a whole lot of liking. They itemized several apparent differences between liking and romantic love that suggested they had qualitatively different determinants and presented their own theoretical stab at causally differentiating the two. The first edition's nine-page chapter grew to two chapters in the second edition of *Interpersonal Attraction* (1978), one titled “Companionate Love” and the other “Romantic Love.” The only difference between companionate love and liking was said to be the intensity of the liking (more in the case of companionate love) and whom the liking was for (someone with whom one's life was “deeply intertwined” as opposed to a “casual acquaintance” in the case of liking). Thus it was proposed that liking and companionate love were on the same causal continuum but that romantic love was a causally different animal.

Efforts by psychologists and other social scientists to understand love steadily increased in

sophistication and intensity throughout the remainder of the twentieth century as theory and research directed toward an understanding of close relationships blossomed (e.g., Kelley et al. 1983/2002). Psychology is a major contributor to the multidisciplinary field of relationship science (Berscheid 1999), for psychologists have increasingly recognized that virtually all human behavior takes place in the context of relationships with others (Reis et al. 2000). The overriding theme of the omnipresent interpersonal relationship context is, as Heider declared, sentiment, positive and negative, just as it is toward all in the human's environment (Osgood 1969).

LOVE AND MARRIAGE

The interpersonal relationship that has historically captured the lion's share of social scientists' attention is the marital relationship, the nucleus of the family, widely believed to be the fundamental unit of society. Sociologists, the first to systematically attack questions concerning the marital relationship, focused primarily on issues concerning the *stability* of marriages. Because the spouses' *satisfaction* with their relationship was assumed to be the prime determinant of marital stability, identification of the factors that influence marital satisfaction became the aim of myriad investigations. From the beginning, spouses' sentiments toward each other were viewed as important in predicting marital satisfaction and stability—but the prediction was not what we might now imagine.

Early on, sociologist Ernest Burgess (1926) fingered romantic love as the likely culprit for much marital unhappiness in his influential article “The Romantic Impulse and Family Disorganization.” The first few decades of the twentieth century had seen a gradual shift in the social definition and basis for marriage—from what has become known as “traditional” marriage as a practical social and economic alliance to “companionate” marriage in which the sentiments aroused by the partner are of prime importance (see Amato & Irving 2006). Many sociologists subsequently followed Burgess's lead. For example, in 1938 and again in its mid-century

second edition, a classic marriage and family text declared that:

...romantic love has been a disturbing, upsetting source of change in the marriage relation, incompatible with the settled, ordered living ultimately required of a family. Wherever romantic love is valued highly, marriages are generically unstable. (Waller & Hill 1951, p. 362)

Shortly thereafter, and at the same time Maslow, Harlow, and Bowlby were decrying the neglect of love in psychology, sociologist William Goode (1959) argued that there existed a “romantic love complex” in the United States—“an ideological prescription that falling in love is a highly desirable basis of courtship and marriage” (p. 42)—and that it deserved serious sociological attention. His contention that romantic love had become strongly institutionalized was subsequently substantiated by another sociologist, William Kephart (1967), who asked a large sample of young men and women if they would marry a person who possessed all the qualities they desired in a spouse if they were not “in love” with that person. “No,” said two-thirds of the men and about one-quarter of the women. By the mid-1980s, at least 80% of both men and women said that they would not marry a person with whom they were not in love even if he or she had all the other qualities they desired in a mate (Simpson et al. 1986). These figures continued to increase, and the importance of romantic love in the contraction of marriage is now found in many other cultures and countries as well (e.g., Levine et al. 1995).

Burgess’s speculation that there was a link between the “romantic impulse” and “family disorganization” had the appearance of being confirmed in the concurrent rise of romantic love as the *sine qua non* for marriage and the divorce rate, the latter beginning in the late 1950s and continuing to increase through the next several decades. As more and more marriages tottered on the brink of dissolution, people cried out for help, but many practicing psychologists, as well as others in the helping

professions, were not prepared to assist. Complaints that practice in marital therapy had outstripped its theoretical and research base were frequently heard, both inside and outside the field. Reviewing research, theory, and clinical practice in marital and family therapy over the decade of the 1960s, Olson (1970) concluded that “The professional gaps between therapists, theorists and researchers have not been effectively bridged so there is a dearth of research or empirical facts to build upon” (p. 270).

Research psychologists then began to enter the picture in earnest, joining their sociological colleagues and those in the developing hybrid field of marital and family studies. Over the next several decades, research on marital satisfaction and stability steadily increased in both quantity and in methodological and analytical sophistication (see Karney & Bradbury 1995). Much of this research focused on the disturbing results of a longitudinal study begun by Burgess and Wallin, in the last phase of which couples were interviewed up to 20 years after their initial interviews (see Pineo 1961). Over their two decades of marriage, spouses’ satisfaction had declined, their intimacy had lessened (e.g., kissing, confiding), and shared activities, including sexual intercourse, had diminished.

Many cross-sectional studies subsequently corroborated the decline in satisfaction over time with the exception that a slight increase was sometimes seen in long-duration marriages. The so-called U-curve of marital satisfaction became a staple in textbooks, holding out hope for those who persevered. However, longitudinal studies, which have grown in number (see Bradbury 1998), have revealed that the slight but significant increase in happiness in long-term marriages was a mirage produced by cross-sectional methodology; that is, highly dissatisfied couples do not appear in the long-term marriage cohort because they have already divorced or separated, leaving those who were more satisfied all along to produce the appearance of an “increase” in satisfaction. It now appears that as a marriage moves through time, spouses’ satisfaction with it continues to decline as far as the eye can see and researchers can

measure (e.g., VanLaningham et al. 2001), although most spouses who remain married still exhibit moderate satisfaction.

Rogge & Bradbury (2002) observe that because the causes of the decline are not yet clear, "...a large proportion of current marital research seeks to explain how couples can begin their marriages with high levels of satisfaction and then, with surprising regularity, grow to become unhappy in a relatively short period of time" (p. 228). Until recently, explanations for the decline focused almost exclusively on the inevitability of conflict and the negative sentiments that accompany it. Accordingly, therapies for distressed marriages have concentrated heavily on increasing the couple's conflict resolution and communication skills.

The assumption that conflict is the sole, or even the prime, cause of marital dissatisfaction has begun to be questioned. Huston and his associates (2001), who followed couples longitudinally from the time they were newlyweds up to 14 years later, found that whereas changes in the marriage over the first two years did indeed foreshadow the marriage's fate, little support was found for the claim that increasing negativity early in the marriage forecasts later failure; rather, what appeared to distinguish couples headed for divorce from those whose marriages remained intact appeared to be disillusionment, "as reflected in an abatement of love, a decline in overt affection, a lessening of the conviction that one's spouse is responsive, and an increase in ambivalence" (p. 237). Recognition is increasing among marital relationship researchers "...that enduringly happy relationships involve more than just the absence of antagonism and strife—affectionate and supportive behaviors are also important" (Caughlin & Huston 2006, p. 132).

How Love Became Forgotten

The almost exclusive focus on conflict as the source of couple distress and marital failure led at least one practitioner to complain that love had become a "forgotten variable" in marital therapy (Roberts 1992) and researchers

Gable & Reis (2001) to ask "Why has relationship research emphasized the causal antecedents and consequences of negative processes such as conflict...to the exclusion of more positive processes?" (p. 189). One answer is that it simply seemed eminently reasonable that the negative sentiments associated with conflict—widely viewed as inevitable in any close, interdependent relationship—should be the principal cause of dissatisfaction, thus obviating the need to look further afield.

