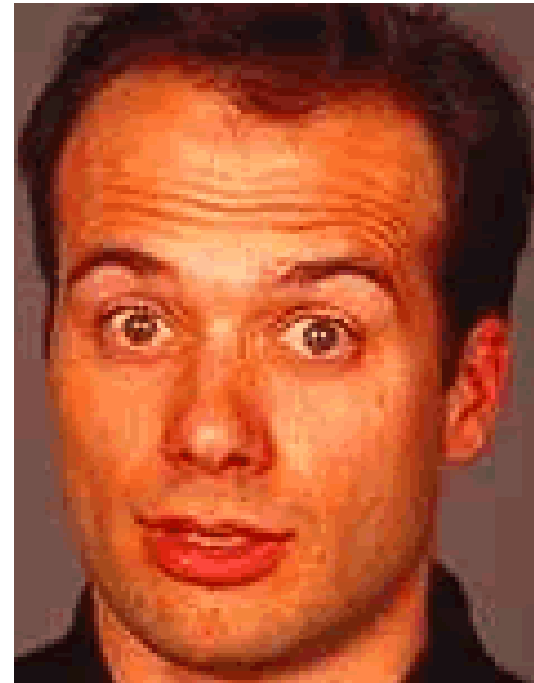
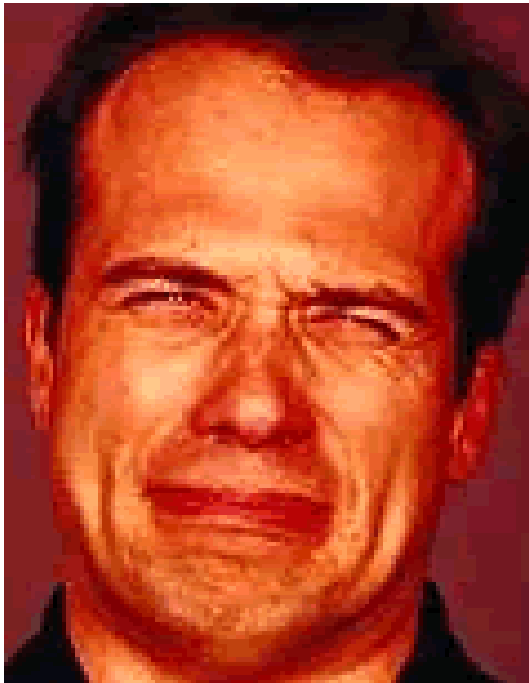
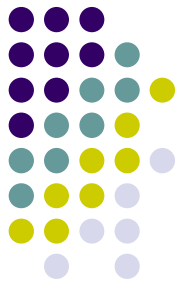
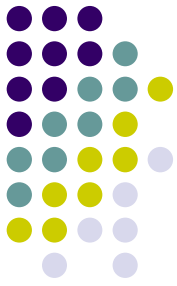


Understanding Emotions



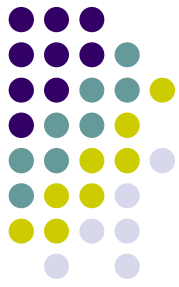
How does this man feel in
each of these photos?

Emotions



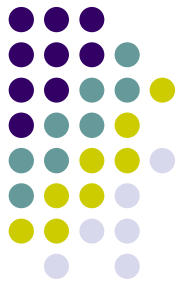
- Lecture Overview
 - What are Emotions?
 - Facial displays of emotion
 - Culture-based and sex-based differences

Definitions



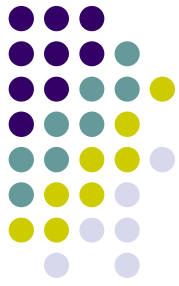
- Spend next few minutes arriving at a definition of 'emotion'. This definition should include descriptions of the *experience* of emotion as well as the *function* of emotion. You might try applying your definition to 1 emotion from the following list:
 - Anger
 - Happiness
 - Sadness
 - Jealousy

