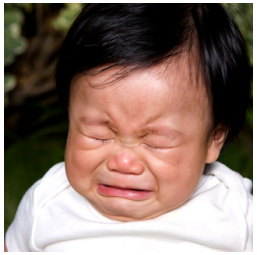
Emotion




VOCATIV

Questions + Themes

What are emotions? What are they **for?**

How do emotions guide judgment and action?

(How) do we know our emotions?

Love
Excitement
Peace

Fear
Sadness
Anger

2 + 2 = 4

Maryland
↓
Annapolis

Indicators

Love

Excitement

Peace

Fear

Sadness

Anger

2 + 2 = 4

Maryland

↓

Annapolis

Indicators

Love

Excitement

Peace

Fear

Sadness

Anger

2 + 2 = 4

Maryland

↓

Annapolis

Indicators

Multidimensional Scaling

Distances ⟶ Map

Baltimore New York City San Francisco Seattle

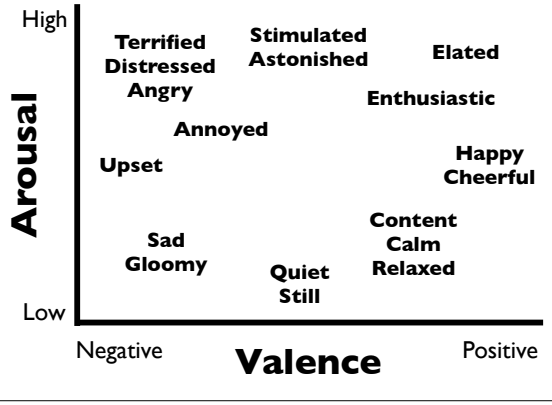
Baltimore - NYC	170mi
Baltimore - Seattle	2328mi
Balimore - San Fran.	2451mi
NYC - Seattle	2401mi
NYC - San Fran.	2565mi
San Francisco - Seattle	680mi

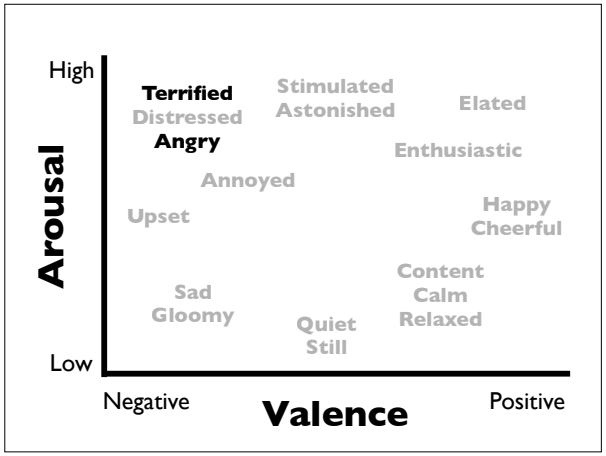
Multidimensional Scaling

Distances → Map

Excitement	Peace	Sadness	Anger

Excitement - Peace	Medium
Excitement - Sadness	Far
Excitement - Anger	Medium
Peace - Sadness	Medium
Peace - Anger	Far
Sadness - Anger	Medium
Happiness - Excitement	Close
Happiness - Sadness	Far




High
Arousal
Low
Terrified
Distressed
Angry
Stimulated
Astonished
Elated
Enthusiastic
Annoyed
Upset
Happy
Cheerful
Content
Calm
Relaxed
Sad
Gloomy
Quiet
Still
Negative
Valence
Positive


ASSHOLE
PARKING

Approach

vs

Avoid

Automaticity

Automaticity

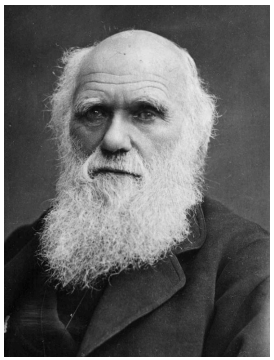
Automaticity

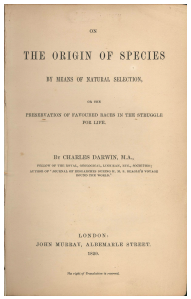
Universality

Universal feelings

↓

Universal faces?