Other, less obvious, factors have contributed to the relative neglect of the role of love and other positive sentiments in studies of relationship satisfaction and stability. For example, few investigators have assessed positive and negative sentiment separately in couples' relationships, thereby rendering it impossible to determine the extent to which each independently influences the relationship. Bipolar self-report scales (e.g., the anchor "dislike" or "dissatisfied" at one pole and "like" or "satisfied" at the other) are the usual method of assessing sentiment in attraction and marital satisfaction research despite ample evidence that positive affect and negative affect are relatively independent, not bipolar opposites (e.g., Watson et al. 1999) and thus require two unipolar scales for assessment, as a study by Ellis & Malamuth (2000) illustrates. These investigators found that the "love" and "anger/upset" systems in dating couples were largely independent in the classes of information partners tracked. Differences across relationships in love covaried with differences in facilitation of the partner but not in interference, and differences in anger/upset during conflict covaried with differences in interference but not facilitation.

That positive and negative sentiment may sit side by side in a relationship, each taking center stage at different times and in different degrees and sometimes interacting (see Huston & Chorost 1994), was clear in an early study conducted by Braiker & Kelley (1979). Surprised that when young married couples recounted their courtships they "often referred to feelings of love and belonging while simultaneously describing instances of conflict and ambivalence"

(p. 148), Braiker and Kelley subsequently found that love and conflict were orthogonal characteristics of the couples' growth toward marriage: "There appears to be no relation between the amount of interdependence and love in a relationship, on the one hand, and the amount of negative affect and open conflict, on the other hand" (p. 152). This appears to be true of other close relationships as well. For example, Collins & Laursen (2000) conclude from their review of parent-adolescent and adolescent peer relationships that "conflicts are neither inimical to closeness nor inevitably harmful to either the relationships or the partners in it" (p. 65).

An exception to the use of self-report bipolar assessments of sentiment are studies in which the couples are observed as they interact, often as they discuss a conflict, for it is customary for the partners' oral and nonverbal interaction behaviors to be coded for both positive and negative sentiment. This practice allowed Gottman & Levenson (2000) to conclude that although negativity was predictive of earlier divorces, "The absence of positive affect and not the presence of negative affect. . . was most predictive of later divorcing" (p. 743). In addition, it allowed Gottman (1999) to conclude that a ratio of 5 positive behaviors to 1 negative behavior seems to be characteristic of stable marriages and that "Most marital conflict is about 'perpetual problems' that never get resolved; what matters most is the *affect* around which the problems don't get resolved" (p. 110, emphasis added).

Another contributing factor to the neglect of the role of positive sentiment in marital relationships is that little attention has been paid to ex-spouses' retrospective reports of the reasons for the demise of their marriages—or even practitioners' reports of the problems they confront in attempting to repair marriages. Ex-spouses often mention the "death of love" as the principal cause of their divorces and separations (e.g., Gigy & Kelly 1992, Kayser 1993), and marital therapists, when asked to name the factors most damaging to the relationship, cite "lack of loving feelings" (Whisman et al. 1997). Therapists also name "lack of loving feelings" as one of the

two most difficult problems to treat (alcoholism being the other).

Yet another source of the neglect of the role of positive sentiment in long-term close relationships concerns the subject of this article. Marital researchers Caughlin & Huston (2006) express dismay that despite the fact that most people today contract marriage on the basis of love, "there are shockingly few studies that have assessed constructs such as affectionate behavior and love over time in a marriage" (p. 139). At least part of the neglect must be attributed to the confusing love literature that has not lent itself to the task of tracing the temporal course of love in an ongoing relationship.

THE PROBLEM WITH LOVE

When it comes to the word "love," we all have much in common with Humpty Dumpty (Carroll 1865/1965). When Alice stepped through the looking glass and encountered Humpty, she complained that she didn't know what he meant when he used a word because he used it in so many different ways. Humpty's scornful reply was that each time he used the word it meant just exactly what he chose it to mean, neither more nor less. But, Alice protested, "The question is whether you *can* make words mean so many different things" (p. 94). If the word is "love," we can. And we do.

The Polysemous Nature of the Word "Love"

Linguists recognize that it is rare that any word has only one meaning; all human language is polysemous (D'Andrade 1989). That the word "love" is polysemous in the extreme is often lamented by love scholars. Murstein (1988), for example, complained that "Love is an Austro-Hungarian Empire uniting all sorts of feelings, behaviors, and attitudes, sometimes having little in common, under the rubric 'love'" (p. 33). One word, "love," must serve many different purposes and carry many different meanings. "When I make a word do a lot of work like

that,' Humpty told Alice, 'I always pay it extra'" (Carroll 1965, p. 95). Because there isn't enough gold in Fort Knox to pay "love" what it deserves, it gets its revenge in myriad misunderstandings in our daily lives and in frustrating love scholars.

How many meanings does the word "love" have? Legion. For example, Fehr & Russell (1991) asked college students to list as many types of love as came to mind. After collapsing syntactic variants, 216 kinds of love were named and, of those, 93 were mentioned by more than one person. Love always has a target, and the targets of many types of love named were objects (e.g., love of money). Love for a person usually occurs within a relationship, and several types of love named simply referred to the type of relationship in which the respondents believed a certain kind of love typically appears (e.g., "maternal love").

Love scholars have been as zealous as students in listing types of love—or, perhaps more accurately, creating different names for kinds of love that may or may not be different in any way that matters. The array is daunting, as illustrated in Sternberg & Barnes's (1988) anthology of contemporary theories of love, in which many of the authors presented their own love taxonomies. Rubin's (1988) preface and critique of the volume said what needed to be said then and which, regrettably, remains true now:

... the science of love is still in its infancy. One sign of this immaturity is the fact that investigators represented in this volume share so little of a common vocabulary. Love researchers are saddled with the problem that "love" means different things to different people. ... Because of this problem, many of the contributors to this volume have developed their own taxonomies of love. Each categorizing scheme differs from the next, and there are no ready translation rules from one chapter's formulation to another's. Just as partners with different views of love may find themselves talking past each other. ... I suspect that some of the contributors to this volume may find it difficult to relate to others' perspectives. (pp. viii–ix)

Rubin went on to advise that "Love researchers might do well to move toward a more common vocabulary" (p. ix), but the new edition of this volume (Sternberg & Weis 2006) reveals that this is a feat easier said than done. The vocabulary of love is as diverse as ever, perhaps even more so, as several biologically tinged theories influenced by the evolutionary perspective in psychology have appeared. Whereas most evolutionary theories of love focus on mate selection and sex differences in desired attributes of a mate, some now address love directly and emphasize the presumed evolutionary function of certain varieties of love in furthering species survival (e.g., Kenrick 2006).

EXPLICATING LOVE

Some suspect that the polyglot nature of the love domain reflects the "softness" of psychological science in general and relationship science in particular. However, the problem of explicating—or making more exact—a word often used in a vague way in everyday language or in an early stage of scientific language often is an important stage in the development of a science and of mathematics, as philosopher of science Carnap (1953) discusses and illustrates with the word "probability": "The history of the theory of probability is the history of attempts to find an explication for the prescientific concept of probability" (p. 441). Carnap's description of the "bewildering multiplicity" of meanings, of definitional attempts, and of classificatory solutions associated with the word "probability" resembles the history of the study of "love." Carnap conducted a painstaking conceptual analysis of the meanings in use, concluded that "probability" was used to refer to two fundamentally different concepts, and demonstrated that this was the source of many heated controversies in probability theory.

