Love in Contemporary Psychology and Neuroscience

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Bio

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1. Introduction

The three most central questions in recent psychological and neuroscientific approaches to love are: (1) the question of why people fall in love, (2) the question of what love is, and (3) the question of what causes unhealthy love to develop. This chapter provides an overview and discussion of the main answers to these questions in psychology and neuroscience.

As we will see, some of the main factors that cause people to fall in love are: (1) a readiness to fall in love (Aron, et al. 1989), (2) the perceived potential for self-expansion (Aron & Aron, 1986; Aron, et al. 1989), and (3) the novelty, unpredictability and mystery the other person is perceiving as introducing (Dutton & Aron, 1974). All three factors line up with findings in the neuroscience of love. Neuroscientists have shown that people who fall in love have compositions of obsession and reward chemicals that are similar to those found in individuals with obsessive-compulsive disorder (Marazziti et al., 1999).

Falling in love, of course, is different from continuing to be in love. How likely romantic love is to endure is determined by a different set of factors, including feelings of familiarity and similarity between the partners' attitudes and core values (Acevedo & Aron, 2009). This is manifested neurochemically in more stable brain levels of mood and pleasure neurotransmitters as well as an increase in the brain's levels of bonding chemicals (Zeki, 2007).

Newer theoretical and empirical studies of the nature of love have lead to several theories of love. One fundamental issue turns on the question of whether love is an emotion or an attribute of a loving relationship. Theories that take love to be an attribute of a loving relationship tend not to be comprehensive enough to capture both reciprocated and unrequited love. This raises a potential challenge for theories that focus too much on relationships in their characterization of love. Most of these theories, however, can be modified to focus more exclusively on the emotions the lover exhibits toward a real or imagined lover and toward the potential for a relationship. Sternberg's (1986) triangular theory of love is a case in point.

Although it is originally formulated in terms of three relationship attributes, viz. intimacy, passion and commitment, it can be cashed out in terms of the corresponding emotions inhabited by the lover.

Even when cashed out in this way, however, the triangular theory does not answer the question of what causes unhealthy love to develop. A more successful account of why unhealthy love develops has been provided within the framework of attachment theory, as originally developed by John Bowlby (1973) and Mary Ainsworth (Ainsworth, et al. 1978). Attachment theory takes people's mental representations of loving relationships--representations that in some cases have been formed in early childhood and in other cases in later relationships--to predict whether people are likely to form healthy or unhealthy love relationships and feel love in healthy or unhealthy ways. Attachment theory by itself cannot fully account for romantic love (Hazan & Shaver, 1987; Shaver & Hazan, 1987). But when supplemented by two additional components characteristic of healthy romantic love (a desire to engage in caregiving and a feeling of sexual attraction), it provides a plausible theory of romantic love (Hazan & Shaver, 1987; Shaver & Hazan, 1987).

Attachment theory was originally developed as an alternative to psychoanalytic approaches to love (Bowlby, 1973). Like attachment theory, psychoanalytic approaches describe love in terms of early childhood experiences or past relationships (Bergmann, 1988). Traditionally, psychoanalytic approaches were more intensely focused on the sexual interactions between parents and child. However, newer psychoanalytic approaches have largely become desexualized (Green 1995; Stein 1998a,b). The sexual component of the theories are typically treated as metaphors that describe attachment patterns. New psychoanalytic approaches are thus similar to attachment theory in their focus and explanatory power (Fonagy & Target, 2007; Blatt, SJ & Levy, 2003).

In this chapter I shall focus primarily on romantic love but contrast it with other kinds of love where appropriate. In the first section I will look closer at the question of why people fall in love. I will then address the questions of whether love is best understood as an emotion or an attribute of a loving relationship. I will then turn to the theory of love advocated within the framework of attachment theory. Finally, I will look at some traditional and contemporary psychoanalytic approaches to love.

2. Why Do People Fall in Love?

One question that has received quite a bit of attention in the psychological literature on love is that of why people fall in love. One promising answer to this question is that romantic love occurs when the attributes that generate general attraction together with certain social factors and circumstances that spark passion are particularly strong. The general attraction attributes are as follows (Aron, et al. 1989). 1. *Similarly*. This includes similarity of people's belief sets and to a lesser extent similarity of personality traits and ways of thinking. 2. *Propinquity*. This includes familiarity with the other, which can be caused by having time spent together, living near each other, thinking about the other or anticipating interaction with the other. 3. *Desirable characteristics*. This general attraction attribute is particularly focused on an outer physical

appearance that is found desirable and to a lesser extent on desirable personality traits. 4. *Reciprocal Liking*. When the other person is attracted to you or likes you, that can increase your own liking.

