



# Social and Cultural Perspectives on Emotions

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# Emotions are Multi-Level Phenomena

- The body: Emotions as representations of physiological states.
- The individual mind: Emotions as cognitive appraisals.
- Social coordination: Emotions as an efficient communication mechanism.
- The collective mind: Emotions and the cultural order.



# Warm-up Game

a Tree



a Lady



# Fire



# Semantic Differential

(Osgood, Suci, & Tannenbaum, 1957)

## a Tree is...

Green.....Red

Calm.....Noisy

Immoral.....Moral

Cold.....Hot

Powerless.....Powerful

Light.....Heavy

Soothing.....Arousing

Etc....



# The Dimensionality of Meaning

(Osgood, Suci, & Tannenbaum, 1957; Osgood, May, & Miron, 1975)

- On average, 50% of variation in semantic differential ratings can be explained by three principal components:

**good, nice.....bad, awful**

**strong, powerful.....weak, powerless**

**active, excited.....passive, calm**

- This finding was confirmed in hundreds, if not thousands of studies in at least 40 different languages and cultures.



# Affective Meaning

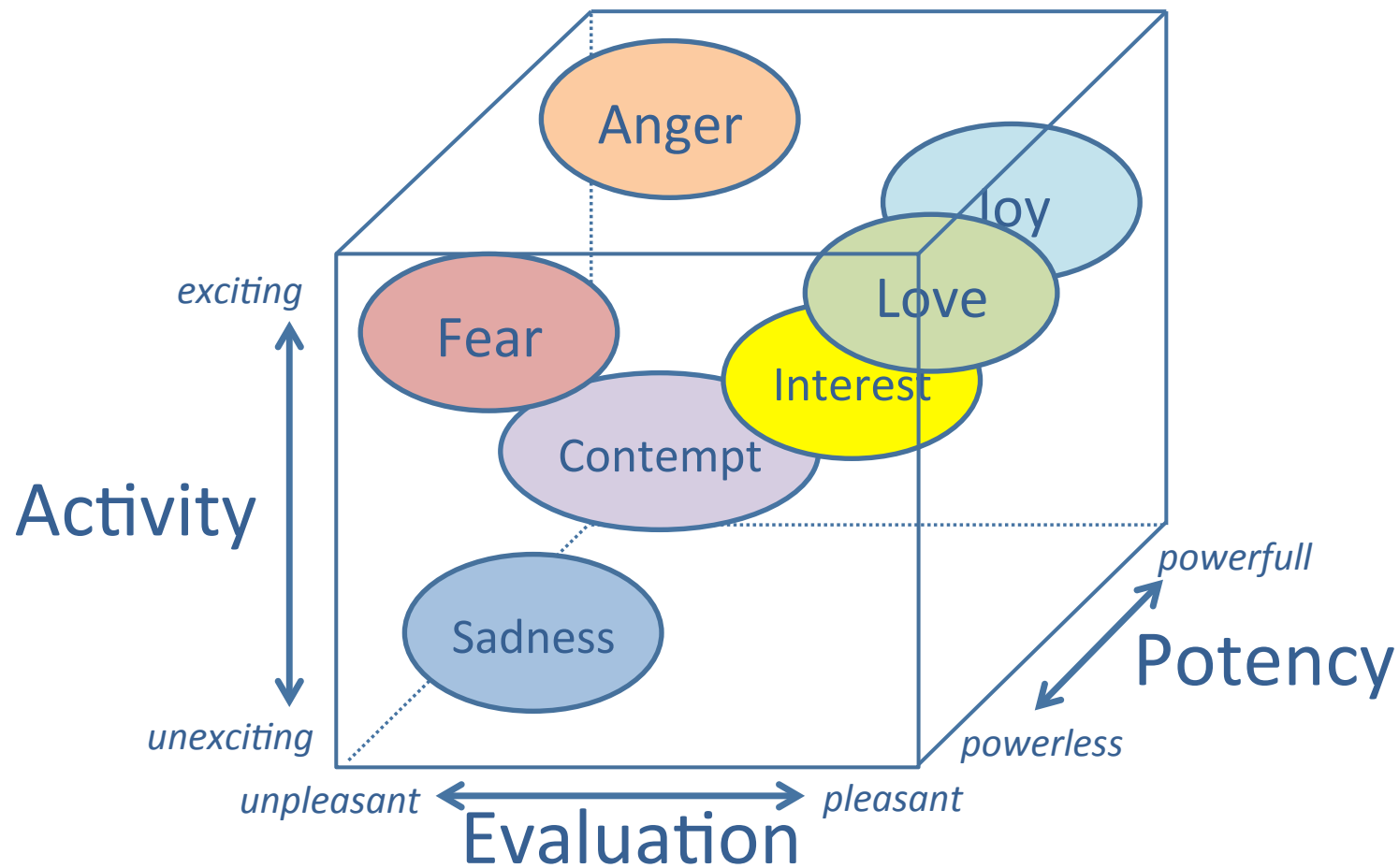
(Osgood, 1962; Osgood, May, & Miron, 1975)