Love in the Abstract

Some researchers have tried to transcend the messy particulars and define love on an

abstract level, allying love with constructs associated with established bodies of knowledge in the hope they would shed their light on love. Because most theory and research on love has been conducted by social psychologists and because *attitude* is the social psychologists' construct of choice, it is not surprising that many love scholars define love as an attitude—or a predisposition to think, feel, and behave in positive ways toward another (e.g., Hendrick & Hendrick 1986). Much attraction theory and research has usefully applied attitude theory and research to the predisposition to like another (e.g., see Berscheid & Reis 1998), but the application has not been as successful with love, perhaps because some forms of love do not seem to always follow the reward-punishment principles on which attitude theory and research rest.

As opposed to an attitude, most laypersons and some love scholars prefer to think of love as an *emotion*. After surveying over 200 emotion words, Shaver et al. (1987) found that the single word that students were most confident represented an emotion was “love”—even more confident than that “terror” or “elation” are emotions. Whether love qualifies as an emotion depends on how one defines emotion and, unfortunately for love scholars, the emotion literature, like the love literature, is littered with definitions. Emotion theorists Russell & Barrett (1999) observe that “The emotion experts do not agree on what is an emotion and what is not” (p. 805) and conclude, as have several other emotion theorists, that “Emotion is too broad a class of events to be a single scientific category” (p. 805). They observe that theorizing about emotion centers on what they call “prototypical emotional episodes,” which are usually thought of as discrete categories (e.g., fear, anger, love). Because prototypical emotion episodes “are complex packages of components, it is possible to organize them in different ways with each component of the episode providing a separate basis for a taxonomic structure” (p. 807). The numerous taxonomic structures associated with love may be an illustration. In short, emotion theorists have their own problems and are not yet in a position to help love scholars.

The Psychometric Approach

In the 1980s, social psychologists began to use psychometric techniques (e.g., principal components analysis) to develop taxonomies of love by identifying the dimensions that underlie people's descriptions of their experiences in romantic relationships. It should be noted that the term “romantic relationship” is used loosely (see Berscheid & Regan 2005). In addition to marital relationships, the term usually includes current or past dating relationships despite the fact that most college students, who are the respondents in most psychometric studies of love, would be hesitant to describe all of their present and past dating relationships as “romantic” or “loving” (e.g., as opposed to “something to do on a Saturday night”). Thus, the term generally refers to any opposite-sex (or same-sex) relationship in which there is at least some *potential* for strong positive sentiment and sexual attraction although such feelings may not *presently* characterize the relationship and may *never* characterize the relationship. In other words, there may be no romantic love, or any other kind of love, in a “romantic relationship,” as the term is used as the instructed referent for responding to items on a love scale.

Robert Sternberg and his colleagues were among the first to use the psychometric approach to love (e.g., Sternberg & Grajek 1984). Consideration of previous theory and research on love and the results of analyses of people's experiences in romantic relationships led Sternberg to develop the Triangular Theory of Love (e.g., Sternberg 1986). This theory proposes that love has three components—intimacy, passion, and commitment—that, when combined in different proportions, result in eight types of love, including romantic love and companionate love.

Another ambitious attempt to construct a love taxonomy through psychometric means was Clyde and Susan Hendrick's (1986) development of the Love Attitudes Scale (LAS) to measure six types of love. Their subsequent factor analysis of data obtained from

administration of the LAS and a number of other love scales—including Sternberg's scales and Hatfield & Sprecher's (1986) Passionate Love Scale—found several factors underlying students' responses, but these did not correspond well to the six proposed love types, nor did they support Sternberg's triangular theory (Hendrick & Hendrick 1989). The first two factors extracted seemed roughly to correspond to the romantic-companionate love distinction, but the investigators believed it premature to accept this taxonomy.

In another psychometric study, Fehr (1994) conducted a cluster analysis of many types of love that students had named in the Fehr & Russell (1991) study and found two primary groupings: a companionate love grouping that included friendship, affection, and familial love, and a passionate love grouping that included romantic love and sexual love.

The psychometric approach has several limitations, some a consequence of the way it has been used in the study of love. One of these pertains to the romantic relationship with reference to which participants are instructed to respond to the scales. Hendrick & Hendrick (1989) report that in their study, only "approximately half the present sample reported themselves to be in love" (p. 785), a figure comparable to that found in their previous research and presumably that of others. The remainder, then, were responding with reference to a "former partner" (perhaps "former" because no love developed) or, for those who had never been in love, "in terms of what they thought their response would be."

Another limitation, especially for those who hope to track the temporal course of love, pertains to the young college student samples used in psychometric and most other studies of love. Hendrick & Hendrick (1989) comment that "Whether it is love by an older adult definition or not, it is love by the respondents' definition" and "many of the love relationships of today are the marriages of tomorrow" (p. 793). Nevertheless, those who wish to examine love in older relationships, or the temporal course of love as a young relationship ages, need to take a leap of

faith that the results of studies conducted with young adults (mostly women, for men are notoriously hard to recruit for relationship studies) in young relationships are generalizable to older people in older relationships.

Other limitations concern the love scales themselves. A frequent concern has been that scale items often include general relationship statements in addition to items directed toward a specific relationship. For example, the LAS instructions tell respondents that "Some of the items refer to a specific love relationship, while others refer to general attitudes and beliefs about love" (Hendrick & Hendrick 1986, p. 394). A relationship-specific version of the scale was constructed (Hendrick & Hendrick 1990) but it is rarely used.

Yet another limitation concerns the scales available to be included in psychometric studies. The LAS includes subscales for six types of love whereas many other scales are focused on a single type of love and scales for some putative types of love have been constructed too recently for inclusion. Because the nature of the scales one puts into a psychometric analysis determines what one gets out, perhaps it is not surprising that romantic and companionate love often emerge from these studies.

Other limitations of the inductive psychometric approach to psychological phenomena are inherent in the method. Kelley (1992) observes that most sciences begin with commonsense observations and commonsense language to describe those observations. From these, scientists typically try to bootstrap themselves to a more precise descriptive language that allows them to measure the phenomenon of interest and then test hypotheses about its causes and consequences. Because the initial scales to measure the phenomenon usually have their roots in commonsense psychology, these scales not only include items useful in measuring the phenomenon (e.g., relationship satisfaction) but they also unwittingly include elements that refer to the causal conditions and consequences associated with it (e.g., frequency of disagreement). As a result, the measuring instrument constructed to investigate the causes

and consequences of the phenomenon becomes confounded with the very causes and consequences whose investigation the instrument was designed to facilitate. Kelley argues that the psychometric approach to a phenomenon, although useful initially, cannot achieve what a theory that specifies the antecedents and consequences of a specific set of behaviors associated with the phenomenon can.

