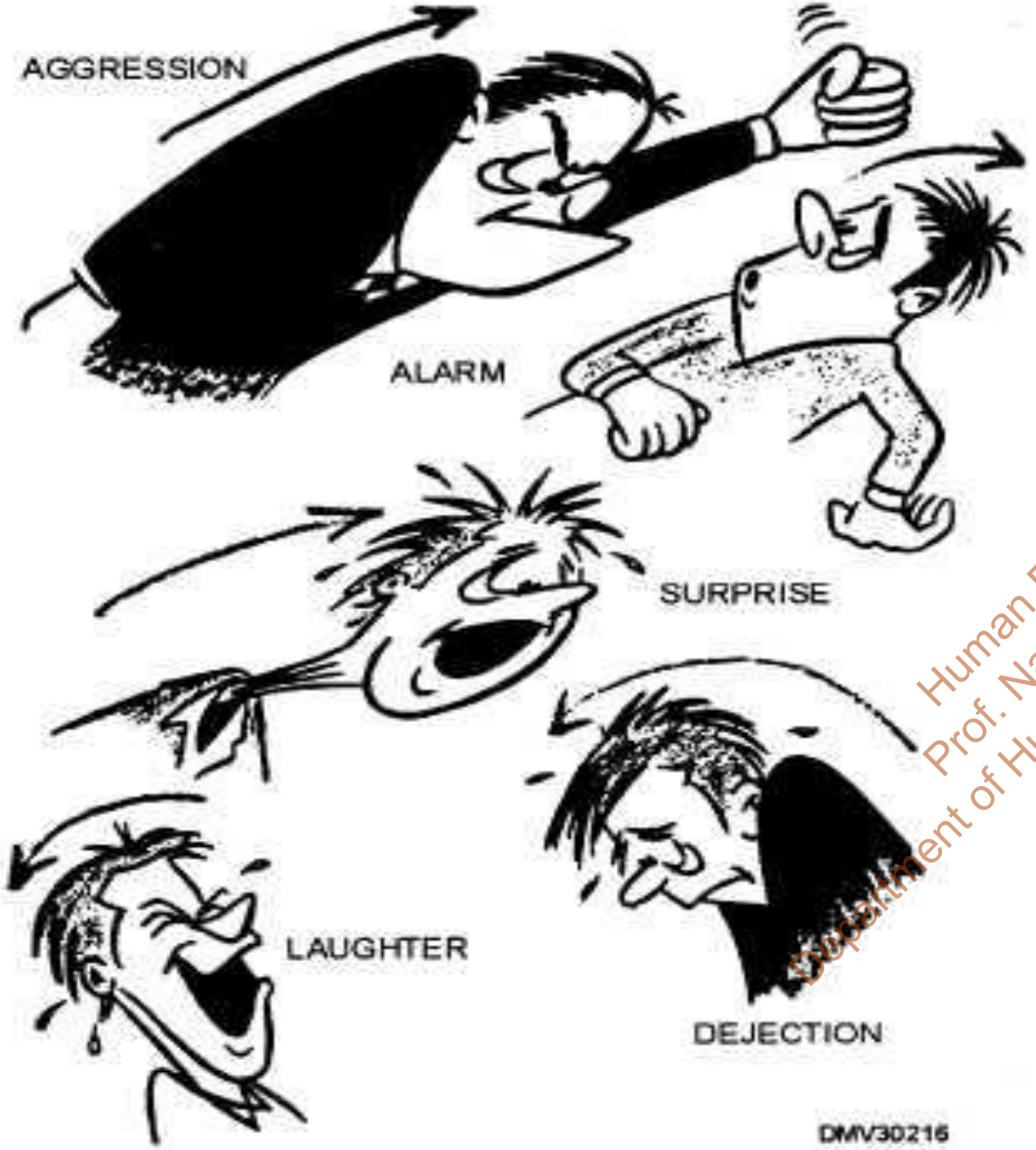
Emotion

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Emotion

Nature of Emotion

Emotions are complex entities to define. However most scientists studying emotions agree that they involve –