ON

THE ORIGIN OF SPECIES

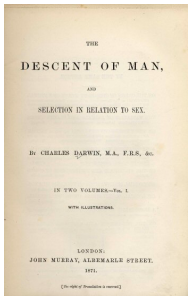
BY MEANS OF NATURAL SELECTION,

OR THE

PRESERVATION OF FAVOURED RACES IN THE STRUGGLE FOR LIFE.

By CHARLES DARWIN, M.A.,

LONDON:
JOHN MURRAY, ALBEMARLE STREET.
1860.



THE

DESCENT OF MAN,

AND

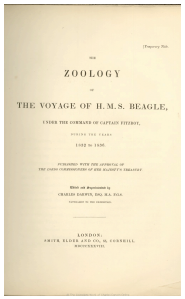
SELECTION IN RELATION TO SEX.

By CHARLES DARWIN, M.A., F.R.S., &c.

IN TWO VOLUMES.—Vol. I.

WITH ILLUSTRATIONS.

LONDON:
JOHN MURRAY, ALBEMARLE STREET.
1871.



ZOOLOGY

OF

THE VOYAGE OF H.M.S. BEAGLE,

UNDER THE COMMAND OF CAPTAIN FITZROY,

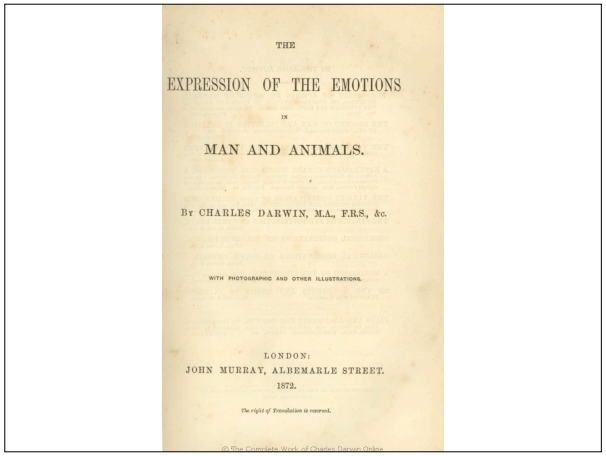
DURING THE YEARS

1832 to 1836.

Edited and Superintended by

CHARLES DARWIN, Esq. M.A. F.G.S.

LONDON:
SMITH, ELDER AND CO., 65, CORNHILL.



THE

EXPRESSION OF THE EMOTIONS

IN

MAN AND ANIMALS.

By CHARLES DARWIN, M.A., F.R.S., &c.

WITH PHOTOGRAPHIC AND OTHER ILLUSTRATIONS.

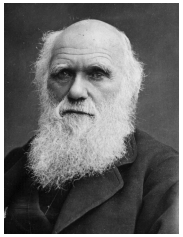
LONDON:
JOHN MURRAY, ALBEMARLE STREET.
1872.

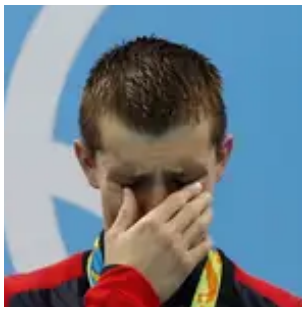
The right of Translation is reserved.

Universality

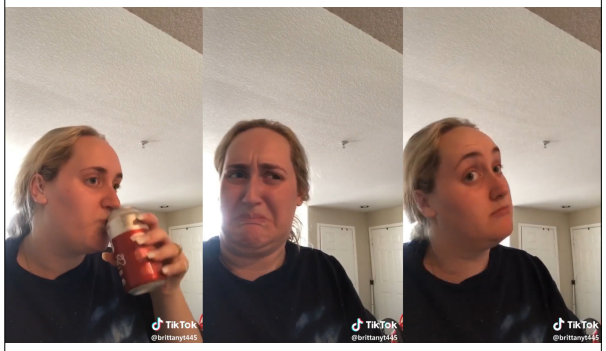
"The young and the old of widely different races, both with man and animals, express the same state of mind by the same movements."