The Theoretical Approach

Few love taxonomists have constructed fully developed theories for each type of love named in their classification scheme. Kelley (1983/2002) observes that theories of love should include ideas concerning (a) certain observable phenomena theorized to be its characteristic manifestations, (b) the current causes responsible for the observed phenomena, (c) the historical antecedents of the current causes, and (d) the future course of the phenomenon. All of these components must be addressed for each type of love the theorist is focusing on because:

The single word *love* refers to different phenomena. . . . Consequently in both common lore and scientific thought, there are a number of different models of love. It is important to recognize that these models are *not* alternative, competing views of a single phenomenon, each of which historically has been termed *love*. The different models are addressed to the major forms or types of love. They imply that one person's "love" for another should always be qualified as to the type or combination of types it involves (p. 280).

Love scholars have often ignored the imperative that when love is discussed, a descriptor of the type of love addressed must be stated. As Sternberg (1987) concluded in his review of theories of liking and love: "If there has been a problem in theory about love, it has been that theories of part of the phenomenon have tended to be labeled as theories of the phenomenon as a whole" (p. 344).

The Neuropsychological Approach

Social neuroscience, particularly efforts to identify the neuropsychological correlates of love, has captivated the American public, perhaps because it has absorbed the deep-veined biological reductionism of American science and the suspicion that neither the mind nor any other entity can be considered "real"—and therefore subject to scientific analysis—unless it can be shown to have a material, physical basis. Again, romantic love has been the principal focus (see Hatfield & Rapson 2009 for a review). For example, Bartels & Zeki (2000) compared people's cortical activity as they looked at a picture of the person with whom they were "deeply in love" with their brain activity as they looked at pictures of their friends and concluded that "underlying one of the richest experiences of mankind is a functionally specialized system of the brain" (p. 3833), one that seemed to them to have a neural link with euphoric states.

In their critique of brain-imaging research in cognitive and social neuroscience, Cacioppo and his colleagues (2003) observe that interpretation of the psychological significance of fMRI data depends on the nature of the psychological differences between the comparison conditions. Noting, for example, that Bartels and Zeki constructed their contrasts with the belief that the psychological difference between their two conditions was romantic love, they ask: "Is romantic love a single process or a unified construct? Might there be other differences between these conditions? . . . might the participants have had more knowledge about, interest in, sexual attraction to, perceived similarity to, personal investments in, commitment to, and conflicted feelings or anxieties about a romantic partner than a friend?" (pp. 657–58). In other words, brain imaging is not a magic wand that obviates the need for adequate conceptualization and measurement of the psychological constructs whose underlying neurological structure and process is sought.

For these and more technical reasons, Cacioppo and his associates conclude that "the fact that romantic love is associated with

changes in brain activation is not theoretically informative to neuroscientists or social scientists” (p. 658). Nevertheless, the neuropsychological approach to love currently represents an important promissory note for the future—one that apparently can’t come too soon for those who envision sticking their partner’s head under a magnet to verify that they are “really, truly” loved.

LOVE IN RELATIONSHIPS

Relationships are temporal in nature. Like rivers, they flow through time and space and change as the properties of the environment in which they are embedded change. The significance of this fact for love and other relationship phenomena is, to paraphrase ancient sage Heraclitus: “One never steps in the same river twice.” Because relationships are not static, neither are the phenomena that occur within them. The social and physical environments that encase the relationship change, biological changes associated with human aging occur, and so the individual changes, the partner changes, their interactions change, and love, a product of those interactions, also changes.

Many regard the inevitability of changes in the quality, if not also the quantity, of love in a relationship as anathema. People who vow their love will be “forever” usually are not only vowing that their love will be everlasting but also that the *kind* of love they feel today will be the kind of love they will feel tomorrow. Despite the ubiquity of the “forever” vow, people are becoming skeptical. Books that treat the question, such as *Can Love Last?* (Mitchell 2002), sell like hotcakes in college bookstores. The kind of love that people hope will last, and that such books address, is romantic love. For the fortunate, love in a relationship may be everlasting, but it is likely that its quality will change over time. But how it changes, when it changes, and why it changes are questions that relationship scholars, marital or otherwise, need to examine, most effectively through longitudinal studies.

The Need for a Temporal Model of Love

Interest in relationship change in general is growing (e.g., see Vangelisti et al. 2002). For example, Rogge & Bradbury (2002) state that “one central question has begun to guide the course of marital research: How do marriages change?” (p. 228). A developmental view of the relationship not only requires asking “who, what, and when” of changes but also, they argue, an expansion of the range of process and outcome variables examined and movement beyond static theories of marriage that fail to distinguish newlyweds from established couples. Reminiscent of Gertrude Stein’s “A rose is a rose is a rose,” many researchers assume that “A marriage is a marriage is a marriage.” But assuming that young and old relationships have the same dynamics is even worse than the proverbial mistake of comparing apples and oranges, both of which at least belong to the fruit family.

To track the course of love over time in a relationship, researchers must first hack through the love vocabulary thicket and identify which of the many types of love that have been posited it would be useful to track. What is needed is a model that specifies a limited range of varieties of love that are likely to be important in assessing both quantitative and qualitative changes in love as the relationship moves through time. To construct such a model, it may be instructive for love scholars to consider the manner in which personality scholars managed to cut their problem down to size—the problem being hundreds, if not thousands, of personality traits and scales offered over the years—with development of the “Big Five” model of personality.

The five-factor model, according to Costa & McCrae (1992), evolved from (a) consideration of the pervasiveness of certain terms in lay vocabularies of personality, (b) their frequency of appearance in theories of personality, (c) consideration of their similarity in substance if not in name, and (d) their emergence in factor analytic studies of responses to various personality

scales. Given the many types of love posited, any such model of love will not satisfy everyone, for it can neither aspire to include all of the varieties of love that have been posited nor can it capture all the permutations and nuances associated even with those it does include. Similarly, Costa & McCrae (1992) acknowledge that critics of the five-factor model who argue that the five factors cannot account for the full range of personality traits are correct. They point out, however, that the usefulness of the model is that it “helps us specify the range of traits that a comprehensive personality instrument should measure” (p. 653).

FOUR CANDIDATES FOR A TEMPORAL MODEL OF LOVE

At least three varieties of love appear to satisfy the criteria outlined by Costa and McCrae and thus might profitably be assessed in investigations of the course of love within a relationship: (a) Companionate Love, (b) Romantic Love, and (c) Compassionate Love. Although each of these types of love has been given several different names, the many labels associated with each seem to refer to substantially the same variety of love (an attempt will be made to refer to each by only one name here). The fourth candidate, for which the evidence is diaphanous but provocative, is Adult Attachment Love. Each of these types of love appears to be associated with different causal conditions and, thus, over time is likely to be vulnerable to different changes in the relationship’s social and physical environments and, as a consequence, changes in the partners’ sentiments (e.g., Berscheid 2006). Whether none, one, or some combination of the four is experienced at one time or at different times over the span of a relationship is an empirical question that cannot be answered unless each is assessed separately over time in the relationship. As this implies, asking people if they “love” their partner is likely to be minimally informative of the sentiment existing in the relationship and its future course.

Companionate Love

Companionate Love has been called “strong liking,” “friendship love,” “*philia*,” “conjugal love,” and “*storge*.” It appears in virtually all taxonomies of love and has often emerged in psychometric analyses of love scales, as previously noted. It also is prominent in lay vocabularies of love. For example, when the several types of love named by students (Fehr & Russell 1991, Study 1) were subsequently rated for prototypicality (Study 2), companionate types of love received the highest ratings as the best examples of love. From subsequent investigations, Fehr (1994) concluded that “for laypeople, companionate varieties of love, such as friendship love or familial kinds of love capture the meaning of the concept” (p. 329). Grote & Frieze (1994), who developed a friendship-based love (FBL) scale applicable to both young and old adults, define friendship-based love as “a comfortable, affectionate, trusting love for a likable partner, based on a deep sense of friendship and involving companionship and the enjoyment of common activities, mutual interests, and shared laughter” (p. 275).