...Definitions: Experience



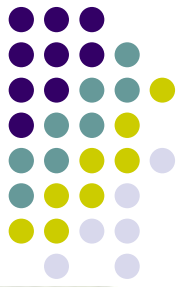
- Various definitions, depending on whom you ask
- Emotions may be characterised by these components:
 - Feelings
 - Expressive reactions
 - Physiological reactions
 - Behaviour
 - Cognitions
 - Neural processes
 - Emotion elicitors
- There is disagreement

Definition: Function

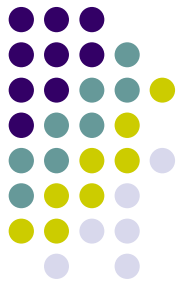


- Emotions have been/are evolutionarily adaptive
- Emotions have been/are socially adaptive

Which face stands out more?



Basic Theories of Emotion



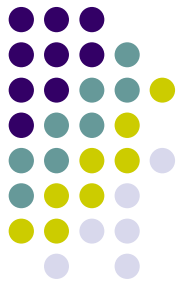
- James-Lange Theory

- A common sense idea:

Elicitor → Psychological experience → Physiological state changes

- BUT, James-Lange theory:

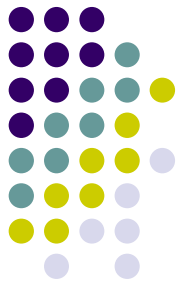
Elicitor → Physiological state changes → Psychological experience



...Basic Theories of Emotion

- Problems w/ James-Lange Theory (according to Cannon-Bard):
 - 1) The same physiological changes occur in different emotional states
 - 2) Total separation of the viscera from the CNS does not alter emotional behaviour
- Cannon-Bard: experience physiological arousal and psychological experience at same time. Theory gives no attention to thoughts or behaviour.

...Basic Theories of Emotion

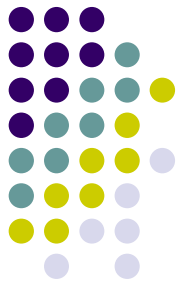


- Schacter & Singer Two-factor Theory –

Elicitor → Physiological state changes → Reasoning (Cognition) →
Psychological experience

- I.e., An event causes physiological arousal first. People must identify a reason for this and then they are able to experience and label the emotion.

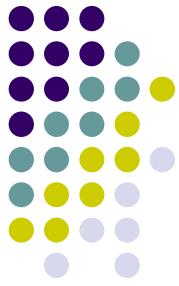
Research Example: Two Factor Theory of Arousal



- Dutton & Aron (1974) – Love on a bridge?
 - Male participants approached by attractive woman or man on one of two bridges
 - Bridge 1: Scary!