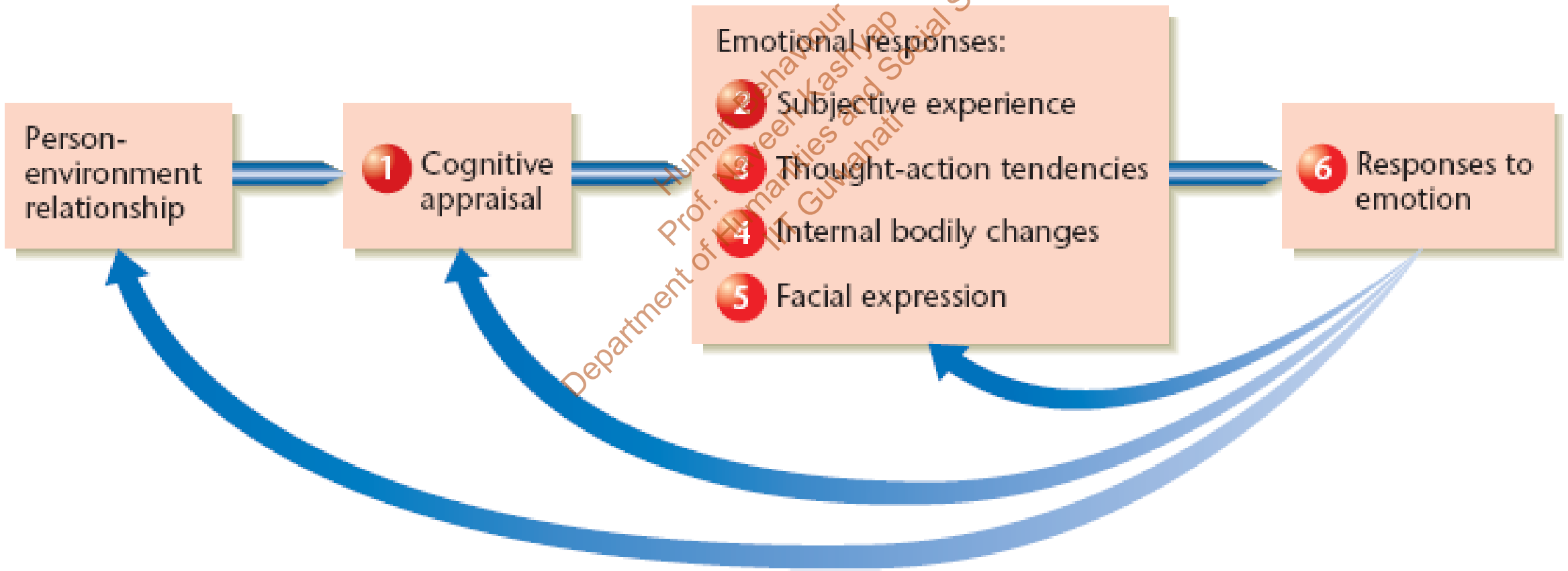
- *Physiological Changes, within our bodies* – shifts in heart rate, blood pressure, and so on
- *Subjective Cognitive states* - the personal experience we label emotions
- *Expressive Behaviors* – outward signs of these internal reactions



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Components of Emotion

- An emotion is a complex, multi-component episode that creates a readiness to act



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CONCEPT REVIEW TABLE

Six components of the emotion process	
Cognitive appraisal	A person's assessment of the personal meaning of his or her current circumstances
Subjective experience	The affective state or feeling tone that colors private experience
Thought and action tendencies	Urges to think or act in particular ways
Internal bodily changes	Physiological responses, particularly those involving the autonomic nervous system such as changes in heart rate and sweat gland activity
Facial expression	Muscle contractions that move facial landmarks — like cheeks, lips, noses, and brows — into particular configurations
Responses to emotion	How people regulate, react to, or cope with their own emotion or the situation that triggered it

