

Emotion



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Definition of Emotion

MERRIAM-WEBSTER DICTIONARY

NOUN

the affective aspect of consciousness : feeling

a state of feeling

a conscious mental reaction (as anger or fear) subjectively experienced as strong feeling usually directed toward a specific object and typically accompanied by physiological and behavioural changes in the body

WORD ORIGIN

middle French, from emouvoir to stir up, from Old French esmouvoir, from Latin emovēre to remove, displace, from e- + movēre to move

First Known use in 1579

Definition of Emotion

Klaus Scherer's processing model of emotion consists of five elements.

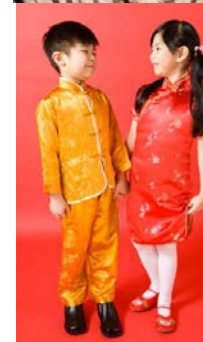
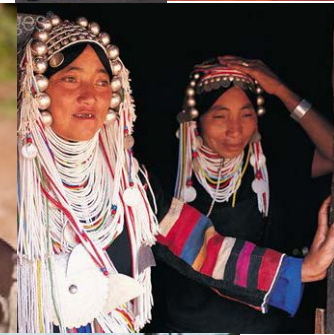
- Cognitive appraisal of the events and objects.**
- Internal feelings experienced by the individual.**
- Physiological symptoms of the emotion.**
- Action tendencies which prepare appropriate motor responses.**
- External manifestation via changes in facial expression or vocal properties.**

Cultural Theory of Emotion

In the early 20th century emotion was considered to be a cultural characteristic.

Emotions were considered to be learned behaviours, which were transmitted from generation to generation like language.

The cultural theory suggested that people who lived in different communities would experience different emotions.



Basic Emotions



In the late 1960s the American Anthropologist Paul Ekman travelled to a remote and isolated region of New Guinea to spend time among the people of a preliterate society. He performed a study in which he told stories to the villagers and then asked them to express how the story made them feel by choosing from among photographs of the faces of Americans who expressed various emotions.

Basic Emotions



Upon his return to San Francisco Paul Ekman performed the experiment in reverse, asking Americans to choose from among pictures of facial expressions of the villagers of New Guinea.

Basic Emotions



Joy



Distress



Fear



Anger



Surprise



Disgust

Ekman concluded that at least some emotions are “basic”, “universal” or “innate”. It is now generally accepted that there are at least six basic emotions which are of rapid onset and which last only a few second at a time.

Higher Cognitive Emotions

The philosopher Paul Griffiths has suggested that there is another type of emotion which he has called *higher cognitive emotions*.

- Love
- Guilt
- Shame
- Embarrassment
- Pride
- Envy
- Jealousy

Higher cognitive emotions are universal like the basic emotions but vary more from culture to culture. These emotions involve greater amounts of cognitive processing and are thus slower to build up and slower to disappear than basic emotions.

Higher Cognitive Emotions

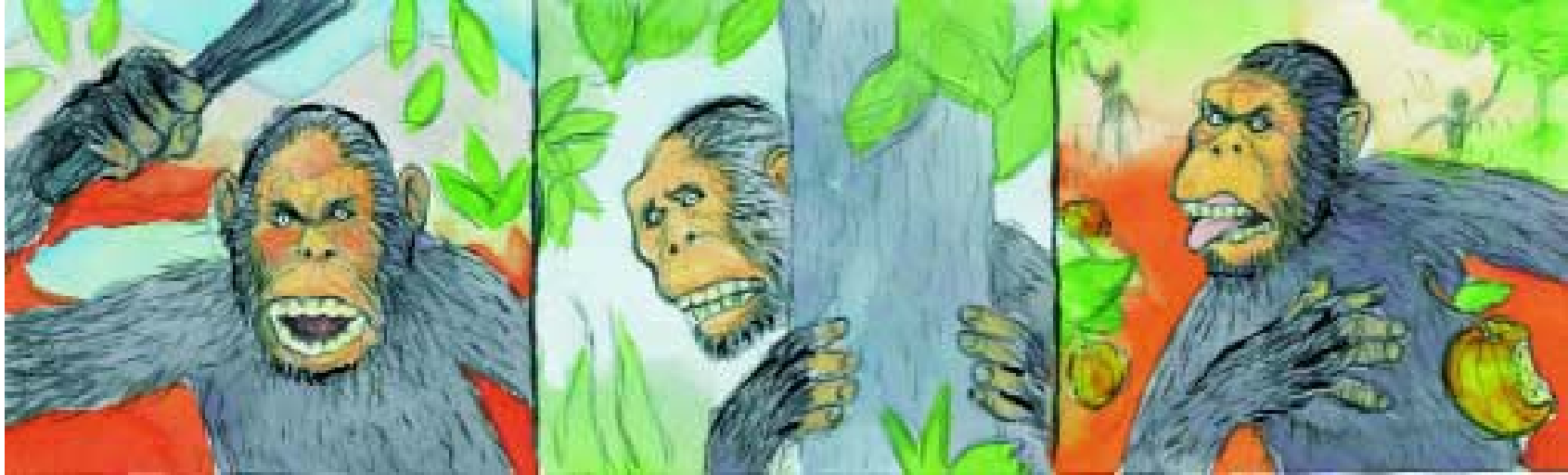
Natural selection appears to have led to the evolution of higher cognitive emotions in order to deal with the ever greater social complexity of human society.