...Research Example

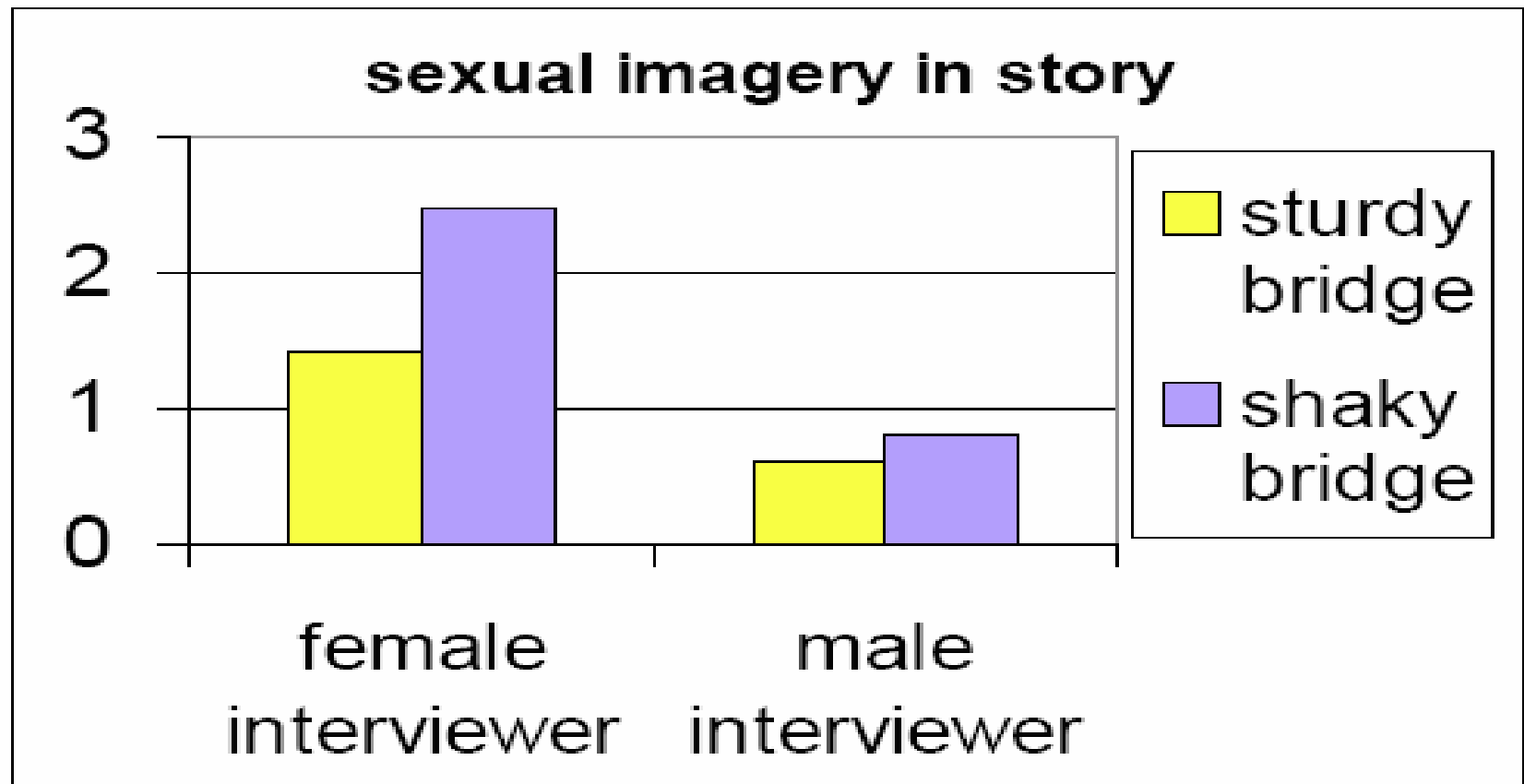
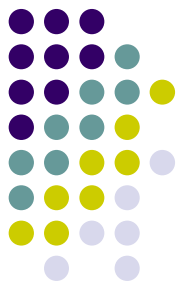


- Bridge 2: Not Scary!