Two further factors that can help explain why people fall in love turn on mate selection (Aron, et al. 1989). 5. *Social Influences*. The potential union satisfying general social norms and acceptance of the potential union within one's social network can contribute to people falling in love. Or if a union does not satisfy general social norms or is not accepted by one's social network, this can result in people falling out of love. 6. *Filling Needs*. If a person can fulfill needs for companionship, love, sex or mating, there is a greater chance that the other person will fall in love with him or her.

Five additional factors seem to be required for the love to be truly passionate as opposed to being a kind of friendship love (Aron, et al. 1989). 7. *Arousal/Unusualness*. Being in an unusual or arousing environment can spark passion, even if the environment is perceived as dangerous or spooky (Dutton & Aron, 1974). 8. *Specific Cues*. A particular feature of the other may spark particularly strong attraction (e.g., parts of their body or facial features). 9. *Readiness*. The more you want to be in a relationship, the lower your self-esteem and the more likely you are to fall in love. 10. *Isolation*. Spending time alone with another person can also contribute to a development of passion. 11. *Mystery*. If there is some mystery surrounding the other person and uncertainty about what the other person thinks or feels or when he or she will initiate contact can also contribute to passion.

Aron et al. (1989) examined which of these factors are most prevalent in college students based on their descriptions of their experiences of falling in love. They found that the most frequently mentioned factor preceding their experiences of love was finding certain characteristics of the other desirable and reciprocity of the experienced emotions. There was a moderate frequency of descriptions mentioning the factors that spark passion (e.g., readiness, arousal/unusualness). There was a low to moderate frequency of descriptions of the other having been perceived as similar to the subject or having spent time with the other.

Aron et al (1989) argue that the self-expansion model proposed in Aron & Aron (1986) predicts this weighing of factors. On the self-expansion model, we have the greatest propensity to fall in love when we perceive the other person as a way for us to undergo rapid self-expansion. Entering a committed relationship requires giving up some of one's personal autonomy by including the other person in one's life. If the other possesses desirable characteristics, the other person's presence in one's life can be perceived as an expansion of the self as opposed to a loss of freedom (Aron & Aron, 1996).

Work in neuroscience on love supports these findings in psychology. The neurochemical profile of people who are in love is characterized by low levels of the satiation chemical serotonin (Zeki, 2007). Marazziti et al. (1999) found that the density of platelet [3H]paroxetine ([3H]Par) binding sites on the serotonin transporter was significantly lower in subjects who had fallen in love within the previous six months compared to normal subjects. In fact, the density of platelet [3H]Par binding sites in subjects who had recently fallen in love was found to be similar to that of unmedicated patients with obsessive-compulsive disorder. Like the standard antidepressants SSRIs, [3H]paroxetine binds to the serotonin (5-HT) transporter. This inactivates the transporter, preventing it from transporting serotonin from back into the neurons,

where it is inactive. A low density of platelet [3H]paroxetine ([3H]Par) binding sites is thus a strong indicator of lower brain levels of serotonin. The authors argue that the obsessive component of new love makes it similar to obsessive-compulsive disorder in its serotonin profile.

It is unsurprising, then, that several of the passion-generating factors, including arousal/unusualness, readiness and mystery, correlate both with the propensity to fall in love and increased anxiety. Increased anxiety triggers increased blood levels of adrenaline and other stress chemicals. As argued by Dutton and Aron (1974), the feeling of increased levels of adrenaline is sometimes mistaken for a feeling of being in love with a person. Dutton and Aron (1974) found that more men fell in love with an attractive female interviewer when she asked questions in anxiety-provoking situations (a fear-arousing suspension bridge) compared to calm situations (non-fear arousing bridge). So, even in the absence of most of the other predictors of the onset of romantic love, meeting a person in an anxiety-provoking situation can cause us to fall in love with that person.

Another interesting feature of love is that a felt proximity to a new lover gives rise to high brain levels of the reward and motivation chemical dopamine, whereas distance can lead to cravings. Aron et al. (2005) used functional magnetic resonance imaging to study people who were intensely in love from 1 to 17 months. The subjects viewed a photograph of their beloved and then after a distraction-attention task they viewed a photograph of a familiar individual. The researchers found heightened brain activation in the right ventral tegmental area and the right postero-dorsal body and medial caudate nucleus--dopamine-rich areas associated with reward and motivation--in response to the photographs of the individual the subject was in love with. So, when you are in love, the imagined or actual presence of the beloved is rewarding and motivating.