(Darwin, 1872)






OLYMPIC
torino 2006


TikTok
@brittany1445
TikTok
@brittany1445
TikTok
@brittany1445

The Four *F*s

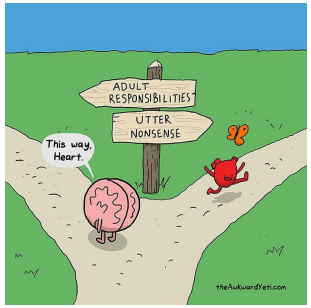
Fighting

Fleeing

Feeding

Mating

Does it work?



Emotions and Rationality

If we were less emotional, would our decision-making be better, or worse?

A. Better

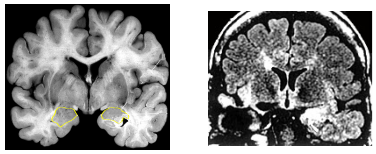
B. Worse

Does it work?

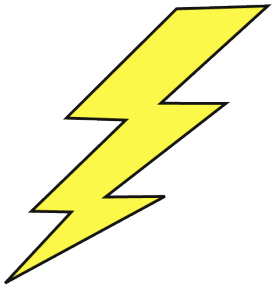


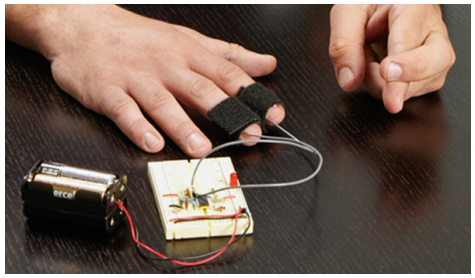
vs


No Emotions?



Patient SP: Bilateral **amygdala** damage





Galvanic Skin Response

(roughly, how much do you sweat)

Impaired recognition of emotion in facial expressions following bilateral damage to the human amygdala

R. Adolphs*, D. Tranel*, H. Damasio*† & A. Damasio*†

* Department of Neurology, Division of Cognitive Neuroscience, University of Iowa College of Medicine, Iowa City, Iowa 52242, USA
† The Salk Institute for Biological Studies, La Jolla, California 92186, USA

STUDIES in animals have shown that the amygdala receives highly processed visual input[1,2], contains neurons that respond selectively to faces[3], and that it participates in emotion[4,5] and social behaviour[6]. Although studies in epileptic patients support its role in emotion[7], determination of the amygdala's function in humans has been hampered by the rarity of patients with selective amygdala lesions[8]. Here, with the help of one such rare patient, we report findings that suggest the human amygdala may be indispensable to: (1) recognize fear in facial expressions; (2) recognize multiple emotions in a single facial expression; but (3) is not required to recognize personal identity from faces. These results suggest that damage restricted to the amygdala causes very specific recognition impairments, and thus constrains the broad notion that the amygdala is involved in emotion.

Iowa Gambling Task

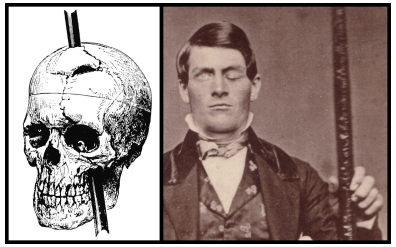
+$20

+$50

Iowa Gambling Task

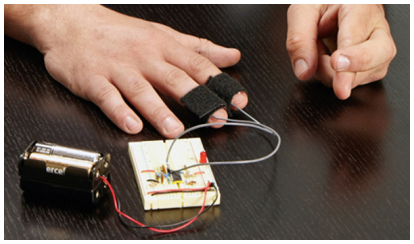
Most People
Learn which deck is bad, **avoid** it

Iowa Gambling Task



Frontal Patients
Learn which deck is bad, **fail to avoid** it

Iowa Gambling Task



It doesn't make them sweat!