- Later re-interpretation: affective as opposed to denotative meaning. Reflects (likely obsolete!) cognition-emotion dichotomy.
- **EPA:** Evaluation, Potency, Activity as fundamental and universal dimensions of affective meaning
- Emotions and language are intertwined:
  - Psychological constructionism: Conceptualization - Language provides categories for interpretation of “core affect” (Lisa F. Barrett, James Russell)
  - Neuroscience: Emotions constitutive in quick and early semantic processing (e.g., Schauenburg et al., in prep.)





# Primary Emotions the Affective Space





# The World of Emotions is not 2-D

(Fontaine, Scherer, Roesch, & Ellsworth, 2007)

- Analyzed statistical relations of 144 features (appraisals, facial/gestural expressions, physiological changes...) with emotions
- 4 principal components: **EPA** + surprise

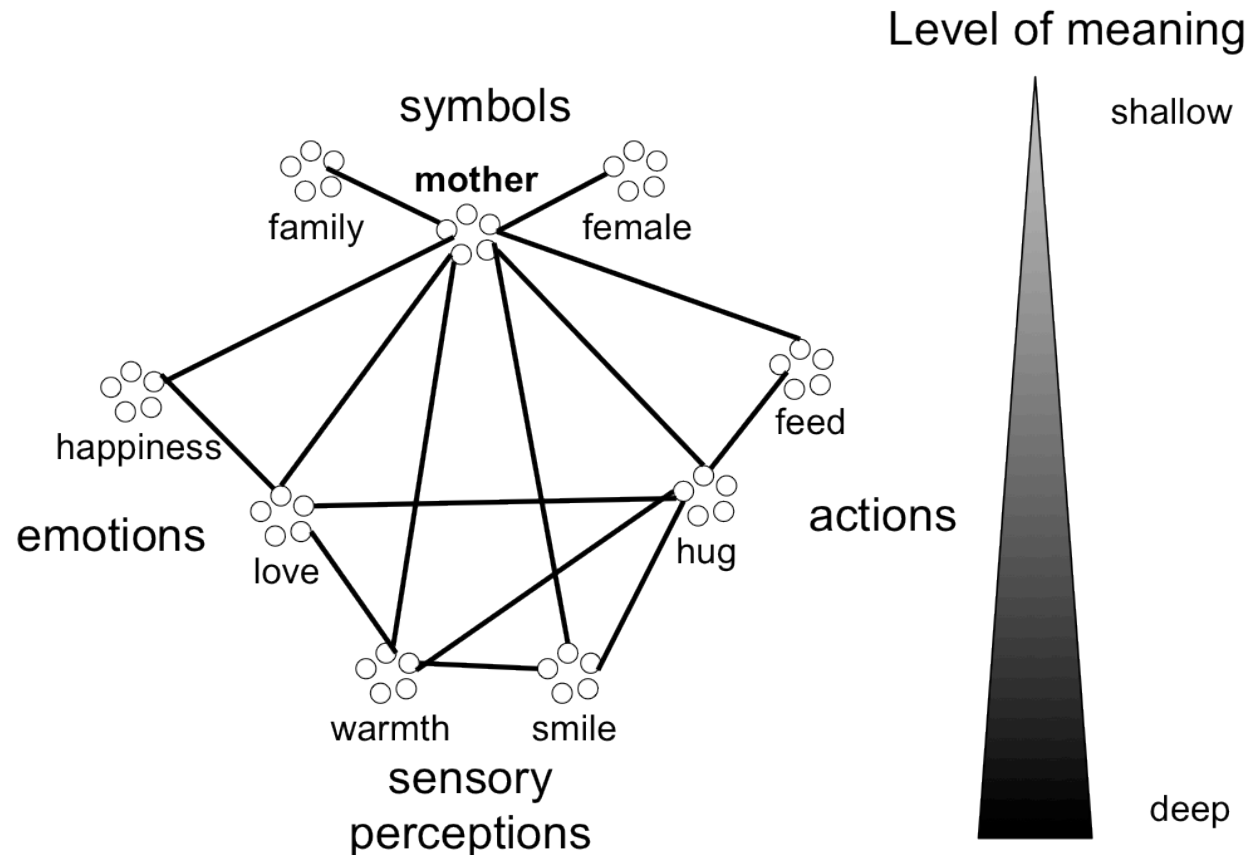
**“...evaluation, potency, activity are not simply dimensions of words, but they are the hidden language, the affective Rosetta stone that allows the mind and the body to communicate”**