The self-expansion model proposed by Aron & Aron (1986) can explain this result as follows: when a subject conceives of the beloved and him- or herself as forming a tight union, the desirable characteristics of the beloved trigger a feeling of reward. This can prompt us to go out of our way to be with the beloved in order to experience the most intense feeling of reward.

The self-expansion model also predicts that the similarity and propinquity factors should have a paradoxical effect in initial stages of falling in love but should have a more significant influence on the duration of love (Acevedo & Aron, 2009). The main reason for this is that familiarity and similarity make it less likely that the other person will constitute an expansion of you, if you include him or her in your life.

These predictions too are consistent with the findings in neuroscience. Low levels of serotonin are likely counteracted by similarity and familiarity, which can prevent people from falling in love (Zeki, 2007). At later stages of a love relationship, however, these same factors may correlate with higher levels of the attachment and bonding chemicals oxytocin and vasopressin. Oxytocin and vasopressin have been shown to increase during the phase of love relationship that fosters romantic attachment and pair bonding (Zeki, 2007).

3. Love as an Emotion

Several psychologists have defended the view that love is an emotion (e.g. Berscheid, & Walster, 1974; Dutton, & Aron, 1974; Shaver & Hazan, 1988; Gonzaga, et al. 2006). Understood as an emotion, love can be taken to characterize its felt manifestations either as a surge of passion or affection or the ongoing disposition to have those feelings for another person (Shaver & Hazan, 1988).

If love is an emotion, this raises the question of whether love is a basic or a complex emotion. The standard view is that there are only seven basic emotions: joy, anger, sadness, contempt, fear, disgust and surprise. Basic emotion are associated with universally recognizable facial expressions, and they resist analysis in terms of other more basic mental states. Complex emotions, by contrast, are not associated with universally recognizable facial expressions, and they have several components to them—components that can vary from person to person and from culture to culture.

Because love is not associated with universally recognizable facial expressions, and it seems analyzable in terms components such as joy, anxiety and jealousy, love is generally thought to be a non-basic emotion.

However, Shaver et al. (1996) argue that love should be considered a basic emotion like anger and joy. One observation they make is that 'love is one of the most prototypical emotions in the minds of layperson' (Shaver et al, 1996: 81). Fehr and Russell (1984) asked two-hundred students to 'list as many examples as you can of the category EMOTION'. They did not define 'emotion'. The subjects top six choice of emotions (out of 196) were: happiness (listed by 152 people), anger (149), sadness (136), love (124), fear (96), and hate (89). Given that emotion theorists rely heavily on everyday knowledge in their analysis of emotions, Shaver et al. (1996) argue, they ought to give weight to this insight.

Shaver et al. (1987) furthermore found that love is a cognitively basic emotion in Rosch's (1978) prototype sense. A concept is cognitively basic when its instances are prototypes. For example, soccer games are prototypes for *game*, chairs and sofas are prototypes for *furniture*, and robins are prototypes for *birds*. The prototype concepts referring to prototypes are cognitively basic. If the concept of love is cognitively basic, this gives us further reason to include love along the basic emotions.

Shaver et al. (1996) grant that love can take the form of a long-lasting sentiment, which is a dispositional form of the emotion, but they correctly observe that all the standard basic emotions can take the form of a long-lasting sentiment as well. You can be angry with or disgusted by a person for a very long time. Yet the short outburst of anger or disgust is not less basic for that reason. Love is similar to the other basic emotions in that there are brief surges or outbursts of feeling in love or feeling especially loving. These outburst are associated with universal bodily signals, such as a flushing face, a widening of the eyes or eye-locking, and action-tendencies, for instance, a tendency to touch the other person, proximity-seeking and

on the grounds that it is associated with a universally recognizable facial expression. Ekman, P & Heider, K.G. (1988). "The Universality of Contempt Expression: A Replication. Motivation and Emotion," 12, 303–308.

¹ Psychologist Paul Ekman originally argued that there were six basic emotions (joy, surprise, sadness, anger, fear and disgust). See e.g. Ekman, P.; Friesen, W.V. (1971). "Constants across cultures in the face and emotion," *Journal of Personality and Social Psychology*, 17: 124–129. Contempt, he said, was a mixture of anger and disgust. However, he later included contempt (or "scorn") among the basic emotions

behavioral synchrony between lovers. The universality of love, Shaver, et al. (1996) argue, is uncovered in historical writings and anthropological studies, which reveal that love is universally a very intense feeling that can give rise to romantic anguish and longing, It thus seems that while love as a sentiment is not fundamental and is associated with many emotion and behavior tendencies, sudden surges of love should be included among the basic emotions.