Theory and research on adult friendship development is sparse. Nevertheless, and as early sociologists believed, Companionate Love may be the “staff of life” for many relationships and a better basis for a satisfying marriage than romantic love. For example, Gottman’s (1999) research and marital therapy experience led him to conclude that the foundation of what he calls “a sound marital house” is friendship laced with fondness and admiration. Orbach et al. (1993), who asked newlyweds to talk about their relationship history up to the time of their marriage and then assessed their marital satisfaction two years later, were surprised that “having a highly romantic reconstruction of one’s courtship does not predict marital well-being . . . Instead, only a generally positive tone without romanticism seems to be important” (p. 824).

Grote & Frieze (1994) administered their FBL scale to a large sample of older married adults and found that Companionate Love was more highly correlated with relationship

satisfaction, perceived importance of the relationship, and respect for and feelings of closeness to the partner than was Romantic Love (although the latter also independently contributed to relationship satisfaction). When the FBL was administered to college students, Companionate Love was again significantly more related than Romantic Love to relationship satisfaction—and also to courtship progress.

Causal conditions. Companionate Love follows the pleasure-pain principle; we like those who reward us and dislike those who punish us. Although the universe of rewards one person may confer upon another is vast, the interpersonal attraction literature has identified those especially potent in generating liking (see Berscheid & Reis 1998). These include *similarity* along virtually every dimension, including attitudes, values, and educational and socioeconomic background. We also tend to like people who are *familiar* (and, therefore, unlikely to do us harm). Similarity, of course, contributes to feelings of familiarity, as does increased exposure to the other, usually through physical proximity. *Expressions of esteem* and validation of one's worth are valuable to others (again signaling likelihood of help, not harm) and they generally inspire liking in return. We also tend to like *physically attractive* people for several reasons, including our inference that they possess other favorable but less visible characteristics.

Friendships, and the intimacy they entail, usually grow through the process of mutual self-disclosures that meet with positive and validating responses from the partner, as Reis & Shaver's (1988) theory of intimacy predicts. Some friendship investigators have concluded that friendships serve mostly socioemotional functions and that joint participation in leisure and recreational activities is particularly important in fostering friendship.

Temporal hypotheses. From his review of the friendship literature, Hays (1988) concluded that friendships are relatively slow to develop. Once developed, it is often assumed

that Companionate Love is stable. For example, after stating that the Storge subscale of the LAS measures an individual's love style of merging friendship and love, Hendrick & Hendrick (1986) comment: "There is no fire in storgic love; it is solid, down-to-earth, and presumably enduring" (p. 400). However, a rare longitudinal study that measured Companionate Love in newlywed couples shortly after marriage and one year later found that it had declined for both husbands and wives in the same degree that their Romantic Love had declined (Hatfield et al. 2008). The presumed endurance of Companionate Love deserves further test, for the causal conditions conducive to liking and friendship are not impervious to changes in the partners as a result of changes in their social and physical environments.

Another popular temporal hypothesis is that in romantic relationships, such as marriage, Romantic Love eventually is replaced by Companionate Love. This hypothesis was advanced early by Walster [Hatfield] & Walster (1978) and even earlier by Reik (1944/1972), who declared that, as time passes, all that people can expect from the fire of romantic love is the "afterglow" of dying embers. Evidence is accumulating, however, that Companionate Love may be important from the beginning and, in fact, may be vital to the development of Romantic Love.

Romantic Love

Romantic Love also has many aliases, including "passionate love," "erotic love" (or "Eros"), "addictive love," "obsessive love," "deficiencylove," and being "in love." Like Companionate Love, it is prominent in lay vocabularies, appears in virtually all love taxonomies, and often emerges from psychometric analyses of love scales.

Causal conditions. On the word of no less an authority than Albert Einstein, scholars can eliminate gravitation as a cause of romantic love. Commenting on an Englishman's theory that as the earth rotated, gravity caused people

to be upside-down or horizontal at times and to do foolish things like falling in love, Einstein declared that “Falling in love is not the most stupid thing people do but gravitation cannot be held responsible for it” (Isaacson 2007, p. 423).

Freud (1912/1963) believed that this form of love had two components. Contrasting “neurotic love” with “normal love” in adults, he stated simply and without further elaboration, “To ensure a fully normal attitude in love, two currents of feeling have to unite—we may describe them as the tender affectionate feelings and the sensual feelings. . . .” (p. 49). Virtually all theories of Romantic Love do link it to the sensual feelings, specifically, the experience of sexual desire (see Berscheid & Regan 2005, p. 334–35, for a listing), and most laypersons believe that an individual cannot be “in love” with another unless sexual desire for that person is experienced (Regan 1998).

As for Freud’s other component, love researchers have been slow to recognize the role that “affectionate feelings,” such as those associated with Companionate Love, play in Romantic Love, perhaps because the early Companionate Love-Romantic Love distinction was often translated as Companionate versus Romantic Love. In the early 1990s, however, Hendrick & Hendrick (1993) noticed that the most frequent theme of college students’ freeform accounts of their romantic love relationships was Companionate Love and that almost half of the students named their romantic partner as their closest friend. It should be parenthetically noted that this may be an illustration of cultural shifts making love a moving target (Hatfield & Rapson 2002), for it seems doubtful that a strong association between Companionate and Romantic Love would have been found before women shared similar educational and occupational backgrounds and aspirations with men, thereby providing the fertile soil of similarity in which friendships develop.

Evidence that both sexual desire and friendship may be jointly necessary and sufficient for today’s college students to conclude they are “in love” with another was obtained by Meyers & Berscheid (1997), who asked young adults to list

all persons in their social network whom they “loved,” were “in love,” were “friends,” and all for whom they felt “sexual desire.” The person named in the “in love” category (usually only one person, perhaps reflecting the cultural belief that one can be in love with only one person at a time) was almost always also named in the “friend” category and in the “sexual desire” category; that is, unless a person was named in *both* of these categories, each of which usually contained several other people, it was unlikely that respondents would report that they were “in love” with that person.

Temporal hypotheses. If Romantic Love is a felicitous combination of Companionate Love and sexual desire, then any weakening of the causal conditions associated with Companionate Love or those associated with sexual desire for the partner should weaken Romantic Love. Whereas many of the causal conditions associated with Companionate Love are known, those associated with sexual desire are not. A healthy body and a physically attractive partner figure prominently as causal conditions (see Regan & Berscheid 1999), and Freud (1912/1963) proposed another: “It is easy to show that the value the mind sets on erotic needs instantly sinks as soon as satisfaction becomes readily obtainable. Some obstacle is needed to swell the tide of the libido to its height. . . .” (p. 57). Obstacles frequently generate emotion and passion.

“Passionate love” and “romantic love” appear to be synonymous in laypersons’ conceptions of love (see Fehr 1994). Most scholars also use the terms interchangeably, but Hatfield (e.g., 1988) prefers the former phrase, perhaps because she emphasizes the emotional quality of romantic love. The word “passion” denotes excitement and physiological arousal, known to be causally associated with the experience of the intense emotions that are often observed in people experiencing the thrall of Romantic Love. Excitement and arousal, in turn, usually are generated by surprise and uncertainty.

