

# Emotion and Consciousness

## The Cognitive Science of Emotion

Carlotta Pavese

11.26.13

# Outline

- 1 Introduction
- 2 What is An Emotion?
- 3 David, Emotion and Feeling

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# Antonio Damasio

## Cast of Characters



- MD, Ph.D. Univ. of Lisbon, Neurology
- University Professor, Director of Brain & Creativity Institute, USC
- Author of 7 books, including *The Feeling of What Happens* (1999) and *Self Comes to Mind* (2010); hundreds of articles.
- *The Feeling of What Happens* was named by NYT Book Review as one of 2001's 10 best
- Member of American Academy of Arts & Sciences, National Academy of Sciences' Institute of Medicine

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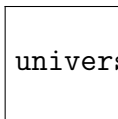
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- Think, for example, how easily we are able to recognize each others' emotions from our faces
  - And predict the faces certain stimuli will induce
- We recreate it in animation, theatre and film!

# Emotion

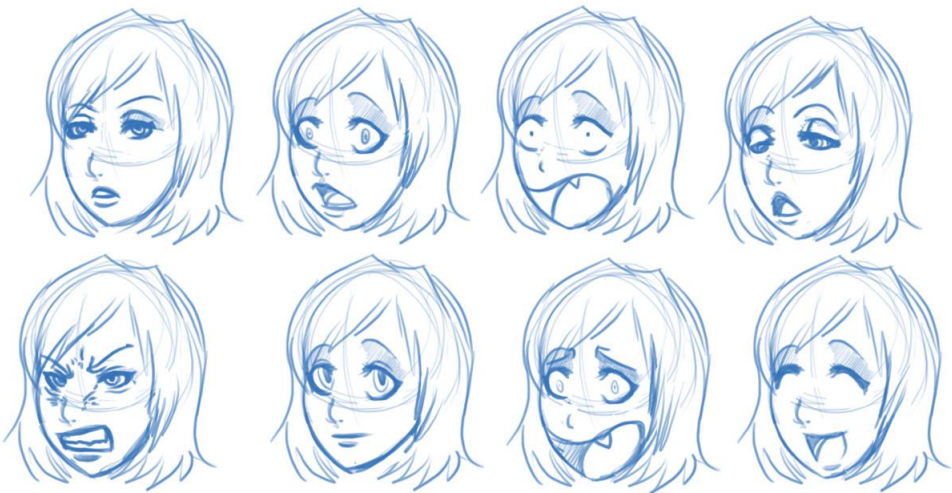
Recognize it?



universal\_emotion.jpg

# Emotion

We Can Recreate it: cartoons, animation



# Emotion

We Can Simplify it: emoticons



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- Is there an 'emotional center' in the brain?

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# What is An Emotion?

## Damasio's Biological Perspective

### Damasio's Slogan (From Interview)

We are not thinking machines. We are feeling machines that think. (<http://youtu.be/Aw2yaozi0Gg>)

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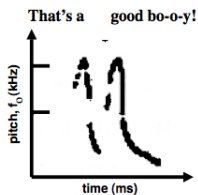
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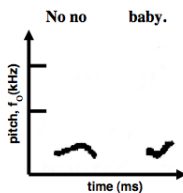
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Darwin's *The Expression of the Emotions in Man and Animals*

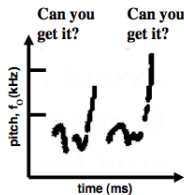
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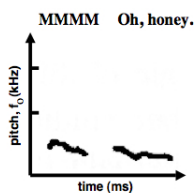
## Prohibition



## Attention



## Comfort



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Fig 7. Half-bred Shepherd Dog in the same state as in Fig. 5. By Mr. A. May.



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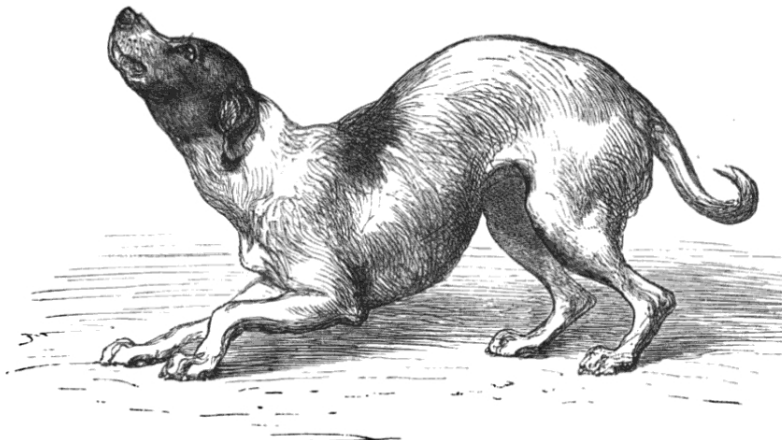


Fig. 6. The same in a humble and affectionate frame of mind. By Mr. Riviere.

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Fig. 8. The same caressing his master. By Mr A. May.

# Biological Perspective

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Fig. 14. Head of snarling Dog. From life, by Mr. Wood.



Fig. 15. Cat terrified at a dog. From life, by Mr. Wood.

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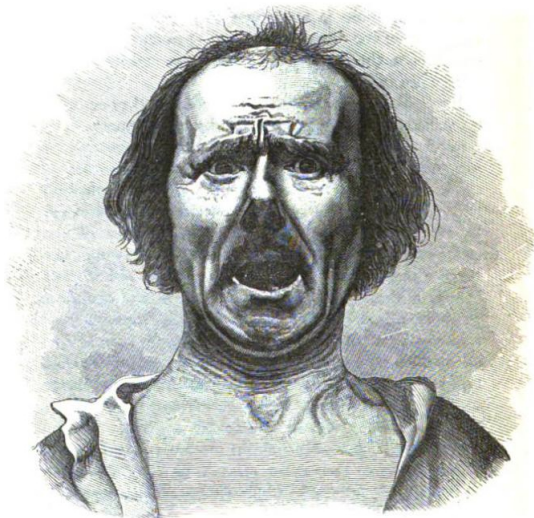
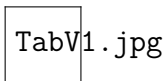


Fig 21. Horror and Agony, copied from a photograph by Dr. Duchenne.

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  - Influence the organism beyond the here and now

# Damasio's Three Stages

## Emotions, Feelings and Consciousness

State of Emotion Automatic reaction of body and brain



State of Feeling A representation of the reaction

- May be fleeting

Feeling Made Conscious Reaction comes to be known

- Is remembered

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### Question

Can you really have a feeling without being conscious of it?

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Total Learning and Memory Loss, Emotional Processing Intact

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  - If asked, he couldn't tell you what they looked like or what their name was; couldn't recognize them at all!

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- David still could not recognize photos or voices
  - But David picked **good guy** 80% of the time!

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- And the feelings could regulate his behavior later
- But this was not the same kind of memory he lacked
- It wasn't an image 'before the mind'

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Damasio pp. 46

“David was being brought to a bad-guy encounter and as he turned into the hallway and saw the bad guy awaiting him, a few feet away, he flinched, stopped for an instant, and only then allowed himself to be led gently to the examining room. I picked up on this and immediately asked him if anything was the matter, if there was anything I could do for him. But, true to form, he told me that, no, everything was all right – after all, nothing came to his mind, except, perhaps an isolated sense of emotion without cause behind that emotion... In the absence of an appropriately related set of images to explain to him the cause of the reaction, the effect remained isolated...”

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