These considerations of basic versus complex emotions raise the question of what kind of mental state an emotion is. One view is that emotions are perceptions of mental or bodily responses to a certain evaluative rendition of an object or event in the external environment (Prinz, 2004; Brogaard, 2015: Chapter 3).² For example, fear of a tiger is a mental and bodily response to what is perceived as a tiger presenting a threat to the subject's well-being. Likewise, resenting an ex for breaking up with you is a mental and bodily response to what is perceived as an ex partner having treated you unjustly. On this account, love of a person is a mental and bodily response to what is perceived as a specific *lovable* person.

The perceived-response theory of emotions lends itself to a particular understanding of rational (or healthy) and irrational (or unhealthy) forms of love. A loving response is rational (or healthy), we can say, just in case (i) there is no misrepresentation of those of the beloved's qualities that fuel the loving response, and (ii) the loving response matches the perceived lovability of the beloved (Brogaard, 2015). If your love harms your well-being, your loving response does not properly correspond to the perceived lovability (or loving qualities) of the beloved. In unrequited love, you may be representing the beloved's qualities correctly. For example, you may be aware of the fact that when a person rejects you, this can enhance your desire to be with that person. Even when unrequited love does not misrepresent, however, it does not match the perceived loving qualities of the beloved. Someone who does *not* love you and likely does not really care about you, has a quality that is not loving toward you: they do not really care about you. So, persistently unrequited love is irrational, which is to say that you ought not love the person (however hard it can be not to do that).

Here is another case. For reasons beyond your imagination, you cannot help but perceive your emotionally abusive girlfriend as a lovable person. Your loving response to her thus matches her perceived lovability. However, because you misperceive her as possessing lovable qualities—the qualities that fuel your love, your emotional response is fueled by properties your girlfriend does not possess. Accordingly, your love is irrational, which is to say that you ought not to love her (however hard it can be not to do that).

As we will see below, the unhealthy forms of love depicted by attachment-theoretical approaches to love are cases in which there is a misrepresentation of the qualities of the beloved that fuel the loving response or cases in which the loving response fails to match the perceived lovability of the beloved.

4. Triangular Theories of Love

² This approach is a natural extension of James' feeling theory. For discussion, see for example, Prinz (2004) and Brogaard (2015).

An alternative to treating love as an emotion is to treat it as an attribute (or attributes) of a relationship (Sternberg 1986, 1988; Kolodny, 2003). Robert Sternberg's (1986) triangular theory of love is a well-known instance of this. On this view, love has three components: intimacy, passion and commitment. The intimacy component captures the feelings of being close, connected and bonded in a loving relationship. The passion component encompasses romance and physical attraction in a loving relationship. Finally, the commitment component refers to a decision two people have made to love each other and maintain that love over time.

According to Sternberg (1996), the three components of love--intimacy, passion, and commitment--constitute different types of love, for instance, romantic love, parental love and friendship love. Intimacy is a shared components in romantic love, parental love and friendship love. The commitment component is likely to be strong in love relationships with members of one's nuclear family, but it need not play a major role in romantic love. Passion, by contrast, is central to romantic love but is absent is pure instances of the other types of love.

The theory also predicts that there are different types of romantic love. These types include liking (intimacy alone), infatuation (passion alone), empty love (commitment alone), short-term romantic love and friends-with-benefits relationships (intimacy plus passion), romantic love in a long-term relationship (intimacy plus passion plus commitment).

Sternberg (1988) provides an account of how the three dimensions of love fluctuate and change over the course of a relationship, and why some changes in the components lead to successful relationships while other changes lead to relationship failure. Excessive passion and intimacy, Sternberg (1988) argues, can shorten the length of a relationship. The main positive influence on relationship length is commitment. Evidence for these predictions were found in empirical studies (Lemieux & Hale, 2002). Analyses of the emotions of college students indicated negative correlations between intimacy and relationship length as well as between passion and relationship length. The correlation between commitment and relationship length was found to be positive.

One significant virtue of Sternberg's triangular theory of love is that it easily accommodates nearly all types of love (including romantic love, friendship love and companionate love). A more problematic feature of the view is that it cannot easily account for cases of unreciprocated love or other forms of unfulfilled love. Love can be experienced as distinct from pure passion even when there is no intimacy and no commitment and even in the absence of a belief that intimacy and commitment will emerge.