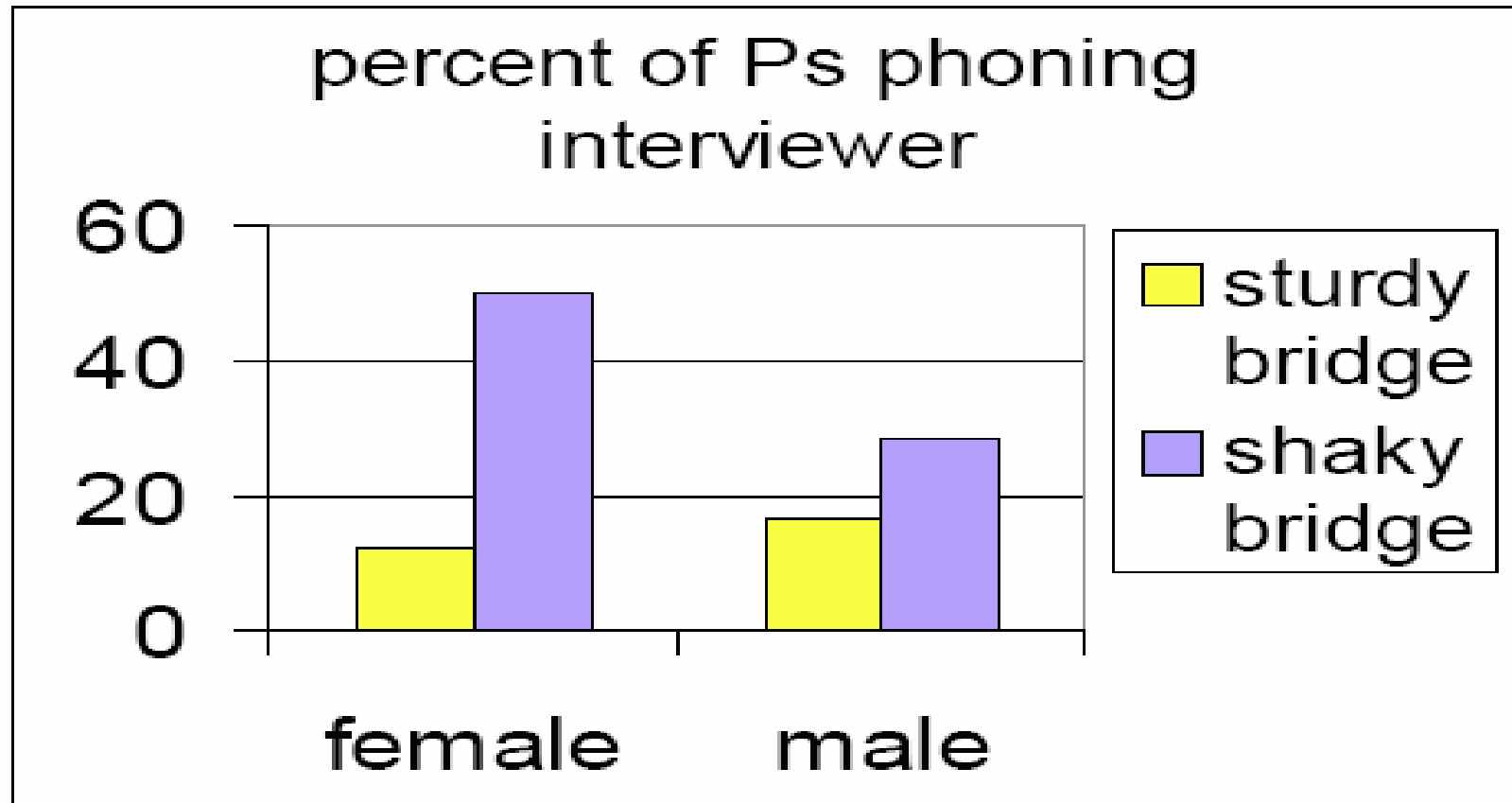
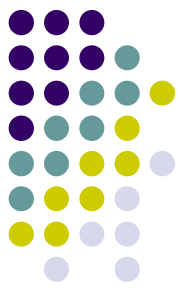


- The confederate asked men to write brief story about a picture and, further, gave her/his phone number should they have further questions
- The researchers coded the stories for sexual content and kept track of how many men from Bridge 1 vs. 2 called the confederate
- What do you think happened?