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Components of Emotion

- Emotions are distinct from moods in several ways:
  - Emotions tend to have a clear cause, are typically brief, and implicate multiple component systems
  - In research there is much interest in the detailed nature of components of emotion, and the mechanisms by which they influence each other

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Theories of Emotion

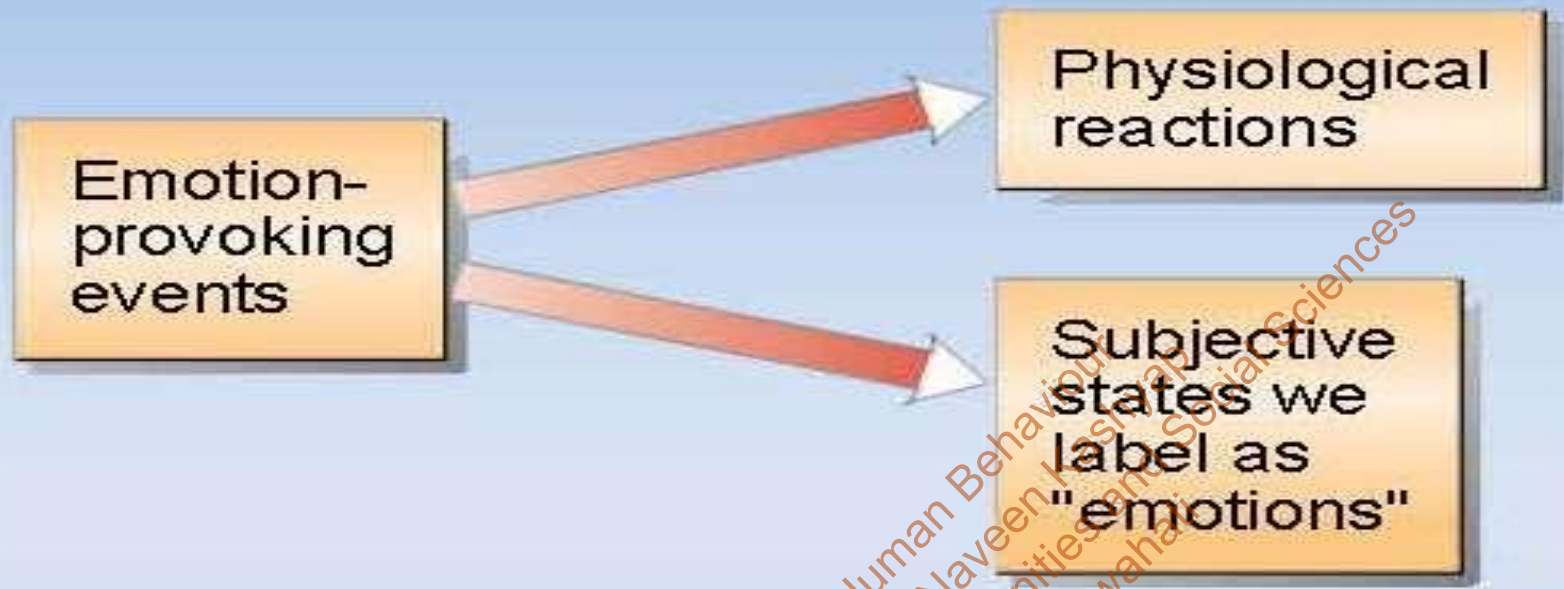
The Cannon-Bard and James-Lange theories – which comes first, action or feelings

Cannon-Bard theory – suggests that various emotion provoking events induce *simultaneously*, the subjective experiences we label as emotions and the physiological reactions that accompany them.

James-Lange theory – suggests that subjective emotional experiences are actually the *result* of physiological changes within our bodies

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Cannon–Bard Theory



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James–Lange Theory



Theories of Emotion

Which of the two theory is a correctly explains emotion?