The triangular theory can, however, be revised to account for unfulfilled love. For example, we can construe romantic love as consisting partially in feelings of passion combined with an intense longing for intimacy and in some cases also a longing for commitment.

Another problematic feature of the triangular theory is its lack of focus on attachment. Recent empirical studies suggest that passion and secure attachment can both be routes to relationship satisfaction, and that secure attachment likely affects relationship satisfaction through intimacy and commitment (Madey & Rodgers, 2009). Sternberg's triangular theory does not itself focus on attachment, however. Commitment, on his view, is a conscious decision, not a result of an ability to bond with another person. However, it is evidently the case that in a culture where we can freely choose our partner, a conscious choice to commitment is not free-floating

but is linked to attachment and passion. As we will see in the next section, because the triangular theory does not treat secure attachment as fundamental for healthy relationships, the theory is not as suitable for predicting which types of love are unhealthy and why they are unhealthy.

A third problematic feature of Sternberg's triangular theory is that the three proposed components appear to overlap significantly. Marston, et al. (1998), for example, found six ways of experiencing intimacy (openness, sexual intimacy, affection, supportiveness, togetherness, and quiet company), two ways of experiencing passion (romance and sexual intimacy), and five ways of experiencing commitment (supportiveness, expressions of love, fidelity, expressions of commitment, and consideration and devotion). The overlap of the factors that constitute the three corners of Sternberg's triangle make these components questionable as separate love-defining factors (Marston, et al. 1998).

Sternberg's triangular theory of love is not the only triangular theory to be found in the psychological literature. John Alan Lee's (1973) color wheel theory of love is in some respects similar to Sternberg's triangular theory. Lee takes his nine types of love to be composed out of the three components: storge, eros and ludus. 'Storge' means commitment or attachment. This love style amounts to a kind of brotherly love or emotionally bland romantic love. 'Eros' means passion. However, as Shaver and Hazan point out, Lee takes it to denote a kind of love characteristic of a securely attached person in a secure relationship. 'Ludus' means play or having fun. A person with this love style is exhibiting a pattern of traits and behaviors characteristic of the avoidant individual.

The three basic love ingredients generate what Lee calls the secondary love styles. There are three main compounds. Mania, which is composed of eros and ludus, is a kind of obsessive love, which involves a strong desire to be with the other person with or without commitment. Pragma, which is composed of ludus and storge, is a convenient type of love. It is based on practicality and is normally the result of a decision to be together. Agape, which has the basic components storge and eros, is self-sacrificing love, a form of altruism directed toward the partner. This love style is manifested in a desire to serve the other person and make him or her happy.

Lee's theory predates Sternberg's model and appeared in print simultaneously with some of the first publications on attachment. It is interesting, then, that three of the love styles correspond to secure attachment, anxious attachment and avoidant attachment. The additional complications of the theory, however, do not seem to add much to attachment theory or Sternberg's simpler model.

5. Love as Attachment

How our love is manifested is a function of our attachment style and our personality. Bowlby described attachment as an emotional bond that impacts behavior 'from the cradle to the grave' (Bowlby, 1977: 203).³ How we bond with caregivers during early childhood affects how we

³ For more in-depth discussion, see Wonderly (this volume).

behave in relationships, how in touch we are with our emotions and how much we will allow ourselves to love others on a conscious level. The early attachment processes lead to a particular mental model of relationships that continues to shape our interactions with other people as we mature and that predicts how we will interact with romantic partners.

People with a secure attachment style maintain a healthy proximity to other people. They are not afraid of closeness and intimacy, and they do not depend on it in a pathological way. People with an insecure attachment style, on the other hand, avoid closeness with others or their whole existence depends on it.

Attachment theory was first developed as a theory of how children respond to different parental behaviors and how this response pattern affects their relationships later in life. Bowlby argued that in a healthy environment a bonding process occurs between child and caregiver during the first five to six years of the child's life. The caregiver is in a position to recognize and satisfy the child's emotional needs. When adequate attachment between child and caregiver is lacking, the child grows up with an impaired ability to trust that the world is a safe place, and that others will take good care of him or her. Childhood abandonment, unpredictable parental behavior, unrealistic parent expectations, and physical, verbal or emotional abuse teach children that their environment is not a safe place and that the people they encounter cannot be trusted.