System of Emotions

Primary Emotions	Secondary Emotions	Extending Branches of Feelings
Love	Affection	Adoration, Fondness, Liking, Attractiveness, Caring Tenderness, Compassion
	Lust/Sexual Desire	Infatuation, Desire, Passion
	Longing	Longing, Missing
Joy	Cheerful	Amusement, Bliss, Gaiety, Glee, Joy, Delight, Enjoyment, Happiness, Elation
	Zest	Enthusiasm, Zeal, Excitement, Thrill, Exhilaration
	Contentment	Pleasure, Satisfaction
	Pride	Triumph, Proud
	Optism	Eagerness, Hope, Positive
	Enthrallment	Enthrallment, Enraptured
	Relief	Relief, Gratefulness, Thankfulness
Surprise	Surprise	Amazement, Astonishment
Anger	Irritability	Aggravation, Agitation, Annoyance, Groutchy, Grumpy
	Exasperation	Frustration
	Rage	Anger, Outrage, Fury, Wrath, Hostility, Bitter, Scorn, Spite, Vengefulness, Dislike
	Disgust	Revulsion, Contempt, Loathing
	Envy	Jealousy, Covetness
	Torment	Abuse, Long-Suffering.
Sadness	Suffering	Agony, Anguish, Hurt
	Sadness	Depression, Despair, Unhappiness, Grief, Woe, Misery, Sorrow, Melancholy
	Disappoint	Dismay, Displeasure
	Shame	Guilt, Regret, Remorse, Embarrassment, Humiliation
	Neglect	Alienation, Dejection, Homesickness, Insecurity, Isolation, Loneliness, Rejection
	Sympathy	Pity, Empathy
Fear	Horror	Alarm, Shock, Frightful, Terror, Panic, Hysteria, Mortification, Scared
	Nervousness	Anxiety, Suspense, Uneasiness, Apprehension, Worry, Distress, Dread

There is considerable debate about the exact number of emotions. One of the most extensive proposals is the system of primary and secondary emotions suggested by Parrot (2001).



Negative Emotions

Negative emotions such as anger, fear and disgust are thought to be the result of evolutionary adaptations which enhanced survival in life-threatening situations by narrowing thoughts and actions to those which most facilitate survival.

Anger (left) is characterised by the urge to attack, fear (middle) the urge to escape and disgust (right) the urge to expel.

Negative emotions are thought to have the greatest psychological weight, i.e. they have the biggest effect on attention, memory, reasoning and behaviour.



Positive Emotions

Positive emotions broaden momentary thought-action repertoires. Joy, for example, encourages playful behaviour. The broadened repertoires in turn build physical, intellectual, social and psychological resources which increase the odds of survival.