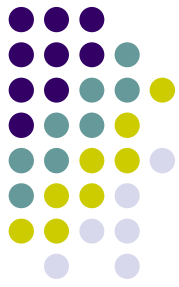
...Research Example



...Research Example

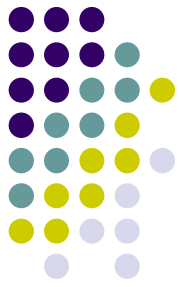


...Research Example



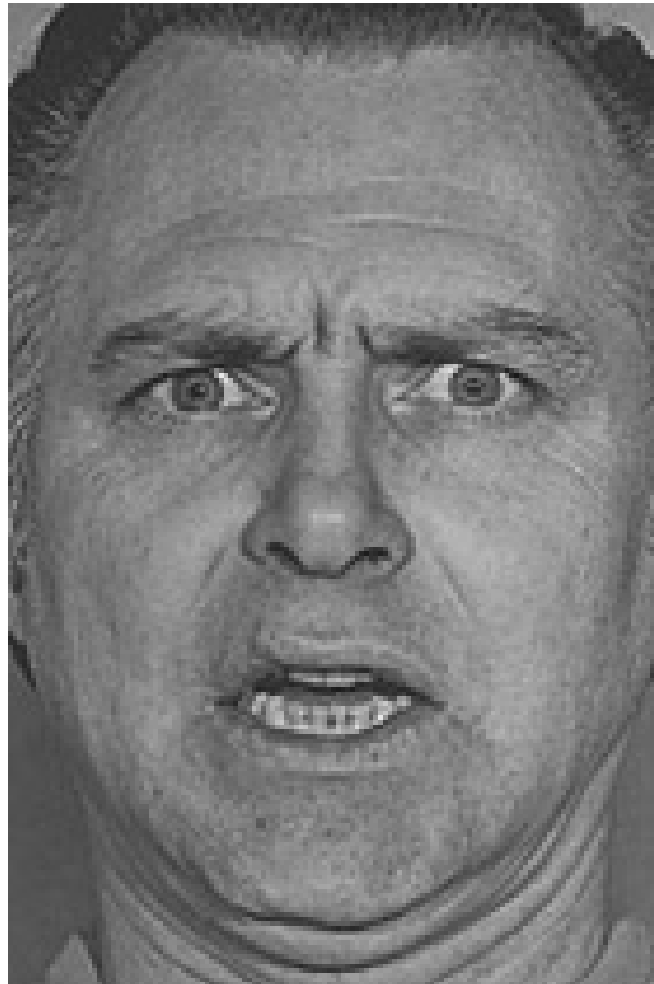
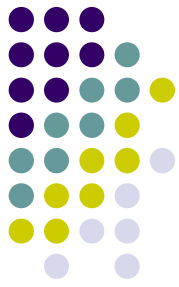
- Findings support the Two-factor theory
- Perhaps explains why people like to go on dates to scary movies?

...Basic Theories of Emotion

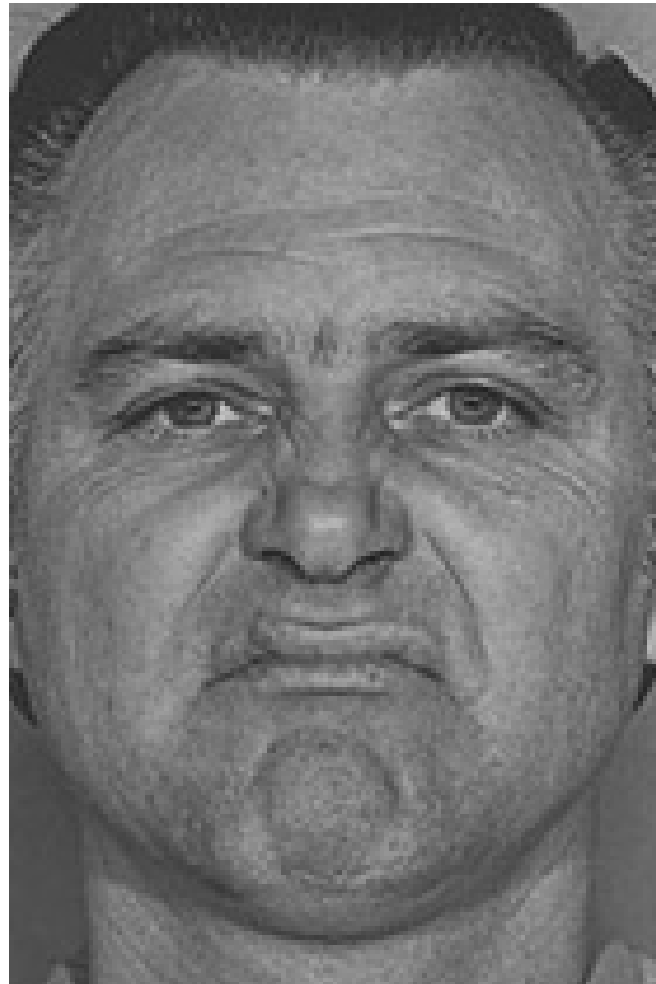
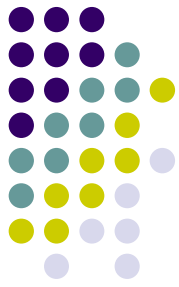