Children who are abandoned, neglected or mistreated will inevitably experiment with different ways of coping with the psychic wounds and lack of security. Whatever is most effective influences what sort of attachment style they develop. One youngster may restore some kind of equilibrium by continually seeking the caregiver's attention and approval. Children in this category develop an anxious/preoccupied attachment style--what is also known as a 'resistant' or 'ambivalent' attachment style. If, however, the initial attempts to restore equilibrium do not work, the child will eventually disengage from the external world and retreat into his or her own mind. They will learn that keeping their thoughts and feelings to themselves leads to the least amount of anguish and pain. Children in this category develop an avoidant attachment style (Bowlby, 1973; Ainsworth, et al. 1978).

The anxious/preoccupied attachment style carries with it a 'a tendency to make excessive demands on others and to be anxious and clingy when they are not met' (Bowlby 1973: 14). Anxiously attached individuals are anxious about and preoccupied with long-term commitment and the availability of their partners. They may also continually experience an unfulfilled need for mutuality, intimacy and reciprocity regardless of how available and committed their partner is.

Anxiously attached people furthermore become very anxious when facing separation and during separation from the partner (Hazan & Shaver, 1987; Fraley & Shaver, 1998). Yet they tend to behave in paradoxical ways upon reunion with the partner or after their needs are met. Their feeling that the partner abandoned them triggers angry protests directed at the partner or angry withdrawal from the partner when the partner eventually attends to them. A similarly negative response can be seen in connection with relationship conflict, which causes the anxiously attached individual to have a more negative attitude toward the partner and the relationship (Simpson, et al. 1996).

Immature, anxiously attached individuals tend to become compulsive care-seekers, wanting their partner to pamper them and take care of them (Schaffer, 1993). In successful

cases where the care-seeker's excessive needs are taken care of, this results in a unilateral relationship that provides the care-seeker with support, approval and attention without any expectation that he or she will show any concern or care for the caregiver. If the care-seeking goal is frustrated by a person who purposely or inadvertently fails to take care of the care-seeker's excessive needs, the care-seeker is likely to lash out with angry insults, passive-aggressive behavior or angry withdrawal from the partner until the partner gives him or her undivided attention and fulfillment of his or her needs.

It is often overlooked that a preoccupied-anxiously attached individual can possess narcissistic traits. However, the preoccupied-anxiously attached care-seeker is an excellent example of an extremely narcissistic person. Conversations will tend to be focused mostly on their needs. Like a child, they will willingly participate in activities only when they are convenient and entertaining for them. Excessive care-seeking can be an underlying cause of attention-seeking disorders like hypochondria, histrionic personality disorder and borderline personality disorder (Widiger & Frances, 1985).

Whereas immature anxiously attached individuals are obsessively seeking care, more mature, anxiously attached individuals may become compulsive caregivers, seeking attachment by caring excessively for a parent, child or partner (Bowlby, 1977; Schaffer, 1993; Blatt & Levy, 2003: 135). In this scenario, the anxiously attached person assumes the role of the excessively, caregiving parent in order to maintain the illusion of true mutuality and unity--the sublime goal of their existence. When a parent assumes this role in his or her relationship to a child, this can turn into a form of constant hovering over the child, also known as 'helicopter parenting' (van Ingen, et al. 2015)

The second type of insecure attachment is the avoidant attachment style. People who are avoidantly attached cannot form close romantic relationships (Bowlby, 1973: 14). They experience fear when they need to narrow down options by committing to another person, a job or a course of action (Hatfield,1984). They furthermore show patterns of compulsive self-reliance, refusing to receive from others or give to others.

Bartholomew & Horowitz (1991) identified two types of avoidant attachment, fearful and dismissive. Whereas the fearfully attached is still hoping to eventually connect with a partner yet fears approaching and connecting and pulls away out of fear, the dismissive avoidant person has given up. Avoidantly attached people will likely be commitment phobic and use small imperfections in the partner as an excuse for not getting too involved. They may purposely distance themselves from the partner by acting ambivalently, openly flirting with others or cheating, not listening when the partner is talking, not communicating their thoughts or feelings and avoiding intimacy or staying out of touch for days or weeks after an intimate encounter.

The avoidantly attached individuals fare slightly better than the anxiously attached individuals when faced with relationship conflict (Simpson, et al. 1996). Avoidant people will attempt to avoid conflict, diverting their attention away from the conflict and attachment-related issues. After the conflict, they are likely to behave in less warm and supportive way toward their partner, but unlike their anxious counterpart, they do not view the partner or the relationship in a more negative light.