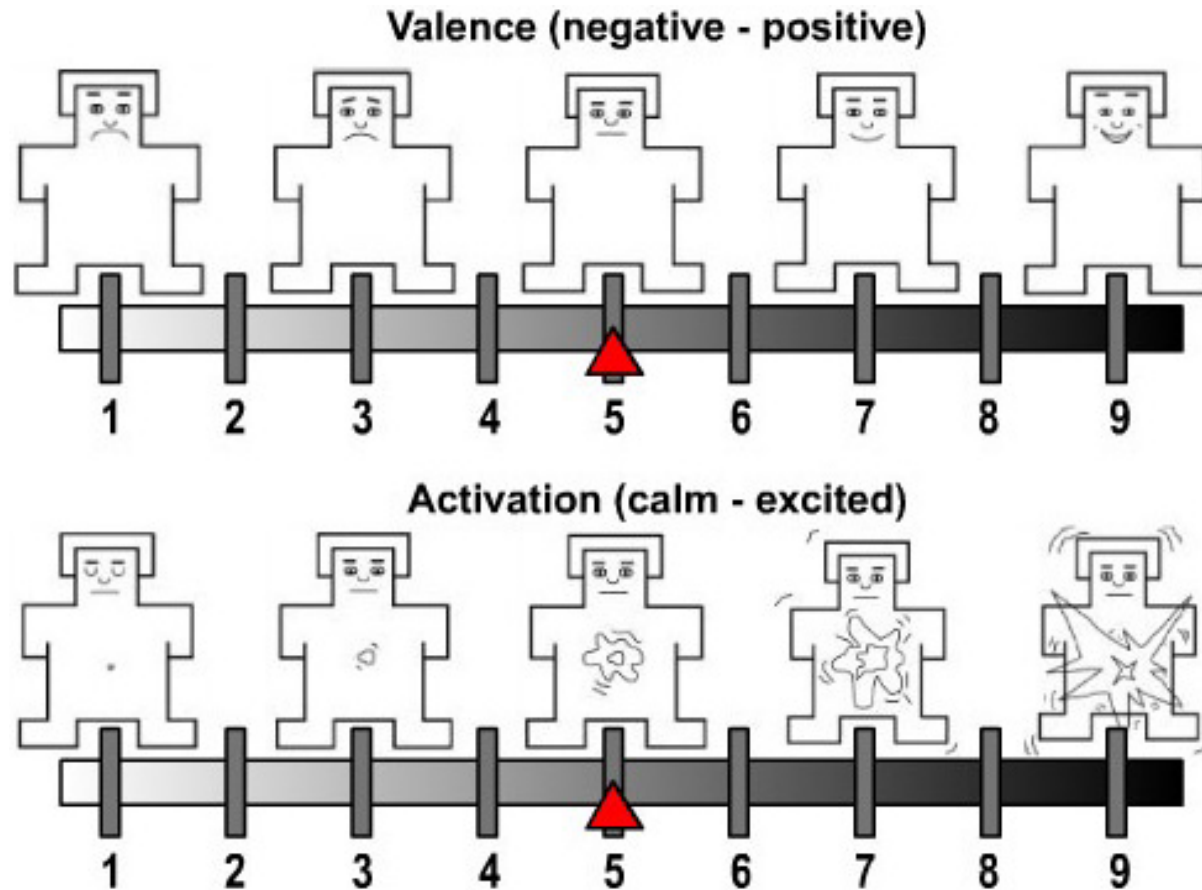
physical resources: coordination, strength and cardiovascular health