- Cognitive Appraisal Theory – Sometimes emotions result from an interpretation of a situation in the absence of any arousal.
- I.e., *emotions* depend on how the perceiver explains the event
 - Two kinds of appraisals (though there are many) are especially important:
 - Does the event have good or bad implications?
 - What caused the event?

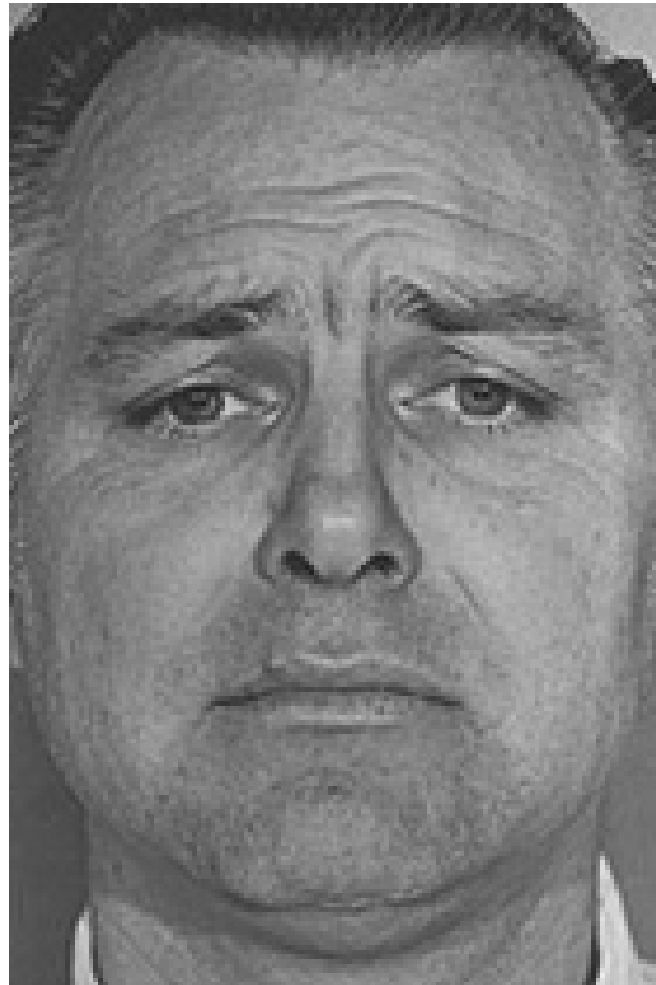
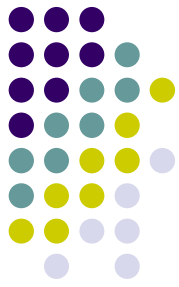
Identify the emotion on this face



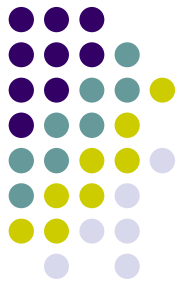
... Identify the emotion on this face



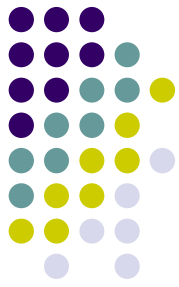
... Identify the emotion on this face



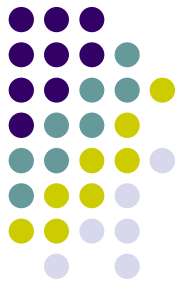
... Identify the emotion on this face



... Identify the emotion on this face

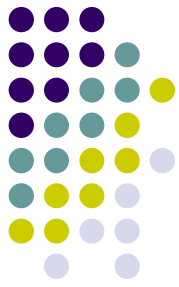


Facial Expressions of Emotion



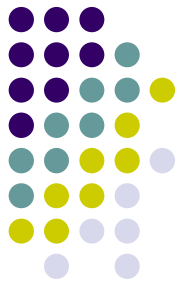
- Another Basic Theory of Emotion ~ Charles Darwin: Emotions have concomitant facial expressions which are
 - Innate
 - Species-specific
 - Universally understood within each species
 - Evolutionarily adaptive