Surprise and uncertainty tend to be characteristic of any new relationship. Because the partner is not well known, expectancies about

the partner's attributes and behaviors are often violated. Berscheid's (1983/2002) emotion-in-relationships model posits that violations of expectancies about the partner usually have implications for the individual's well-being and, as a consequence, are likely to occasion an emotional experience, which may be either positive or negative depending on whether the individual believes the violation has enhanced or diminished his or her well-being. When partners surprisingly facilitate personally valued activities and the achievement of desired goals, well-being is enhanced and positive emotion is likely to be experienced. If happy facilitative surprises occur in a new relationship, positive emotions are likely to be experienced, the relationship will be perceived to promote well-being, and the partners will try to maintain it. When, however, partners unexpectedly interfere with the pursuit of valued activities and goals, well-being is jeopardized, negative emotion is likely to result, and, if the relationship is new, it may be terminated.

As the relationship ages, the partners' mutual interdependencies are likely to grow in number and complexity, with the associated expectancies having become so deeply entrenched that they have fallen from awareness. In most established relationships, the partner's facilitative behaviors are taken for granted and, because they no longer surprise, they no longer have the power to arouse strong positive emotion. Now it is the partner's violation of those facilitation expectancies that have the power to surprise; failures to facilitate as expected are likely to be perceived as threatening to well-being and negative emotion is likely to result. Partners in established relationships who do not behave as expected once again become strangers, as is reflected in the word "estrangement," often used to describe a disintegrating relationship. Most partners in long-term relationships do behave as expected, however, and, as a consequence, the partners seldom arouse each others' intense emotional passions—either positive or negative.

Baumeister & Bratslavsky (1999) propose that degree of passion is a function of a rapid

change in intimacy, where "intimacy" is defined similarly to Companionate Love and to Reis & Shaver's (1988) definition of intimacy (i.e., knowledge and understanding of the other combined with communication of a strong positive attitude toward the other). These theorists endorse the generally accepted view that intimacy usually grows gradually, but in those instances in which it rises rapidly, passion should result; in addition, citing Berscheid's model, they predict that when intimacy stabilizes, the relationship should become passionless. Aron & Aron (1986), too, believe that certain rapid changes in a new relationship, namely, the rapid "expansion of the self" or incorporation into the self-concept of the qualities of the other, produce the euphoria often associated with falling in love.

As the relationship ages, then, uncertainty and facilitative surprises wane, predictability grows, erotic satisfaction becomes readily available, and thus the emotional experiences that are associated with Romantic Love should wane. With respect to sexual activity, if not desire, national studies are consistent in showing that sexual intercourse in married couples declines with the partners' age and length of marriage. Among the factors claimed to be responsible is "a reduction in novelty associated with being with the same person for a long period of time," a conclusion based on evidence that older partners in young relationships show higher sexual activity than do their cohorts in older relationships (Sprecher et al. 2006, p. 467).

Although Companionate Love is believed to be relatively slow to develop, sexual desire may sometimes provide the motivational spark that initiates the relationship and sustains it until friendship combines with sexual desire to produce Romantic Love. Gillath et al. (2008, Study 1) found that when sex-related representations (e.g., an erotic photo) were subliminally primed, relationship-related motives were activated, "causing people to become more interested in, or inclined, to engage in behaviors that would foster initiation and maintenance of a more extended couple relationship" (p. 1067).

Several investigators have attempted to plot the course of Romantic Love through cross-sectional studies that examine self-reports of love in marital relationships of varying length. For example, Montgomery & Sorrell (1997) administered the LAS to four groups whose marriages were of varying durations and found that neither LAS Eros subscale scores nor Storge subscale scores differed across groups. As in similar cross-sectional studies of the temporal course of romantic love, the older marriages were intact, and it is not known how many marriages in the older cohort had failed, possibly for lack of either Romantic Love or Companionate Love, nor were the initial levels on the two dimensions of the older couples known. Knowledge of the temporal fate of love requires longitudinal methodology.

In their longitudinal study, Hatfield and her associates (2008) found that a year's time had significantly eroded Romantic Love, as previously noted. In another rare, albeit short-term, longitudinal study, Tucker & Aron (1993) measured passionate love and marital satisfaction two months before and eight months after three transitions (e.g., engagement to marriage). Passionate love declined over all three transitions (but a moderate level remained). The passionate love pattern remained mostly unchanged when marital satisfaction was controlled, but the similar pattern found for satisfaction disappeared when passionate love was controlled, leading these investigators to conclude, "This asymmetry suggests that passionate love, and not marital satisfaction, may be the key variable associated with any differences over the stage of family life cycle" (p. 142).

Compassionate Love

Compassionate Love has several aliases, including "agape," "caregiving love," "selfless love," "being-love" (love for another's being), "sacrificial love," "pure love," "true love," "unconditional love," "altruistic love," and, more recently, "communal responsiveness." Although featured in religious and many love literatures

for thousands of years and despite it being the first factor extracted in the construction of the LAS scale with college students (Hendrick & Hendrick 1986), systematic examination of Compassionate Love is relatively recent.

Interest in caregiving in ongoing relationships has grown for several reasons, including its role in relationship satisfaction and stability (e.g., Pasch & Bradbury 1998). Because reciprocity of negative behavior is the hallmark of unhappy relationships, several researchers have highlighted the importance of the partners' ability to restrain the tendency to respond to negativity with more negativity (e.g., Gottman 1999, Rusbult et al. 1998) and to overlook the partner's negative behavior or otherwise respond with Compassionate Love to the partner's shortcomings.

In addition to the LAS Agape subscale, at least two other scales are available to measure Compassionate Love in ongoing relationships: Kuncle & Shaver's (1994) Caregiving Scale and, more recently, Sprecher & Fehr's (2005) Compassionate Love Scale, based on their definition of Compassionate Love as "an attitude toward other(s). . . containing feelings, cognitions, and behaviors that are focused on caring, concern, tenderness, and an orientation toward supporting, helping, and understanding the other(s), particularly when the other(s) is (are) perceived to be suffering or in need" (p. 630).

The term "communal responsiveness," coined by Clark and her associates (e.g., Clark & Monin 2006), reflects growing interest in the interactional dynamics of Compassionate Love in ongoing adult relationships (e.g., Cutrona 1996, Feeney & Collins 2004). As opposed to "exchange" relationships in which benefits are given to another on a quid pro quo basis (e.g., see Clark & Mills 1979), mutual communally responsive relationships are defined as those in which the partners attend to one another's needs and welfare and are confident that the other will do the same when their own needs arise. Repeated acts of mutual "communal responsiveness" that are noncontingent (i.e., given without demanding or expecting future benefits in return) are theorized to contribute

to a sense of love in all types of relationships—friendship, family, and romantic.

Causal conditions. Bowlby (e.g., 1973) theorized that humans possess an innate caregiving system along with its complement, an attachment system. Despite the flood of research on adult attachment, the caregiving system, especially as it may be manifested in adult relationships, has been relatively neglected. This lacuna is surprising given that Bowlby theorized that people become attached to an individual who provides care in times of need and generates feelings of safety and security, a “safe haven” and a “secure base” from which to explore the environment.