intellectual resources: information, skills and problem-solving

social resources: interpersonal skills, social interaction and bonding

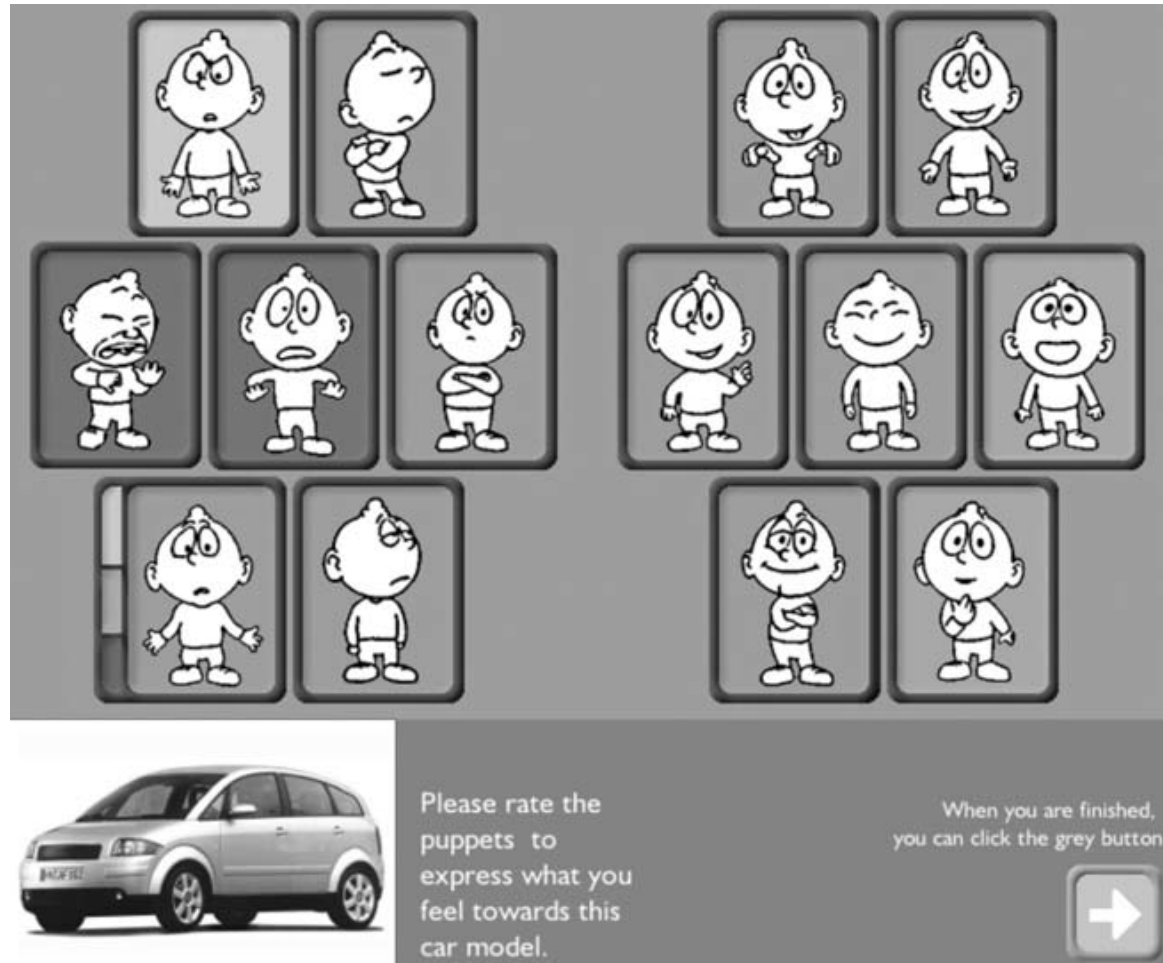
psychological resources: resilience, optimism, goal orientation and sense of identity