Attachment is typically viewed as distinct from love. Phillip Shaver and Cindy Hazan, however, have argued that love is best understood in terms of feelings of attachment or

dispositions to have those feelings (Hazan & Shaver, 1987; Shaver & Hazan, 1987; Shaver & Hazan, 1988; Shaver, et al. 1988). Attachment, of course, cannot by itself constitute passionate love. Shaver and Hazan adopt a triangular theory of love. Love, they say, is composed of feelings of or dispositions to feel attachment, a desire to engage in caregiving and feelings of or dispositions to feel sexual attraction.⁴

Although there are three components to passionate secure love, the most basic of the three emotions is the feeling of or disposition to feel attachment. The attachment component is a complex emotion, which involves a multiplicity of other emotions, for instance, euphoria, joy, affection, security, intimacy, trust, fear, anger, resentment, sadness, emotional pain, disappointment and jealousy. The other two components of passionate, secure love are influenced by the individual's attachment pattern, which in turns influences how the individual feels about attachment.

People who are securely attached tend to be in love relationships that have all three components. Avoidant individuals, by contrast, often do not have the capacity for caregiving. Nor do they show any interest in caregiving. They also fail to associate sexual behavior with intimacy and are more likely to have casual, non-committal sexual relationships than committed relationships.

Anxiously attached individuals score much higher on the caregiving components. They are either compulsive care-seekers or compulsive caregivers or both. Their sexual relationships tend to be a means to satisfy unmet needs for security. They often come across as desperate for love. In their relationships they are likely to be highly jealous and obsessed with their partner as a result of their constant fear of abandonment.

Love understood partially in terms of feelings of attachment has an advantage over other approaches to love. The attachment-theoretical framework forms a unified 'framework for understanding love, loneliness, and grief at different points in the life cycle' (Hazan & Shaver, 1987: 511). It furthermore provides a unified account of what distinguishes healthy from unhealthy forms of love. It is noteworthy that the unhealthy forms of love are cases in which the emotions that an individual experiences do not match the object of her love. Compulsive care-seekers, compulsive caregivers and avoidant individuals typically do not have a loving response that matches that of their partners. Compulsive caregivers love too much, whereas compulsive care-seekers and avoidant individuals love too little. So, in extreme cases, both kinds of love are unhealthy (or irrational).

Moreover, the love experienced by anxiously attached individuals is very often fueled by an idealization of the beloved. So, the love misrepresents and hence is unhealthy (or irrational) for that reason as well. Of course, one can imagine relationships between two avoidant individuals where the loving responses of each partner match the other person's loving responses perfectly. This form of love would not strictly speaking be unhealthy and likely is not distressing to the partners. But such cases are merely hypothetical.

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⁴ For simplicity's sake I will treat desires as kinds of emotions, even though desires are ontologically different from emotions (see Brogaard, 2015).

6. Love and Psychoanalysis

Love has been at the heart of psychoanalysis since its conception. What distinguishes the psychoanalytic approach to love from the classical psychological approach is, as Bergmann puts it, 'the awareness of the link between adult love and love in infancy' (Bergmann, 1988: 668-669). Most contemporary psychoanalytic approaches are expansions of Sigmund Freud's theories of love. Freud developed two psychoanalytic theories of love (Bergmann, 1988). One is the theory that love and sexuality are initially combined when the 'child is sucking at his mother's breast. The finding of the love object is in fact a refinding' (Freud, 1905: 222). This phase is also known as the 'oral phase' of the child's psychosexual development (0-1 years of age). This phase is followed by the anal phase (1-3 years of age) and the phallic or oedipal phase (3 to 6 years). During latency (6-12 years of age) the child learns to repress the sexual component of his or her love for his parents. During adolescence (or the genital phase; 12+ years of age), the sexual impulses reemerge, and if the other stages have been resolved successfully, he or she can enter a loving sexual relationship with a partner. The individual's capacity to love (also known as 'genital love') and engage in a healthy love relationship depends on his or her ability to recombine the capacity for tender love with the re-emerging sexuality. This, however, requires that the individual has fully separated from the parents. Otherwise, the individual will experience the beloved merely as a corrected version of a parent (Bergmann, 1988, Herzog, 2005).

Freud's second theory followed his discovery of narcissism. On the second theory, the separation from the parent is required for us to be able to experience love but it is not sufficient. We fall in love with people that are mirror images of one's ideal self. Love completes our deficient narcissist selves. When the love is reciprocated, the tension between self and other is eliminated and the lover experiences a relief from the freedom from envy of the other person's qualities and abilities. This leads to the characteristic feeling of reward in the presence of the beloved as well as an idealization of the beloved. This second theory shares core elements in common with Aron & Aron's (1986) self-expansion theory, which also predicts that we fall in love with people who complement us and who can trigger a feeling of one's own self being expanded.