Like Bowlby, Clark & Monin (2006) believe that acts of communal responsiveness provide the partner with an ongoing sense of security, which, they hypothesize, increases the likelihood that he or she will be communally responsive in turn. Consistent with this hypothesis, Mikulincer et al. (2005) have shown experimentally that increasing an individual’s felt security increases the likelihood of compassionate behavior toward another.

Reis et al. (2004) hypothesize that what will be perceived as “responsive,” and presumably what kinds of caregiving acts are likely to increase felt security, depends on the type of relationship and its place in a triangularly shaped hierarchy of communal relationships—spouses and children at the peak, followed in descending order by parents, close friends, casual friends, acquaintances, and strangers at the broad base. It is the broad stranger base that heretofore has been the primary focus of the vast social support literature, which primarily addresses questions about when people will aid strangers in need and the effects of support on the recipient. Sprecher & Fehr (2005) found that scores on their Compassionate Love Scale were lowest for strangers, higher for close friend relationships, and highest for dating and marital relationships, consistent with Reis et al.’s (2004) communal relationship hierarchy and also with Gillath et al.’s (2008, Study 2) finding that a subliminal sexual prime increased the

willingness of people in relationships of varying length (3 months to 40 years) to sacrifice for their romantic partner’s benefit.

Clark & Monin (2006) believe that for a relationship to be communally responsive, responses to the partner’s needs not only must be noncontingent but both partners must be willing to receive care. Not all partners are. Not only is support sometimes unwelcome but it also may exacerbate rather than ameliorate distress. Some of the conditions under which such negative outcomes of care can be avoided have been identified (e.g., Bolger et al. 2000, Gleason et al. 2003), but the dynamics of caregiving in ongoing relationships are likely to be complex. Iida et al.’s (2008) examination of couples’ daily reports of giving and receiving support found that whether support was given in times of need and how it was received was a function of many factors, including characteristics of the providers (e.g., positive mood), the recipients (e.g., requests for support), and their relationship (e.g., their support history).

Temporal hypotheses. Clark & Monin (2006) note that research indicates that “most people are quite adept at immediately behaving communally when they desire a new friendship or romantic relationship” (p. 212) and that most spouses endorse communal norms and try to abide by them, at least initially. However, conflict and stress often cause partners to start calculating fairness and equity, which has been shown to lower marital satisfaction (e.g., Grote & Clark 2001). They believe that whether a communal orientation continues in a relationship depends importantly on each individual’s trust that the partner truly cares about the individual’s welfare and, also, the partner’s acceptance of care.

More research needs to be conducted on Compassionate Love, especially in older relationships with older partners, who often are experiencing the infirmities and frustrations of biological aging, as well as in relationships, both young and old, in which malevolent fate plunges one of the partners from “better” to a permanent “worse.” It is one thing to

exercise Compassionate Love when it is rarely required and/or when it requires small and temporary sacrifice and quite another when Compassionate Love must be sustained at great personal cost for long periods of time and selfpreservation needs arise (see Bolger et al. 1996). Investigation of when sacrifice is harmful, both to the caregiver and the relationship, is needed (e.g., see Whitton et al. 2002).

Adult Attachment Love

Both Harlow (e.g., 1958) and Bowlby (e.g., 1979) believed that humans possess an innate behavioral system that is activated by threat and leads them to form an attachment to a familiar person who provides comfort and protection. Harlow believed attachment to be a form of love, and Bowlby defined attachment as a “strong affectional bond” to a specific person, whom he termed an “attachment figure.” Attachment to a specific person is revealed when the individual seeks proximity to that person when threatened. It also is revealed when the individual experiences distress when involuntarily separated from that person and grief when the loss is permanent, for the individual views that person as unique and irreplaceable.

Bowlby’s theory of attachment and his belief that “attachment behavior is a normal and healthy part of human nature from the cradle to the grave” (1973, p. 46) spawned a great deal of research, mostly by developmental psychologists on humans recently emerged from the cradle and lately by social psychologists on those closer to the grave. The latter has focused on individual differences in “adult attachment style,” or differences in adults’ orientations to close relationships, inspired by classification systems of differences in the quality of children’s attachments to their caregivers. The normative implications of attachment theory for adults have been relatively neglected (see Simpson & Rholes 1998), despite the fact that attachment theory is “first and foremost a normative theory” (Hazan & Shaver 1994, p. 17).

Most normative adult attachment research has been influenced by Ainsworth’s (1985)

hypothesis that some of the affectional bonds people form after childhood “may be characterized either as having attachment components or at least meeting some of the criteria that distinguish attachments from other bonds” (p. 792). She noted that although parents remain attachment figures for many adults, certain others may become attachment figures as well, including close friends, mentors, and partners in a long-term sexual relationship such as marriage. With respect to this last, Ainsworth (1985) speculated that over the course of a long-term sexual relationship, “an attachment relationship tends also to be built up, the attachment and caregiving components interacting to make for a reciprocal give-and-take relationship” (p. 804). She cautioned, however, that the caregiving and attachment components may not be symmetrical and reciprocal in all relationships.

The conjecture that partners in long-term sexual relationships may alternate between giving care and receiving care, which may result in each partner becoming an attachment figure for the other, captured the attention of Shaver and his associates (e.g., 1988), who view Romantic Love as an integration of the attachment, caregiving, and sexual behavioral systems originally posited by Bowlby. Normative adult attachment research has continued to focus on romantic relationships. Hazan & Zeifman (1999) state, in fact, that “The importance of the question—whether romantic bonds are attachments in the technical sense—can hardly be overestimated” because “The entire field of adult attachment research has been constructed on the premise that they are” (p. 336).

Such a premise might have startled Bowlby (1979), for he warned that “by no means all affectional bonding between adults is accompanied by sexual relations; whereas, conversely, sexual relations often occur independently of any persisting affectional bonds” (p. 70). Ainsworth (1985), too, cautioned that “a relationship or a class of relationships may be important to an individual without implying either an affectional bond in general or an attachment in particular” (p. 800).

Nevertheless, many have enthusiastically embraced the assumption that romantic partners, including those in dating relationships of short duration, are each other's "attachment figures." This assumption is in dire need of empirical scrutiny.

Causal conditions. It is not known how usual it is for adults to display in any relationship, romantic or otherwise, the defining features of attachment to their partners—proximity maintenance, safe haven, secure base, and separation distress. It also is not known how adult attachments form. The provision of care from another in time of need—that is, Compassionate Love consistently received from another over a long enough time-span that the individual feels confident of the availability of that love, as Clark & Monin (2006) describe, may be the primary process. Fraley & Davis (1997), for example, found that associated with young adults naming another as an attachment figure were "factors that generally promote the development of attachment formation in infancy (such as caregiving, trust, and intimate contact)" (p. 131).

The sustained receipt of Compassionate Love from another in times of need usually is accompanied by a growth of familiarity with the caregiver. Bowlby (e.g., 1979, p. 115) believed that familiarity was of immense importance in the lives of animals and humans because familiarity signals safety and security, particularly important to people who are sick, tired, threatened, or otherwise experiencing stressful circumstances, and for this reason he emphasized the importance of familiarity in attachment formation. Indeed, what distinguished Bowlby's theory from the reinforcement theories prevalent at the time was his insistence that not all affectional bonds follow reinforcement principles—that on the basis of familiarity even abused children and battered adults may form attachments to their abusers and vigorously resist separation from them, an observation well documented by social workers. The role of familiarity in adult attachment formation is not clear. It seems likely, however, that the frequent receipt of care from another and the growth of

familiarity with that person over time may be jointly necessary and sufficient for an attachment to develop.