(Clore & Pappas, 2007)



# Meaning in the Brain: Semantic Pointers

(Eliasmith, 2013; Eliasmith, Stewart et al., 2012; Fig. from Schröder & Thagard, 2013)



- Concepts: distributed patterns of activity in neurons
- Recursive binding – “representations of representations”
- Grounded in sensorimotor and emotional experience



# Fundamentals of Social Coordination

(Scholl, 2013)

- Similar dimensions in many research domains
  - Emotions, language, non-verbal signals, personality traits, interpersonal behaviours
- => a universal socio-emotional space enabling human cooperation and group coordination
  - Synchronization through attachment / hierarchy
  - Overcoming social dilemmas (cf. game theory)
  - Computational implementation of social coordination through emotion: Affect Control Theory (Thursday!)



# Sociology of Emotions

(e.g., Heise, 2007; Hochschild, 1978, 1983; Kemper, 1978, 2006)

- Cultures provide subtle rules for emotional experience and display (“feeling rules”)
  - Cross-cultural differences: e.g., guilt and shame
  - Emotions indicate one’s role in the social fabric
    - Status ~Evaluation
    - Power ~Potency
    - Agency ~Activity-arousal
- => Emotions as a mechanism for maintaining the order of society



# Affective Meaning, Again

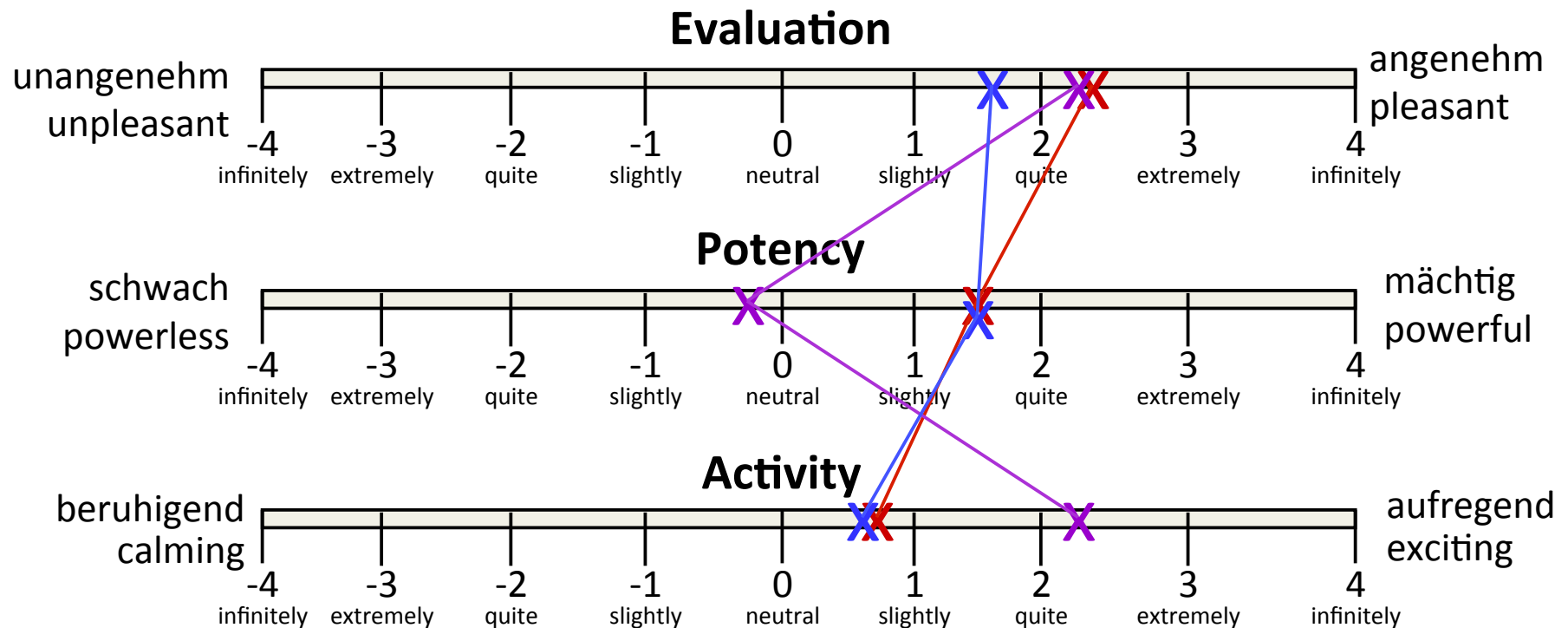
- Dictionary Studies: Psychologists and sociologists have created culture-specific “sentiment repositories”, i.e. datasets with 1000s of concepts with empirical EPA ratings
  - Identities, Behaviours, Traits, Emotions, Settings
- Empirical base for
  - Scaling experimental materials
  - Computer models of social interaction and emotion
  - Sentiment analysis
  - Providing artificial agents with cultural knowledge