Until recently the Cannon-Bard hypothesis was the most favored theory among the two but recent research has highlighted the importance of the James-Lange theory based on evidences from

- modern equipment's verify that different emotions have different patterns of physiological activity

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- *facial feedback hypothesis* – suggests that changes in our facial expressions produces shifts in our experienced emotions rather than merely reflecting them

- In addition research suggests that changing our bodily postures or even the tone of our voice may influence emotional experiences

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Theories of Emotion

Schachter and Singer's Two-Factor theory –

Emotion provoking events produce *increased arousal*.

In response to these feelings we then *search the external environment* in order to *identify the causes* behind them.

The *factors we then select* play a key role in *determining the label we place on our arousal* and so in determining the *emotions we experience*

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Opponent process theory – the theory suggest that

1) an emotional reaction to a stimulus is followed automatically by an opposite reaction

2) repeated exposure to a stimulus causes the initial reaction to weaken and the opponent process, or opposite reaction to strengthen

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Theory	Stimulus	Response	Report
Common sense		Fear → Subjective experience; Body response (arousal) 	"My heart is pounding because I feel afraid."
James-Lange		Body response (arousal)  → Fear; Subjective experience	"I feel afraid because my heart is pounding."
Cannon-Bard		Body response (arousal)  ; Fear; Subjective experience	"The dog makes me feel afraid and my heart pounds."
Schachter		Body response (arousal)  → Interpretation  → Fear; Subjective experience	"My pounding heart means I'm afraid because I interpret the situation as dangerous."

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Theories of Emotion: An Overview

The theories summarized here are among the ones that have received most attention from researchers.

Theory of Emotion	Basic Assumptions
Cannon–Bard Theory	Emotion-provoking events induce simultaneously the subjective experiences we label as emotions and the physiological reactions that accompany them.
James–Lange Theory	Subjective emotional experiences result from physiological changes within our bodies (e.g., w feel sorry because we cry, frightened because we run away from something, etc.).
Schachter–Singer (Two-Factor) Theory	Emotion-provoking events produce increased arousal; in response to the arousal, we search t external environment in order to identify the causes behind it. The factors we identify then determine the label we place on our arousal and the emotion we experience.
Opponent-Process Theory	Emotional reactions to a stimulus are followed automatically by an opposite reaction; repeated exposure to a stimulus causes the initial reaction to weaken and the opponent process (opposite reaction) to strengthen.

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Cognitive Appraisal & Emotion

- ***Cognitive appraisal***
  - It is the *interpretation of the personal meaning* of *current circumstances* (person-environment relationship) that results in emotion
  - Cognitive appraisal is *largely responsible for differentiating emotions*

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Discovery of appraisals

Two-factor theory of emotions – emotions are the result of a combination of an initial state of unexplained arousal & cognitive appraisal for that arousal – mixed support

Misattribution of arousal – physiological arousal can be erroneously attributed to subsequent event

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Cognitive Appraisal & Emotion

- ***Themes & dimensions of appraisals***
  - People's appraisals of situations lead to subjective experience of emotions, associated arousal & other components of emotional response
    - ***Minimalist appraisal theories*** – reduce number of appraisal dimensions to a minimum, often based on fundamental themes – emphasises importance of emotion-specific core relational themes (e.g. irrevocable loss for sadness)

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Table 11.1

Emotions and their cognitive causes *Fifteen emotions and their associated core relational themes (appraisal patterns).* (After Lazarus, 1991b)