"Somatic Marker Hypothesis"

"Personal and social matters are frequently linked to punishment and reward and thus to pain, pleasure, and the regulation of homeostatic states, including ... emotion and feeling. [Emotions have] the advantage of **constraining the decision-making space**."

(Damasio, 1996)

António Damásio

Capgras' Delusion

Theories of Emotion

James-Lange Theory

Cannon-Bard Theory

Two-Factor Theory

…

Theories of Emotion

Interpretation of Events

↓

Physiological States

Theories of Emotion

Interpretation of Events

↑

Physiological States

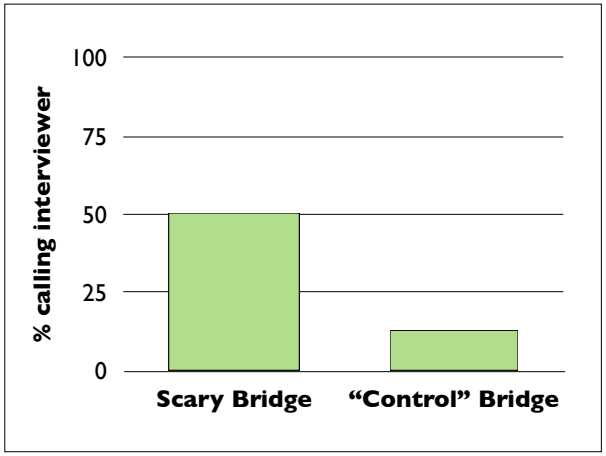
Misattribution of Arousal

Journal of Personality and Social Psychology
1974, Vol. 30, No. 4, 510–517

SOME EVIDENCE FOR HEIGHTENED SEXUAL ATTRACTION UNDER CONDITIONS OF HIGH ANXIETY[1]

DONALD G. DUTTON[2] AND ARTHUR P. ARON
University of British Columbia, Vancouver, Canada

Male passersby were contacted either on a fear-arousing suspension bridge or a non-fear-arousing bridge by an attractive female interviewer who asked them to fill out questionnaires containing Thematic Apperception Test pictures. Sexual content of stories written by subjects on the fear-arousing bridge and tendency of these subjects to attempt postexperimental contact with the interviewer were both significantly greater. No significant differences between bridges were obtained on either measure for subjects contacted by a male interviewer. A third study manipulated anticipated shock to male subjects and an attractive female confederate independently. Anticipation of own shock but not anticipation of shock to confederate increased sexual imagery scores on the Thematic Apperception Test and attraction to the confederate. Some theoretical implications of these findings are discussed.



Interpretation of Events

↑

Physiological States

Journal of Abnormal and Social Psychology
1962, Vol. 65, No. 2, 121–128

EPINEPHRINE, CHLORPROMAZINE, AND AMUSEMENT[1]

STANLEY SCHACHTER AND LADD WHEELER
Columbia University *University of Minnesota*

In their study of cognitive and physiological determinants of emotional states, Schachter and Singer (1962) have demonstrated that cognitive processes play a major role in the development of emotional states. Given a common state of physiological arousal, subjects can be readily induced into states of euphoria or of anger by means of cognitive manipulations. To what extent the state of physiological arousal is a necessary component of an emotional experience is not, however, completely clear in that study.

account for this failure to find larger differences between epinephrine and placebo subjects seems reasonably apparent. The experimental situations employed were fairly effective. The injection of placebo does not, of course, prevent the subject from self-arousal of the sympathetic system, and indeed there is considerable evidence (Woodworth & Schlosberg, 1958) that the arousal of an emotional state is accompanied by general excitation of the sympathetic nervous system.

Emotion