### definitions and origin of emotions

- (1) what is an emotion?
- (2) evolution of emotions

from: "Understanding Emotions" (1996)

Keith Oatley & Jennifer Jenkins

Blackwell Publishers Ltd, Oxford, UK

## (1) what is an emotion?

- working definitions of emotions
- the <u>process</u> of emotions
- so what are emotions really?
- the affective realm: emotions moods dispositions

### definitions of emotions

......"Everyone knows what an emotion is, until asked to give a definition"......

Beverly Fehr and James Russell

We do not seek to <u>define</u> emotions but to understand them.....

# working definition (Frijda)

- (1) An emotion is usually caused by a person consciously or unconsciously evaluating **an event as relevant to a concern (a goal)** that is important; the emotion is felt as positive when a concern is advanced and negative when a concern is impeded.
- (2) The core of an emotion is readiness to act and the prompting of plans; an emotion gives priority for one or a few kinds of actions to which it gives a sense of urgency so it can interrupt, or compete with, alternative mental processes or actions. Different types of readiness create different outline relationships with others
- (3) An emotion is usually <u>experienced as a distinctive type of mental</u> <u>state</u>, sometimes accompanied or followed by bodily changes, expressions, actions.

## necessary condition

- **necessary condition**: without it an emotion does not exist
- **sufficient condition**: if this occurs we are certain that an emotion is present
- Frijda proposed that the *necessary condition* of an emotion is **change in readiness for action**
- there is not a *sufficient condition*, since people get ready for an action **without** this being emotional

## emotion prototype

- people rarely think in terms of necessary and sufficient conditions, instead,
   prototypes are fundamental to everyday human thinking
- Fehr and Russell adopt the idea that people's everyday **prototype** of an emotion is a **script**; a characteristic outline of a sequence of events

## the process of emotion

Frijda (1986): emotion as a set of stages:

appraisal →

context evaluation →

action readiness →

physiological change,
expression, action

# appraisal

**appraisal** = recognition of an event as significant

**goal-relevant theories** (Lazarus, Oatley & Johnson-Laird):

- (1) goal relevance
- (2) goal congruence or incongruence
- (3) type of ego involvement

#### context evaluation

Lazarus (1991): secondary appraisal thoughts are important in this stage thoughts about:

- context: plans, how to cope with event
- changes of priority
- cause of event: attribution

### action readiness

#### examples:

- I want to assault, hurt, insult
- I want to approach, make contact
- I felt paralyzed, frozen
- I felt helpless

### expression, bodily change, action

- recognition of "affect displays" quite successful
- James: an emotion <u>is</u> the feeling of what is going on in the body
- emotions implied by <u>patterns of action are</u> recognizable to others

#### relations among elicitors, expressions and bodily changes

• one would expect high correlations but relations are **ambiguous** 

#### Lang's proposal:

- 3 systems with 3 separate functions:
- cognitive-verbal system: goal priority
- bodily-physiological system: make ready
- behavioral-expressive system: social

## what emotions really are

- ➤ Campos et al. (1994): "emotions are those processes which establish, maintain, change, or terminate the relation between the person and the environment on matters of significance to the person"
- In real life, purely logical search through all possibilities is not possible (because of limitations of resources, multiple goals, and problems of coordination with others). This is why emotions or something like them are **necessary to bridge** across the unexpected and unknown, to guide reason, and to give priorities among multiple goals.
- ➤ What emotions really are, are the guiding structures of our lives -- especially of our relations with others.

### the affective realm

- affect: whole range of states
- **emotions**: between a few min and a few hours
- moods: may last for months
- emotional disorders: may last for years
- personality: traits may last for a lifetime

## (2) evolution of emotions

- species-characteristic patterns of action
- <u>origins</u> of the emotional characteristics of humankind
- evolutionary bases of emotions
- emotions as bases of social relationships

### evolution of emotions

- emotions provide **outline patterns** for certain kinds of behavior, especially social behavior, that underlie the human adaptation to the world
- what exactly is an outline pattern?
- In his chapter we discuss inherited patterns that are **similar** among humans and between humans and other animals

#### species-characteristic patterns of action

- "instinct" = genetically based, extended, pattern of action
- two concepts have replaced the idea of fixed action sequences:
  - (1) goal-directed behavior, and
  - (2) **script** from the theater

#### origins of the emotional characteristics of humankind

#### three kinds of information:

- study of closest relatives: chimpanzees
- study of prehistoric evidence of early
   humans and of human ancestors
- study of **contemporary human societies** living as earlier hunter-gatherers

#### our primate relatives: chimpanzees

- chimps live in dominance hierarchies
- there is no problem in identifying chimps emotions because they are so like ours
- a plausible inference is that <u>emotions and their</u> <u>expressions are the bases for distinctive patterns of</u> interaction
- at least <u>some emotions form bridges between</u> <u>ourselves and chimps</u>

## evidence of human ancestry

- human emotions are based on mechanisms enabling us to react to distinctive situations that have recurred often during human evolution
- what separates us from animals is **culture** -- of tools, skills to use them, concepts
- our environments of human adaptiveness were extended family groups of hunter-gatherers

## hunter-gathering ways of life

- societies of still-living hunter-gatherers are cooperative and non-hierarchical (!?)
- human adaptations: upright walking, increasing brain-size, division of labor, monogamy
- central structure of human life is **family**
- most of our emotions are probably adapted to living in this way: <u>cooperating</u>, <u>though with</u> <u>division of labor</u>, <u>in hunting and gathering</u>, <u>in</u> <u>preparing and sharing food</u>, <u>in rearing and</u> <u>protecting children</u>

## evolutionary bases of emotions

- emotions arise largely with **problems to be solved**
- for recurring problems we are equipped with genetically based outline scripts for behavior that has been successful in the past
- each kind of emotional pattern is triggered by distinctive cues
- each makes ready patterns of action appropriate to solving the problem that has been arisen

#### uniqueness of human relationships

- emotions are felt not just towards other members of the species, but to **specific individuals**
- each of us achieves an identity, meaning a social identity
- humans can manage to know and interact successfully with a maximum of about 150 individuals. So human villages have around this number (!?)

#### species-characteristic patterns of action

- its start-up program is **genetically given**
- actions become **more skilled with learning**
- <u>human behavior is strongly influenced by genetic patterns</u> in the same way as that of other animals
- instinctive actions are **not fixed but highly responsive to features of the environment**
- **goal-directedness:** when a discrepancy from the goal, a plan-like set of actions follows until the goal is reached
- **script**: outline sequence of actions until goal is reached
- some outline scripts, for important functions in humans, are
   genetically provided by our genes
- without motivation and stimulus, the actions do not occur