Emotion	*Core relational theme*
Anger	A demeaning offense against me and mine
Anxiety	Facing uncertain, existential threat
Fright	Facing an immediate, concrete, and overwhelming physical danger
Guilt	Having transgressed a moral imperative
Shame	Having failed to live up to an ego ideal
Sadness	Having experienced an irrevocable loss
Envy	Wanting what someone else has
Jealousy	Resenting a third party for loss or threat to another's affection
Disgust	Taking in or being too close to an indigestible object or idea (metaphorically speaking)
Happiness	Making reasonable progress toward the realization of a goal
Pride	Enhancing our ego identity by taking credit for a valued object or achievement, either our own or that of some person or group with whom we identify
Relief	A distressing goal-incongruent condition has changed for the better or gone away
Hope	Fearing the worst but yearning for better
Love	Desiring or participating in affection, usually but not necessarily reciprocated
Compassion	Being moved by another's suffering and wanting to help

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Dimensional appraisal theories – identify a range of appraisal dimensions thought sufficient for differences among emotions (e.g. desirability of event & whether it occurs)

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Table 11.2

Primary appraisal dimensions and their consequences

Combinations of two appraisal dimensions and their associated emotions. (After Roseman, 1984)

	Occur	*Not occur*
Desirable	Joy	Sorrow
Undesirable	Distress	Relief

Cognitive Appraisal & Emotion

- **Conscious & unconscious appraisals**
  - Appraisals can ***occur at unconscious levels*** – people experience emotion without understanding why
  - Cognitive appraisals in emotion processes similar to other types of cognition - ***resulting in part from automatic processing & in part from controlled processing***

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Appraisals in the brain

Amygdala (in the lower brain) – key role in automatic appraisals which supports idea of appraisals occurring both unconsciously & consciously

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Figure 11.3 Amygdala Activation During Unconscious

Subjective Experiences & Emotion

- ***Subjective experience of emotion***
  - This feeling component is, by definition, within awareness
  - One output of the appraisal process is change in subjective experience
- ***Feelings modify attention & learning***
  - Current feelings direct attention to events that match our feelings, as a result we learn more about those events
  - Feelings influence which memories are more accessible & those memories influence what is easy to learn at the moment

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Subjective Experiences & Emotion

- ***Feelings modify evaluations & judgements***
  - Our feelings can affect evaluations of other people, and of inanimate objects
  - Feelings also affect our judgements of risk – if we are fearful, more likely to see world as uncertain & uncontrollable; if feeling angry/happy, more likely to see world as certain & controllable

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Thought & Action Tendencies & Emotion

- ***Thought-action tendencies***
  - *Refers to urges* – one way that feelings guide behaviour & information processing

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    - With most negative emotions, people's thought-action tendencies become narrow & specific

    - With most positive emotions, people's thought-action tendencies become broad & more open to possibilities

Table 11.3

Emotions and their associated thought–action tendencies *Twelve emotions and the urges they spark.* (After Fredrickson, 1998, 2002; Fredrickson & Branigan, 2001; Frijda, 1986; Lazarus, 1991b)

Emotion	*Thought–action tendency*
Anger	Attack
Fear	Escape
Disgust	Expel
Guilt	Make amends
Shame	Disappear
Sadness	Withdraw
Joy	Play
Interest	Explore
Contentment	Savor and integrate
Pride	Dream big
Gratitude	Be prosocial
Elevation	Become a better person