Temporal hypotheses. If Attachment Love grows at all in a relationship, it appears to do slowly and stealthily, under the radar of consciousness. In his studies of separated and recently divorced marital partners, Weiss (1975) observed what he called "the erosion of love and the persistence of attachment" (p. 36). Some of the separated, many of whom instigated the separation themselves and currently felt strong negative sentiment for the partner, nevertheless periodically, and inexplicably to them, felt a compelling urge to re-establish proximity to their now disliked, even hated, partner. Weiss concluded, "Even when marriages turn bad and the other components of love fade or turn into their opposites, attachment is likely to remain" (p. 44) because the attachment figure represents feelings of "at-homeness and ease"—a safe haven—much needed under the stress of divorce. Moreover, and as Bowlby theorized, Weiss (1988) observed that adult attachments do not seem responsive to the absence of reinforcement—they persist "even when the attachment figure is neglecting, disparaging, or abusive" (p. 40).

It was Weiss's impression that attempts to restore proximity to the now disliked partner generally were experienced by individuals who had been with their partner for at least two years. The temporal hypothesis that attachment takes time to develop, possibly two years in most relationships, was investigated by Hazan & Zeifman (1999), who questioned young adults about their secure base (e.g., "Whom do you feel you can always count on?") and separation distress (e.g., "Whom do you hate to be away from?"). Those involved in romantic relationships of at least two years duration tended to name their romantic partners in answer to both questions, but those in shorter-term romantic relationships and those without partners mostly named a parent.

The identity of the persons named as attachment figures has been addressed by several

researchers. Fraley & Davis (1997), for example, found parents to be the primary attachment figures of most in their college student sample, but the students seemed to be in the process of transferring some attachment-related functions to their best friends and romantic partners, as Hazan and her colleagues have hypothesized (see Hazan & Shaver 1994). However, Trinke & Bartholomew (1997) found that, on average, young adults named over five attachment figures, and concluded that “a focus on romantic partners is limited: almost everyone in the current sample had more than one attachment figure, and [romantic] partners were primary figures for only one-third of the individuals” (p. 622).

To determine if Compassionate Love is essential to the development of Attachment Love in an adult relationship and, if so, its frequency of receipt over differing time periods requires separate measurement of Compassionate Love and Attachment Love. Ainsworth’s (1985) warning that the caregiving and attachment components may not be symmetrical and reciprocal in relationships—or, of course, may not be present at all—also demands their separate measurement. Vormbrock (1993), who studied spouses repeatedly separated in wartime or because of job demands, found that spouses left at home typically showed attachment activation whereas leavers showed caregiving activation. She concluded, “The differential separation reactions of home-based and traveling spouses suggest that these systems are indeed distinct, and feelings related to the attachment system and those related to the caregiving system need to be assessed separately” (p. 140). It also suggests that tests of Hazan & Shaver’s (1994) hypothesis that “prototypical” romantic relationships involve “the integration of three behavioral systems—attachment, caregiving, and sexual mating” requires measuring each of the associated types of love separately (and perhaps adding Companionate Love, absent from the hypothesized prototype), for separate measurement over time would permit observation of the integration processes presumed to occur.

Given the volatility of young romantic relationships and the rapidity with which old partners are discarded and new ones found, it seems improbable that all, or even many, short-term romantic partners truly are attachment figures as Bowlby and Ainsworth defined an attachment figure—a person regarded as unique and irreplaceable. It also is questionable whether all long-term romantic partners are attachment figures. These are empirical questions, but their investigation is not likely as long as it is assumed that romantic partners are attachment figures and as long as the most likely process to result in Attachment Love—the receipt of Compassionate Love over time—is not assessed over time and independently of the other forms of love that may be present in the relationship.

SUMMARY COMMENTS

Many psychologists have responded to Harlow, Bowlby, and Maslow’s passionate and persuasive pleas for a scientific understanding of love, for it is a prepotent force in human affairs, as is its antithesis, hatred. The latter, in its many forms, including aggression, conflict, and hostility, has received far more attention from psychologists than love has, even in the study of close relationships, perhaps because its harmful effects are more visible and seemingly in more urgent need of understanding and control than are the presumed salutary effects of love. Indeed, love, which is truly all around us in the small groups in which people live, tends to be taken for granted—until it inexplicably evaporates, changes form, or metamorphoses into enmity.

The question, then, is not “why” but rather “how” to advance the systematic study of love. The impoverished vocabulary people have to describe their strong positive sentiments for another has made the conceptualization and measurement of love difficult. Although a constructionist view of love probably is the correct one—no one loves another exactly the same at two different points in time and no two people love in exactly the same way (or, it should be noted, as the recipient wishes to be loved)—overlapping love taxonomies as

well as psychometric studies sketch sufficient commonalities to postulate several major forms of love, each of which appears to be associated with different causal conditions and behavioral manifestations that remain mostly the subject of anecdotal comment, isolated hypotheses, and speculative conjecture, unbound and unarticulated by formal, empirically testable theory.

It seems likely that the cataloging of putative types of love and inductive psychometric studies have reached their points of diminishing return. New approaches to the study of love are needed. The scientific dictum that the dynamics of a phenomenon are best understood when it is in the process of change and the fact that relationships are temporal, and thus the phenomena within them change over time, suggest that a temporal approach to the study of love would be profitable. The fruits of previous taxonomic and psychometric efforts are sufficient to specify a limited number of types of love for the development of a comprehensive instrument to measure love over time in a relationship. Because conceptualization and theory have been sparse, it should be noted that few of the available love scales are “pure”; each often contains items clearly more relevant to types of love other than that reflected in the scale’s label. An early example is Hatfield’s (1988) comment that Rubin’s (1970) Love Scale, still often used to measure Romantic Love, seemed to her, as it subsequently has to others, to be a Companionate Love scale!

The development of a comprehensive instrument, in concert with adequate conceptualization of each type of love within an encompassing theory, would facilitate the test of causal hypotheses about each, knowledge of its likely temporal course, and the differential vulnerability of each to negative sentiment, which arises in any close interdependent relationship. It also would provide information about if and how the types of love become integrated, as Hazan & Shaver (1994) posit.

Four candidates for such an instrument, and the need for a theory that incorporates all of them, have been suggested here with no expectation that such an instrument will fully describe any one individual’s sentiment for another. It should, however, facilitate the identification of normative trends in the patterns of “marbling” of the four types of love over time in a relationship and their correspondence to the causal conditions theorized to be associated with each. Empirical tests of a temporal theory of love will require longitudinal methodology and, because love is not the exclusive province of romantic relationships, the investigative terrain must be expanded to include the other types of relationships that play a significant role in people’s lives, especially long-term family relationships and friendships. It is in these that one can expect the preeminent role of Compassionate Love in enduring relationships, long overlooked by love scholars in their focus on Romantic Love and short-term relationships, to be revealed.

DISCLOSURE STATEMENT

The author is not aware of any biases that might be perceived as affecting the objectivity of this review.

ACKNOWLEDGMENTS

The author wishes to express her appreciation to Elaine Hatfield, who has inspired many to study love, for her comments on this article, as well as for the helpful advice of Harry Reis, John Holmes, Jeff Simpson, Beverly Fehr, and Pamela Regan.

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