Human behavior and factors that influence it.

Emotional contagion is the tendency for humans to feel the emotions of people around them. It appears to be involved with mob psychology and related to the bandwagon effect. The bandwagon effect is a well-documented form of groupthink. It says that human conduct spreads among people in a similar way as fads and trends. As more people come to believe in something, others "hop on the bandwagon." The idea of emotional contagion is clearly evident in human children. For example, if a parent is sad, the child will often notice and react with crying.

Emotional contagion covers a wide range of human emotions, including power, strategy, invincibility, and dominance. The ability to transfer moods between humans is innate. This is a powerful fact and behind some the world's religions, dictators, and the history of war. As you would expect, the transfer of emotions between humans has been studied in a number of different situations and settings. Unlike cognitive contagion, emotional contagion is less conscious and more automatic. It relies mainly on non-verbal communication, although it has been demonstrated to occur via telecommunication.

Interesting Fact: Follie à deux is a psychiatric syndrome in which delusional beliefs are transmitted from one individual to the next. The disorder was first conceptualized in France during the 19th century. It is related to Stockholm syndrome, which is a phenomenon that occurs when a hostage expresses empathy for their attackers. One of the most horrific examples of folie à deux is Adolf Hitler and the Nazi Party.

# The existence of instincts in humans [edit]

The simplest instincts in humans have been empirically demonstrated.

- 1. Congenital fear of snakes and spiders was found in six-month-old babies.<sup>[10]</sup>
- 2. Infant cry is a manifestation of instinct. The infant cannot otherwise protect itself for survival during its long period of maturation. The maternal instinct, manifest particularly in response to the infant cry, has long been respected as one of the most powerful. Its mechanism has been partly elucidated by observations with functional MRI of the mother's brain.<sup>(17)</sup>

- 3. The herd instinct is found in human children and chimpanzee cubs, but is apparently absent in the young orangutans.<sup>[18]</sup>
- 4. Testosterone (main male sex hormone) primes several instincts, especially sexuality; also dominance, manifest in self-affirmation, the urge to win over rivals, to dominate a hierarchy, and to respond to violent signals in men, with weakening of empathy.<sup>[19]</sup> In men, a decrease in testosterone level after the birth of a child in the family was found, so that the father's energies are more directed to nurturing, protecting and caring for the child.<sup>[20][21]</sup> Unduly high levels of this hormone are often associated in a person with aggressiveness, illegal behavior, violence against others, such phenomena as banditry, etc.<sup>[22]</sup> This is confirmed by studies conducted in prisons.<sup>[23][24]</sup> The amount of testosterone in men may increase dramatically in response to any competition.<sup>[26]</sup> In men, the level of testosterone varies depending on whether it is susceptible to the smell of an ovulating or non-ovulatory woman. Men exposed to the odors of ovulating women maintained a stable level of testosterone, which was higher than the level of testosterone in men exposed to non-ovulatory signals. This is due to the fact that an ovulating woman is capable of conceiving, and therefore a man who feels the smell of an ovulating woman is given a signal to sexual activity.<sup>[26]</sup>
- 5. Squeamishness and disgust in humans is an instinct developed during evolution to protect the body and avoid infection by various diseases.<sup>[27]</sup>

# Reflexes[edit]

#### Main article: Reflex

Examples of behaviors that do not require conscious will include many reflexes. The stimulus in a reflex may not require brain activity but instead may travel to the spinal cord as a message that is then transmitted back through the body, tracing a path called the reflex arc. Reflexes are similar to fixed action patterns in that most reflexes meet the criteria of a FAP. However, a fixed action pattern can be processed in the brain as well; a male stickleback's instinctive aggression towards anything red during his mating season is such an example. Examples of instinctive behaviors in humans include many of the primitive reflexes, such as rooting and suckling, behaviors which are present in mammals. In rats, it has been observed that innate responses are related to specific chemicals, and these chemicals are detected by two organs located in the nose: the vomeronasal organ (VNO) and the main olfactory epithelium (MOE).<sup>[28]</sup>

## Maturational[edit]

Some instinctive behaviors depend on maturational processes to appear. For instance, we commonly refer to birds "learning" to fly. However, young birds have been experimentally reared in devices that prevent them from moving their wings until they reached the age at which their cohorts were flying. These birds flew immediately and normally when released, showing that their improvement resulted from neuromuscular maturation and not true learning.<sup>[29]</sup>

## In evolution[edit]

Imprinting provides one example of instinct.<sup>[16]</sup> This complex response may involve visual, auditory, and olfactory cues in the environment surrounding an organism. In some cases, imprinting attaches an offspring to its parent, which is a reproductive benefit to offspring survival.<sup>[30]31</sup> If an offspring has attachment to a parent, it is more likely to stay nearby under parental protection. Attached offspring

are also more likely to learn from a parental figure when interacting closely. (Reproductive benefits are a driving force behind natural selection.)

Environment is an important factor in how innate behavior has evolved. A hypothesis of Michael McCollough, a positive psychologist, explains that environment plays a key role in human behaviors such as forgiveness and revenge. This hypothesis theorizes that various social environments cause either forgiveness or revenge to prevail. McCollough relates his theory to game theory.<sup>[52]</sup> In a tit-for-tat strategy, cooperation and retaliation are comparable to forgiveness and revenge. The choice between the two can be beneficial or detrimental, depending on what the partner-organism chooses. Though this psychological example of game theory does not have such directly measurable results, it provides an interesting theory of unique thought. From a more biological standpoint, the brain's limbic system operates as the main control-area for response to certain stimuli, including a variety of instinctual behavior. The limbic system processes external stimuli related to emotions, social activity, and motivation, which propagates a behavioral response. Some behaviors include maternal care, aggression, defense, and social hierarchy. These behaviors are influenced by sensory input — sight, sound, touch, and smell.

Within the circuitry of the limbic system, there are various places where evolution could have taken place, or could take place in the future. For example, many rodents have receptors in the **vomeronasal organ** that respond explicitly to predator stimuli that specifically relate to that individual species of rodent. The reception of a predatory stimulus usually creates a response of defense or fear.<sup>[28]</sup> Mating in rats follows a similar mechanism. The vomeronasal organ and the main olfactory epithelium, together called the olfactory system, detect pheromones from the opposite sex. These signals then travel to the medial amygdala, which disperses the signal to a variety of brain parts. The pathways involved with innate circuitry are extremely specialized and specific.<sup>[28]</sup> Various organs and sensory receptors play parts in this complex process.

Instinct is a phenomenon that can be investigated from a multitude of angles: genetics, limbic system, nervous pathways, and environment. Researchers can study levels of instincts, from molecular to groups of individuals. Extremely specialized systems have evolved, resulting in individuals which exhibit behaviors without learning them.