Is love an emotion, an urge, brain chemistry, or something else entirely? It’s the one question that has dominated our culture and relationships for millions of years. But what is love? It's powerful enough to drive us to create new life or to destroy it, but while countless books, poems, films, plays, and careers have been made out of trying to decipher it, or at least represent it, can we pin down what it actually is?

What is love?

Scientists agreed that love is not something that can be controlled, curated or switched on or off. Instead, it arises from the depths of our subconscious. “Our subconscious mind has about ten times more information than our rational brain,” Toleikyte told. “So when we actually fall in love with a person it might seem like quite a momentary experience, however the brain is working really hard to compute and to produce that feeling.” This is what Fisher labels romantic love, something she somewhat unromantically describes as “a basic drive that evolved millions of years ago in order to enable us and focus our attention on just one partner and start the mating process.” So it's a complex series of computations of the subconscious brain that gives us an emotional experience we can’t control.

How can we tell if what we’re feeling is definitely love?

Everything about the beloved takes on special meaning, said Fisher. “The car they drive is different from every car in the parking lot. The street they live on, the house they live in, the books they like, everything about this person becomes special.” While you might be able to list what you don’t like about them, you have an ability to sweep this aside and focus on the positive. Then there’s the intense energy and mood swings brought about by love - elation when things are going well, to terrible despair when they don’t text, write or invite you out.

Physically, love causes a dry mouth, a feeling of butterflies in the stomach, weak knees, separation anxiety, and craving for sex as well as an emotional union. “You want them to call, to write, and there’s an intense motivation to win the person - what people will do when they are in love is quite remarkable,” Fisher said.

"Love evolved to allow us to start the mating process with a certain individual in order to send our DNA into tomorrow"

In one study conducted by Fisher, 17 new lovers (ten women and seven men) who had been happily in love for around seven and a half months, had their brains scanned. The scans showed activity in the ventral tegmental area, a region of the brain that makes dopamine and sends the stimulant to other areas. “This factory is part of the brain’s reward system, the brain network that generates wanting, seeking, craving, energy, focus and motivation,” Fisher writes. This, she found, means lovers are ‘high’ on a natural speed.

Does love last forever?

From the honeymoon period to the seven year itch, there are plenty of theories that suggest love is not meant to, or even can last. But Toleikyte suggests it depends on how we look at it. Love as an emotion, she said, has follow-on effects: a deep connection between people leads to commitment and certain habits, and establishes boundaries where people identify themselves as part of a relationship. “So love as a greater experience can last. But if any steps have been compromised, for example someone learns that a person is completely different to who we got to know, that can change the experience.” She said at an emotional level, love is still a function of brain chemistry which is changing all the time. “Sometimes we’re not capable of feeling emotions such as love, sometimes we go through flat moments where we can’t feel anything.”

Fisher said a study she conducted proved that it can last forever (or at least after a couple of decades of marriage). In one study, 15 people in their 50s and 60s who told Fisher they were in love after an average of 21 years of marriage, were put into a brain scanner. What she found was that some of the brain circuits, the basic brain pathways for intense romantic love, were still active. “These long term partners still feel some of the early stage intense feelings of romantic love, so yes, it is possible,” she said, although with a caveat - “you have to pick the right person”.

Does love at first sight exist?

Toleikyte and Fisher are both confident that yes, love at first sight does exist and more than that, it's easy to prove.

Toleikyte is a living example. She and her husband fell in love straight away, getting married after one year of dating. “I think both our brains computed that this person somehow hit each other’s sweet spots of our love centres and from that very moment we were fully committed to each other,” she said. But, it's not something you can or should go looking for she said. It does not matter one way or another - sometimes it just happens.

Fisher likens love to the fear system of the brain. “Fear can be activated at any time, so can anger, so can joy, so can sadness, so can this basic feeling of romantic love.” Not only does it occur, but Fisher said it has probably evolved to occur rapidly for a specific reason: our ancestors lived together in small groups and did not run into that many people very often. “So if there’s a young girl, she’s pulled up to a waterhole with her family and she sees a cute boy on the other side of the waterhole, it's adaptive to feel instant attraction to him because they didn’t constantly mingle with other people.”

Are there different types of love?

Toleikyte thinks not. From a neurological perspective, love from person to person is not that different, even though the journey to get there almost certainly is. “Sometimes it takes a very long time for people to be together and develop love for each other and sometimes its immediate, sometimes it can be hot and cold, so we give different names to those experiences.”

Fisher believes there are three different brain systems all geared toward mating and reproduction - the sex drive, feelings of intense romantic love, and feelings of deep attachment - which she said are often mistaken as phases but can actually be activated in any pattern and exist simultaneously. “That it starts with the sex drive and then moves to romantic love and then turns into attachment, that’s not true,” she said. “You can start with a deep attachment to somebody in college, or at work or in your social circle and then times change and things happen and suddenly you fall in love with the person.”

What about marriage?

Marriage is simply beautiful. Living by the highest ideal of marriage achieves the very purpose for getting married: to experience unconditional love. This is accomplished by establishing it in your mind as your vision. Make it the polestar of your life and let all your actions be guided by this singular desire. Simply put, your ideal in marriage is to perform only actions that create unconditional love, and avoid any actions that move you further away from it.

And why people are marriage?

About nine-in-ten Americans (88%) cited love as a very important reason to get married, ahead of making a lifelong commitment (81%) and companionship (76%), according to a 2013 Pew Research Center survey. Fewer said having their relationship recognized in a religious ceremony (30%), financial stability (28%) or legal rights and benefits (23%) were very important reasons to marry.

However, being a good financial provider was seen as particularly important for men to be a good husband or partner, according to a 2017 survey by the Center. About seven-in-ten adults (71%) said it was very important for a man to be able to support a family financially to be a good husband or partner, while just 32% said the same for a woman to be a good wife or partner.

As far as what helps people stay married, married adults said in a 2015 survey that having shared interests (64%) and a satisfying sexual relationship (61%) were very important to a successful marriage. More than half (56%) also named sharing household chores.

What purpose does love serve?

It's all about survival, said Toleikyte. “You can’t survive on your own in the African Savanna, you can’t survive in the jungle on your own. So perhaps love or any other emotional attachment has been serving us to be good to each other, to be selfless sometimes, and to really take into account other people’s needs.”

Fisher agrees that love came about millions of years ago to advance the species. “It evolved to start the mating process. 97 percent of mammals do not pair up to rear their young, but human beings do,” she said. “Human pair bonding evolved about four million years ago and along with that this brain system of romantic love evolved to allow us to start the mating process with a certain individual in order to send our DNA into tomorrow.”