Emotional Response Scales



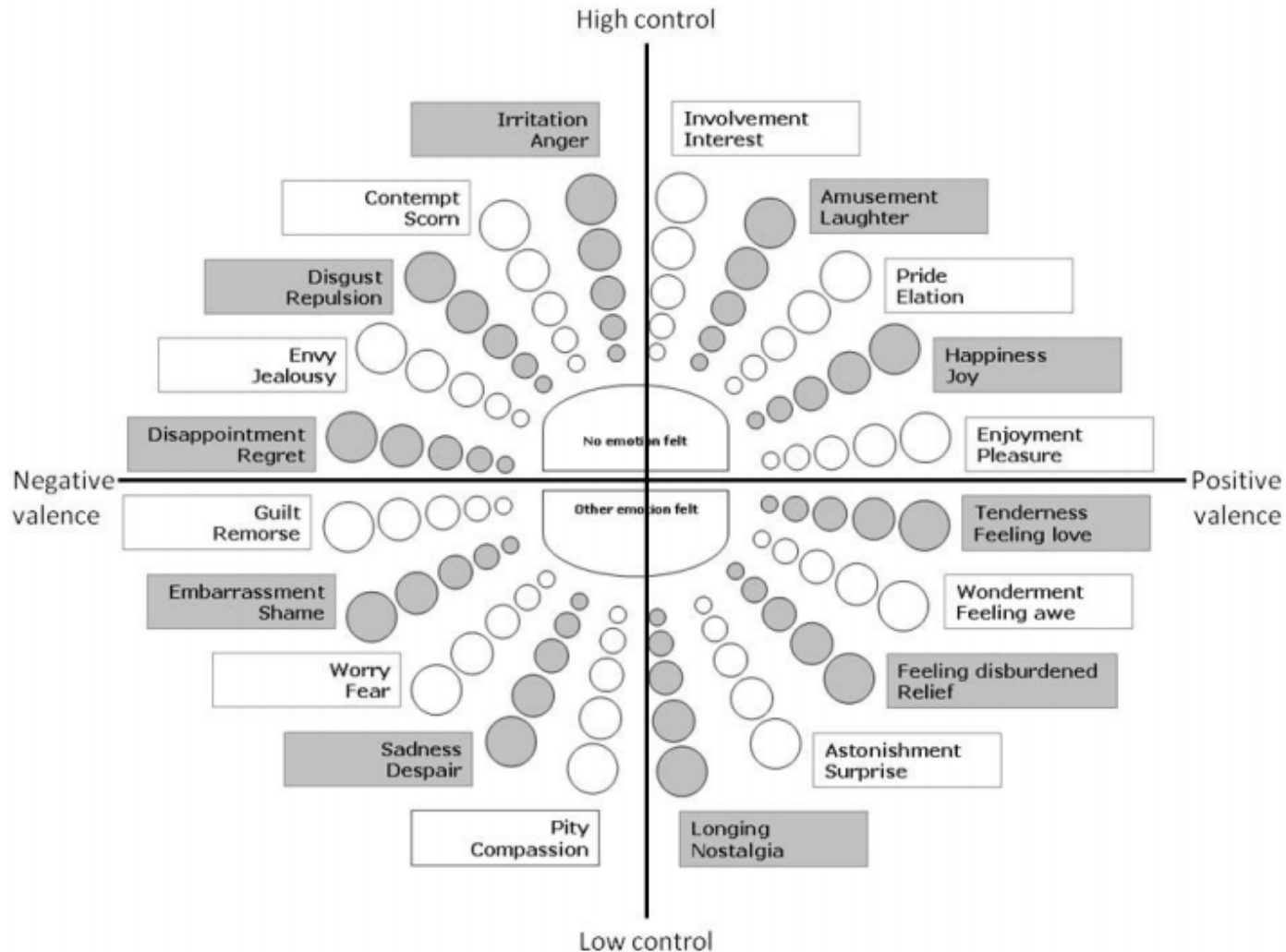
One method for quantifying emotional response is the Self-Assessment Mannikin SAM, which in its most basic form evaluates activation and valence . The method traces its roots to psychological research from the early 20th century, but was formalised in its current form by Bradley and Lang (1994).

Emotional Response Scales



Desmet's (2002) Product Emotion Measurement Instrument considers fourteen different emotional states which are represented by animated characters. An individual rates the extent to which he or she feels each emotion in response to the product by means of a three point scale.

Emotional Response Scales



Scherer (2005) proposed the Geneva Emotion Wheel in several different languages based on analysis of the linguistic terms used by people to describe their emotional responses to things and to situations.

Emotional Response Scales



Dan Hill (2007) in his book “Emotionomics” described facial coding as a means for performing design and marketing evaluations. The facial response can be collected by means of either manual or automated video recording routines.

Emotion in Design

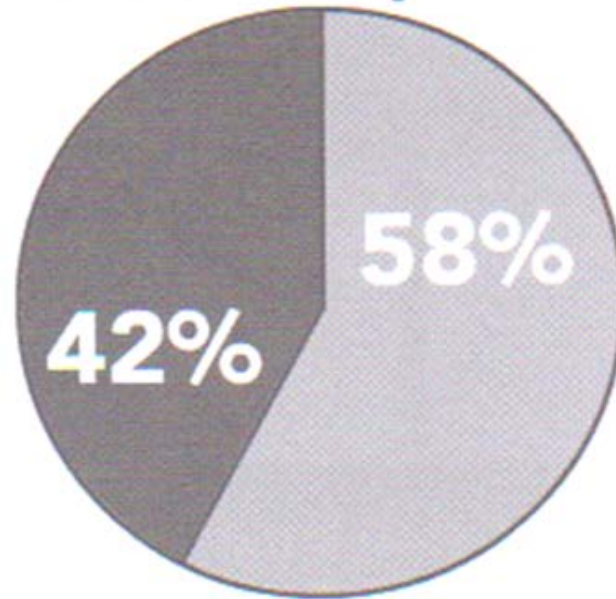
Dan Hill (2007) suggested why emotion matters in design, marketing and branding:

- **Feelings happen before thoughts, and they happen with great speed.**
- **Conscious thought is only a small part of mental activity.**
- **Emotion drives reason more than reason drives emotion.**
- **We perceive matters in ways that emotionally protect our habits and biases.**