More recent psychoanalytic approaches to love have become increasingly desexualized (Green 1995; Stein 1998a,b), bringing the field closer to attachment theory (Fonagy & Target, 2007; Blatt, SJ & Levy, 2003). The sexual phrases inherent to psychoanalytic theory are now primarily thought of as metaphors for the dynamic between the individual and her parents or later a partner. Like attachment theory, modern psychoanalysis also predicts two fundamental ways of being insecurely attached to others (Blatt, 1995; Blatt & Blass, 1996). A fundamental polarity in psychoanalytic theory is that between unity and agency, or relatedness and self-sufficiency (Blatt, SJ & Levy, 2003). The anxiously attached individual seeks to preserve

⁵ Bergmann (1988) argues that Freud has three theories. But the one outlined in "Instincts and Their Vicissitudes" is so lacking in content that it hardly counts as a theory. Freud merely observes that love cannot be explained as a sexual instinct but resides in the relationship between the beloved and the 'total ego' (Freud, 1915).

unity and prevent loneliness and alienation, whereas the avoidantly attached person seeks to preserve agency, individuality and personal autonomy (Balint, 1959; Blatt, 1999; Shor & Sanville, 1978). Healthy love requires that one maintains a healthy balance between unity and agency, or relatedness and self-sufficiency.

In the beginning obsessive stages of love relationships in which the love is mutual, the lovers seek an unhealthy level of unity and relatedness (Balint, 1959; Blatt, 1999; Shor & Sanville, 1978). Only when the love matures and neurochemical and hormones return to normal can lovers hope to retrieve a balance between unity and agency. This, however, is also the point at which lovers may go too far in the other direction and seek to be self-sufficient and express their own agency without concern for the other. Many mistake the shift in hormones and neurochemicals that are natural in healthy, long-lasting love relationships for a sudden absence of love. If a person is used to the obsessive feelings of being in love and then suddenly feels nothing but occasional closeness and sexual attraction, he or she is bound to think that something is wrong with the relationship. A natural reaction to that feeling is to seek self-expansion elsewhere, be it through a new lover, a new self-expanding activity or a renewed dedication to work. This type of behavior is, in fact, predictable in avoidant individuals, who are more likely never to fall in love or to experience only low intensity love (Feeney & Noller, 1990).

When attachment grows too insecure especially in childhood, it can lead to pathopsychology (Widiger & Frances, 1985). An anxious attachment style in early childhood is a predictor of dramatic personality disorders such as histrionic, borderline and dependent personality disorder later in life, whereas an avoidant attachment style in early childhood is a predictor of schizotypal, schizoid, narcissistic, antisocial and avoidant personality disorder later in life (West, et al. 1994; Blatt & Levy, 2003). But being insecurely attached to one or more partners in adulthood can also give rise to markers of pathopsychology. Being abandoned by several consecutive partners may push an individual toward a more insecure attachment style, which together with genetic dispositions is a predictor of psychopathology (West, et al. 1994).

Securely attached lovers, who manage to find the right balance between relatedness and self-sufficiency, have the capacity to establish mature and mutually satisfying interpersonal relationships within which they can explore new activities and develop their own sense of self (Blatt, 1995). The securely attached lover respects the other person's need for alone time while setting aside time to connect with the other person, thereby giving both parties the opportunity to experience both independence and bonding.

7. Conclusion

I have argued that the main predictors of why we fall in love in the first place are that (1) we are open to meeting a new lover or romantic partner, (2) we meet another person who provides the potential for an expansion of ourselves, and (3) the person or the circumstances in which we meet the person destabilizes our mood and pleasure chemicals, which generates a kind of obsessive-compulsive tendency in us. While these factors can account for why people fall in love in the first place, they do not predict why romantic love lasts. For romantic love to last there has to be feelings of or dispositions to feel familiarity, attachment and similarity of attitudes and

core values. These feelings or dispositions correspond to more stable mood and pleasure chemicals and an increase in attachment and bonding chemicals.

Attachment theory, I have argued, appears to have the greatest potential for providing a plausible account of what love is as well as the individual differences in our capacity to love other people in a healthy way. On the view of love proposed by attachment theorists, healthy love is an emotion that consists of feelings of or dispositions to feel attachment, a desire to engage in caregiving and feelings of or a disposition to feel sexual attraction. Unhealthy love typically involves abnormal changes to the attachment or caregiving systems, which can be a result of early parent-child interactions or interactions with friends, family and partners in relationships later in life.⁶

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