Contemporary Darwinism: Methods of Assessment



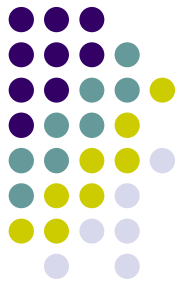
- Three different approaches have been used to assess the Universality of facial expressions:
 - 1) Members of various cultures observed when spontaneously making facial expressions or purposefully making facial expressions (in response to a request) in different emotional contexts.
 - 2) Studies of children born blind and deaf.
 - 3) Photographs of faces have been shown to observers who have been asked to identify the emotion displayed.

Contemporary Darwinism: Ekman

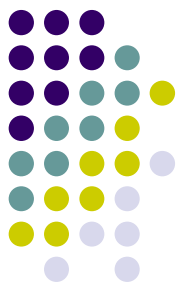


- Ekman & Friesen 1971 – Identification of Emotional Expressions
 - Located isolated group of people (Fore of New Guinea)
 - Participants shown 3 photographs of facial expressions of emotion (either happiness, sadness, anger, surprise, disgust, and/or fear)
 - Participants hear a brief story involving the emotion depicted in one of the photographs
 - Results: For all emotion stories except fear, the % of participants choosing the correct expression ranged from 64%-100%

...Contemporary Darwinism



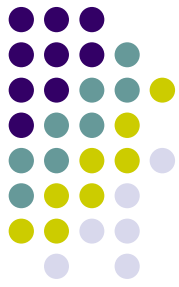
- Ekman & colleagues, 1987
 - Using a similar judgment task, they asked people in 10 different cultures to match facial expressions to labels of emotion terms



Percentage Correct Identifications

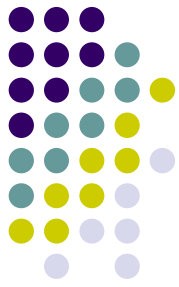
<u>Nation</u>	<u>Hap</u>	<u>Sur</u>	<u>Sad</u>	<u>Fea</u>	<u>Dis</u>	<u>Ang</u>	<u>Total</u>
Estonia	90	94	86	91	71	67	83
Germany	93	87	83	86	61	71	80
Hong Kong	92	91	80	74	77	77	82
Italy	97	92	81	82	89	72	86
Japan	90	94	87	65	60	67	77
Scotland	98	88	86	86	79	84	87
Sumatra	69	78	91	70	70	70	75
Turkey	87	90	76	76	74	79	80
USA	95	92	92	84	86	81	88
Ave	90	90	85	79	74	74	

Cross-cultural Variation



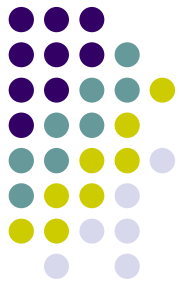
- Culture may modulate encoding and decoding of facial expressions via
 - Display rules
 - Ingroup familiarity

...Cross-cultural variation



- Display Rules – Specify when it is appropriate to display certain emotions.
- Display rules can both discourage and encourage emotional expression.