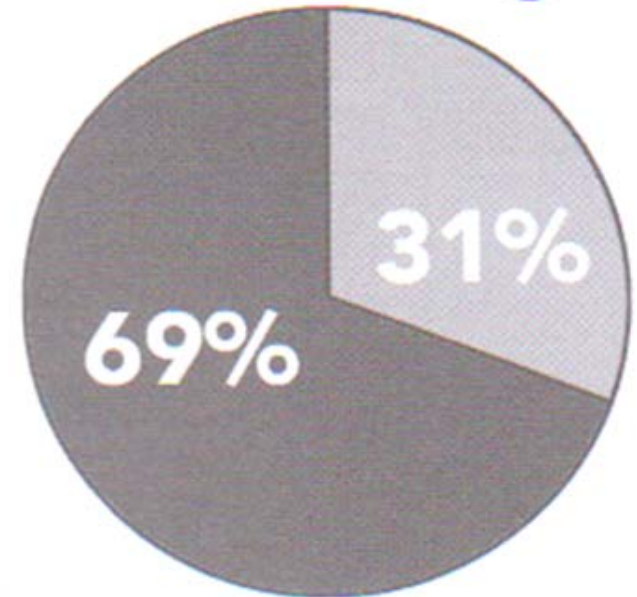
The Say/Feel Gap

Dan Hill (2007) in his book “Emotionomics” describes the say/feel gap.

Verbal Responses



Facial Coding



Even though over half the subjects gave a positive verbal response to the TV spot involving the architect, less than a third of the emotional response was positive

Emotional Response

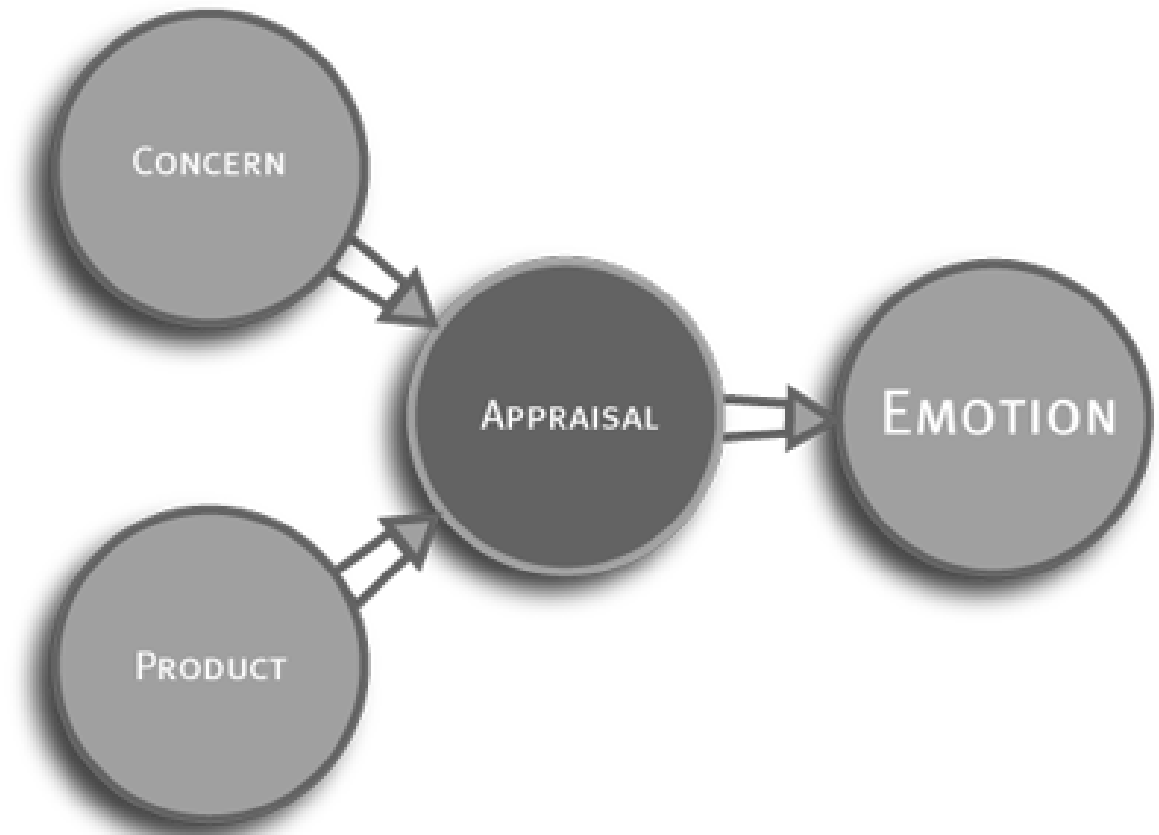
Emotional responses are situated, thus they depend on the context and on the intentions and concerns of the individual.