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Bodily Changes & Emotion

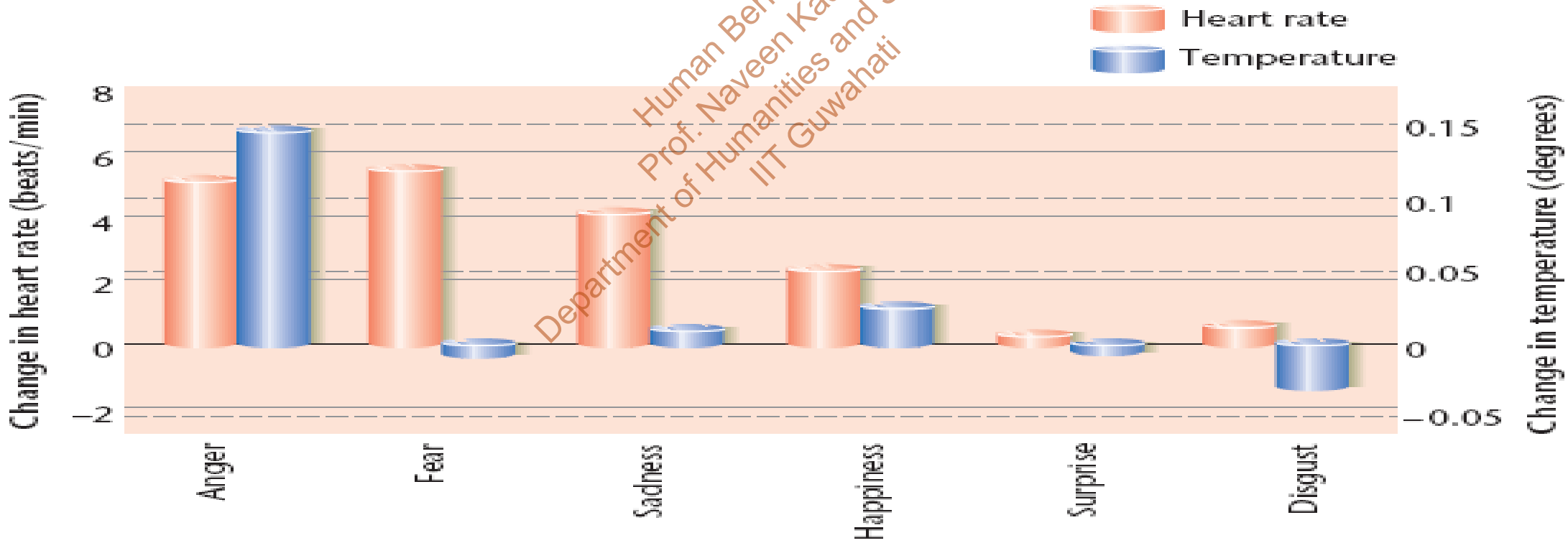
- ***Bodily changes & emotion***
  - Intense negative emotions involve physiological arousal caused by activation of sympathetic division of autonomic nervous system
  - Positive emotions have undoing effect on lingering arousal from negative emotions
- ***Intensity of emotions***
  - People with spinal chord injuries (limit feedback from autonomic nervous system) report less intense emotions
  - Visceral perception plays a role in intensity of emotions

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Bodily Changes & Emotion

- Differentiation of emotions
  - James-Lange theory holds that autonomic arousal differentiates the emotions

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Facial Expression & Emotion

- ***Communications of emotion through facial expressions***
  - Certain facial expressions seem to be universal in meaning, regardless of culture
  - Facial expressions of one person can change behavior of another (e.g. mother/child & visual cliff)
  - Certain aspects of facial expression are learned – display rules specify types of emotions people should express in certain situations and appropriate behavior for particular emotions

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Facial Expression & Emotion

- ***The facial feedback hypothesis***
  - *Facial feedback hypothesis* – the idea that facial expressions, in addition to their communicative function, also contribute to our subjective experience of emotion

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Responses to Emotion: Emotion Regulation

- ***Emotion regulation***
  - Refers to people's responses to their own emotions
  - Sometimes people have goal of intensifying emotion while other times people want to minimise emotion – ability to do so predicts social success
  - Suppressing facial expression increases autonomic arousal & amygdala activation, & also impairs memory

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Responses to Emotion: Emotion Regulation

- **People develop different strategies to control/regulate emotions**

Table 11.5

Classification of emotion regulation strategies *People use different cognitive and behavioral strategies to make themselves feel better.* (After Parkinson & Totterdell, 1999)

	Cognitive	*Behavioral*
Diversion		
Disengagement	Avoid thinking about the problem	Avoid the problematic situation
Distraction	Think about something pleasant or absorbing	Do something pleasant or demanding
Engagement		
Affect-directed	Reappraise	Vent feelings; seek comfort
Situation-directed	Think about how to solve the problem	Take action to solve the problem

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