Research Example: Display Rules

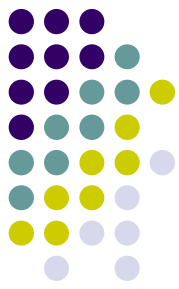


Ekman (1973):

- Observed facial expressions of participants while they were watching a stressful film in private, and then discussing it in public

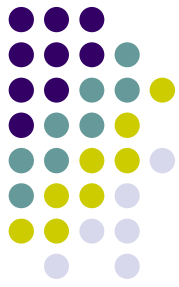
	Japanese	U.S.
Private	Neg emotions	neg. emotions
Public	pos emotions	neg. emotions

...Research Example: Display Rules



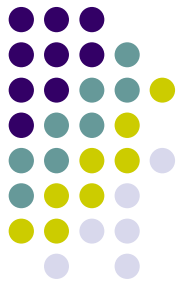
- Matsumoto (1990) explains these differences in terms of individualism vs. collectivism
 - Collectivists (typically Asian and South American cultures) — it is important to avoid reflecting negatively upon the group, hence, they are less likely to show negative affect in public
 - Individualists (typically in Western cultures)—direct communication is important, hence, they are less likely to mask their negative affect

Individualism vs. Collectivism



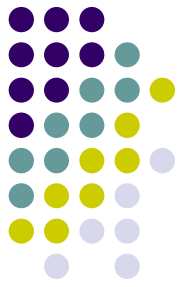
- Individualism
 - 1. Fostering independence and individual achievement
 - 2. Promoting self-expression, individual thinking, personal choice
 - 3. Associated with egalitarian relationships and flexibility in roles (e.g., upward mobility)
 - 4. Understanding the physical world as knowable apart from its meaning for human life
 - 5. Associated with private property, individual ownership
- Collectivism
 - 1. Fostering interdependence and group success.
 - 2. Promoting adherence to norms, respect for authority/elders, group consensus
 - 3. Associated with stable, hierarchical roles (dependent on gender, family background, age)
 - 4. Understanding the physical world in the context of its meaning for human life
 - 5. Associated with shared property, group ownership

In-group Familiarity



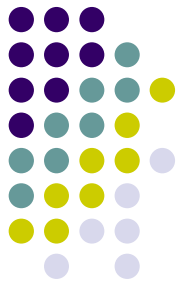
- Elfenbein & Ambady, 2002 - Hypothesised that emotional expression recognition should be higher when emotions are expressed and interpreted by same cultural group
 - Meta-analysis found: Emotion recognition judgments by persons of same cultural group as posers were an average 9.3% more accurate
- There is a similar, weaker, effect for cross-racial emotion identification (within same culture; Nowicki, Glanville, Demertzis, 1998)

Sex differences



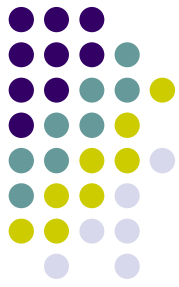
- Research indicates women are more emotionally expressive (in terms of facial expressiveness) than men, especially with respect to *smiling*, though there is also evidence with respect to facial displays of *disgust*, fear, *sadness* & *surprise*
- Why?

...Sex Differences



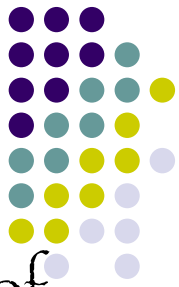
- Why?
 - Perhaps women *feel* the emotions more intensely than men
 - Or, perhaps men and women have different 'thresholds' for the experience vs. display of emotions
 - Research suggests that socialization concerning emotion centres more distinctly on its *display* than its *experience*
 - Men and women – though they may display emotions differently – may experience them to the same extent
 - Research by Krings & Gordon (1998) supports this framework: Thus, sex-based display rules govern the expression of emotion in men and women

Display Rules: Culture x Gender



- Findings:
 - Japanese women will often hide wide smiles behind their hands, while Western women are encouraged to smile broadly and often
 - Negative emotions are not supposed to be expressed intensely by either men or women in Japan, whereas cultural norms in Western cultures dictate that men and women may display negative emotions, but only of particular kinds (males: anger; females: sadness, fear).

Take Home Messages



- There are a variety of definitions of emotion, some of which give priority to the physiological component, and/or the cognitive component, or even the evolutionary basis.
- Research on the universality of facial expressions of emotions stems from the Darwinian (evolutionary) tradition
 - There is a great deal of research giving credence to this point of view, at least for a limited number of 'basic' emotions
 - Still, there exists cultural variability, whether that culture be defined by national borders, ethnic identity, or sex.