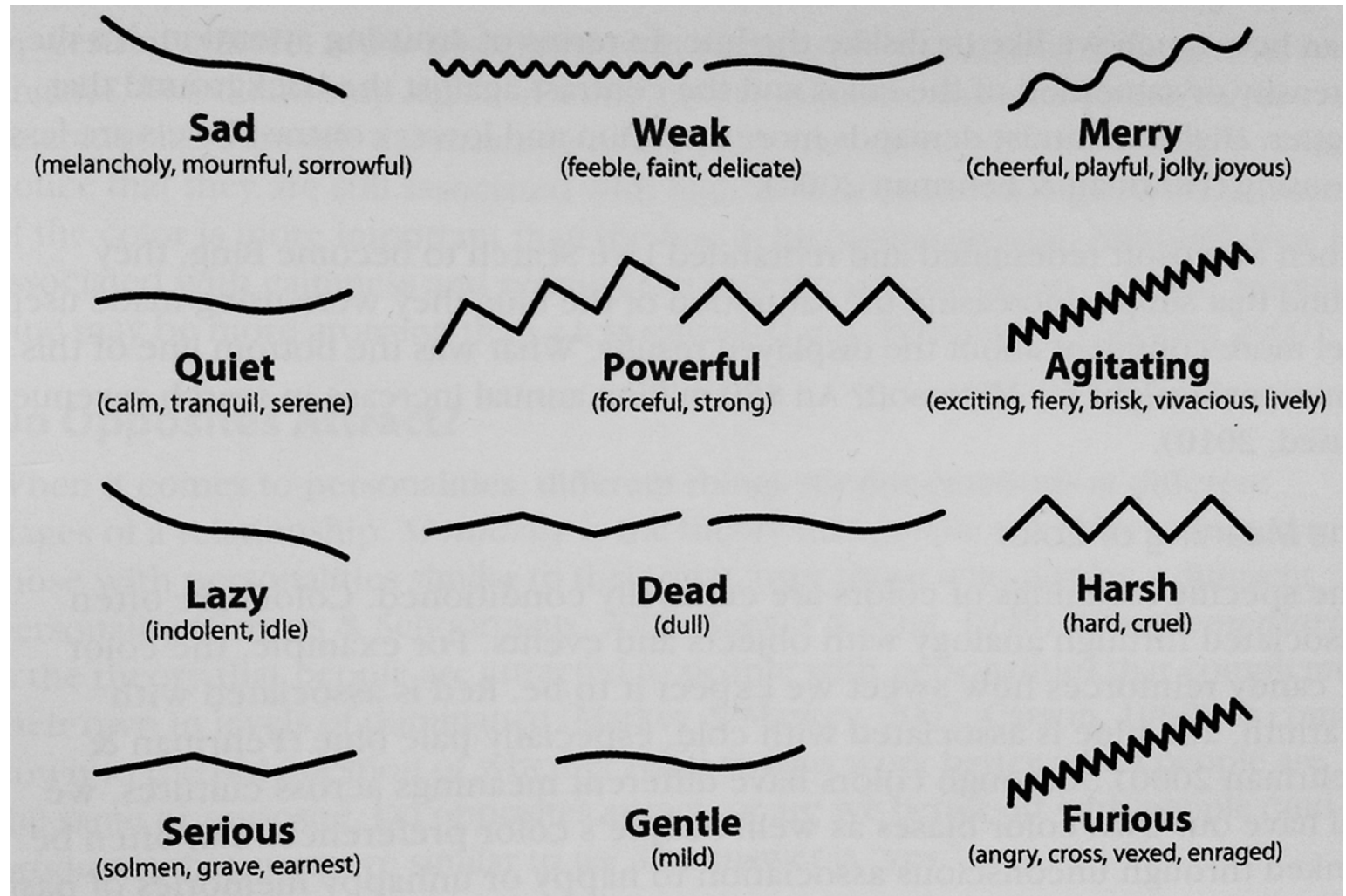
Some intentions and concerns will be innate, while others will have been acquired from life experiences which were effected by time and culture.



Emotional Response

Desmet (2002) suggested a model to describe the evaluations or appraisals which people make about products.





Emotion in Design

In 1924 Poffenberger and Barrows asked 500 students to match 18 different lines to 47 different emotionally themed adjectives. A remarkable degree of agreement was found regarding the emotions which some lines symbolise.



Emotion in Design

According to the Web Online Analytics company KISSMETRICS the choice of colour has a large effect on customer purchasing behaviour. 85% of shoppers cite colour as the primary reason why they buy a product while 52% don't return to a website due to its aesthetics.



Emotionally Durable Design

Jonathan Chapman suggests that one path to environmental sustainability is that of emotionally durable design.

People tend to fall out of love with things like cellular telephones long before the devices actually become technologically obsolete.

In such cases environmental sustainability is not about longer lasting materials, but rather about creating a longer lasting relationship.

Emotionally Durable Design

Chapman suggests the key characteristics of “narrative” and “surface”.

Narrative refers to the unique personal history which is shared between the person and the object, such as the history of purchase and use. Surface refers instead to how well the product ages, and what character it achieves over time. Through our use and mis-use we create a patina that imparts ownership and uniqueness. For example each scratch of your mother’s old kitchen table has a story which can be recalled and cherished.

From the point of view of emotional durability a trendy disposable bamboo cutlery set is probably not as environmentally friendly as grandmother’s silverware

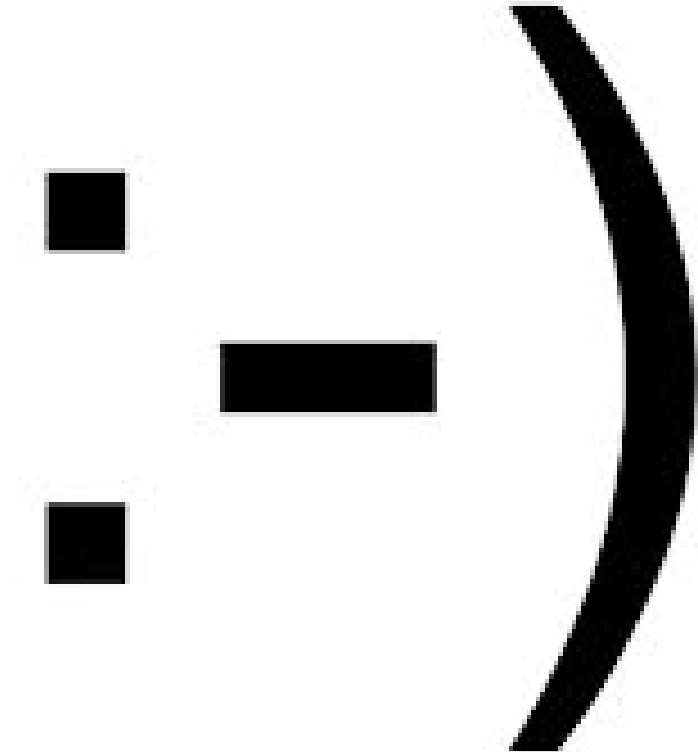


Design Classic: The Emoticon

An emoticon is a pictorial representation of a facial expression using punctuation marks and letters, which is written to express a person's feelings or mood.

Emoticons can be traced back to the 19th century when they were used in casual and humorous writing.

In 1982 Scott Fahlman suggested the use of :-) and :-(for expressing emotion in digital communications.



Design Classic: Anna G Corkscrew

Alessandro Mendini designed the “Anna G” corkscrew for Alessi in 1994.

By anthropomorphising and gamifying its kitchen utensils the Alessi company transformed them from simple functional commodities to emotionally engaging lifestyle statements.



Design Classic: Apple iPod

Introduced in 2001 the Apple iPod portable media player has become a design icon and has contributed to the emotional relationship between Apple Inc. and its customer base.

In recent years the emotional engagement has become so extensive that neuroscience research performed using magnetic resonance imaging (MRI) has found that images of Apple products light up the same brain regions in customers as do images of a deity for people with religious beliefs.