# Measuring EPA: Semantic Differential

(Heise, 1969, 2010; Osgood, Suci, & Tannenbaum, 1957)

mother, child, father

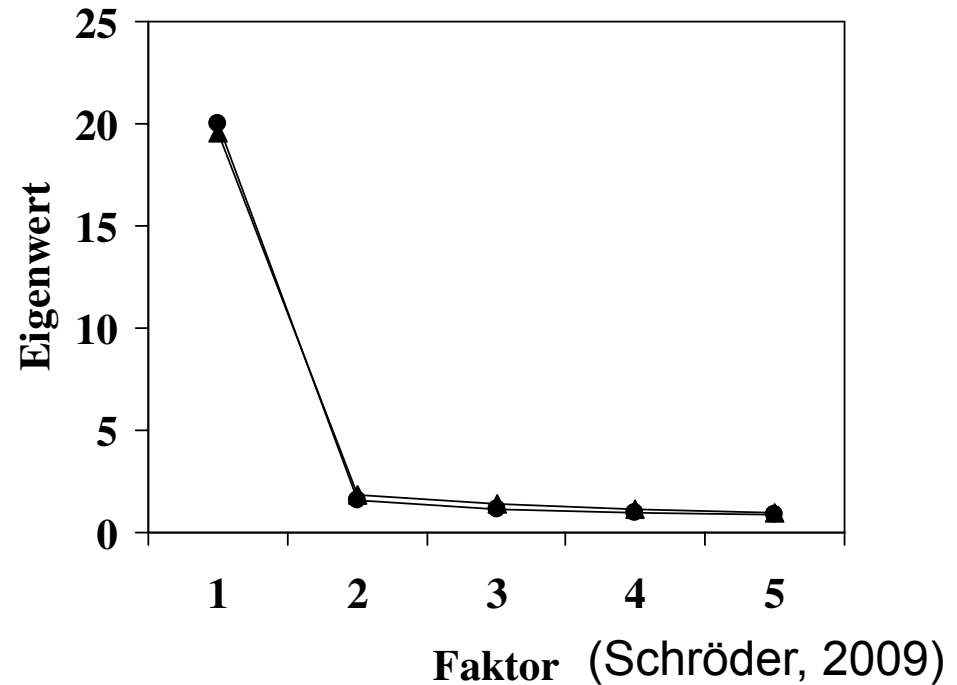




# Culture as Consensus

(Heise, 2010; Romney, Boyd, Batchelder, Moore, & Brazill, 1996)

- Q-Factoring (across persons) reveals one large factor to explain EPA ratings of concepts.



=> The conceptual basis of emotional experience and social coordination is largely **shared** among members of one culture.

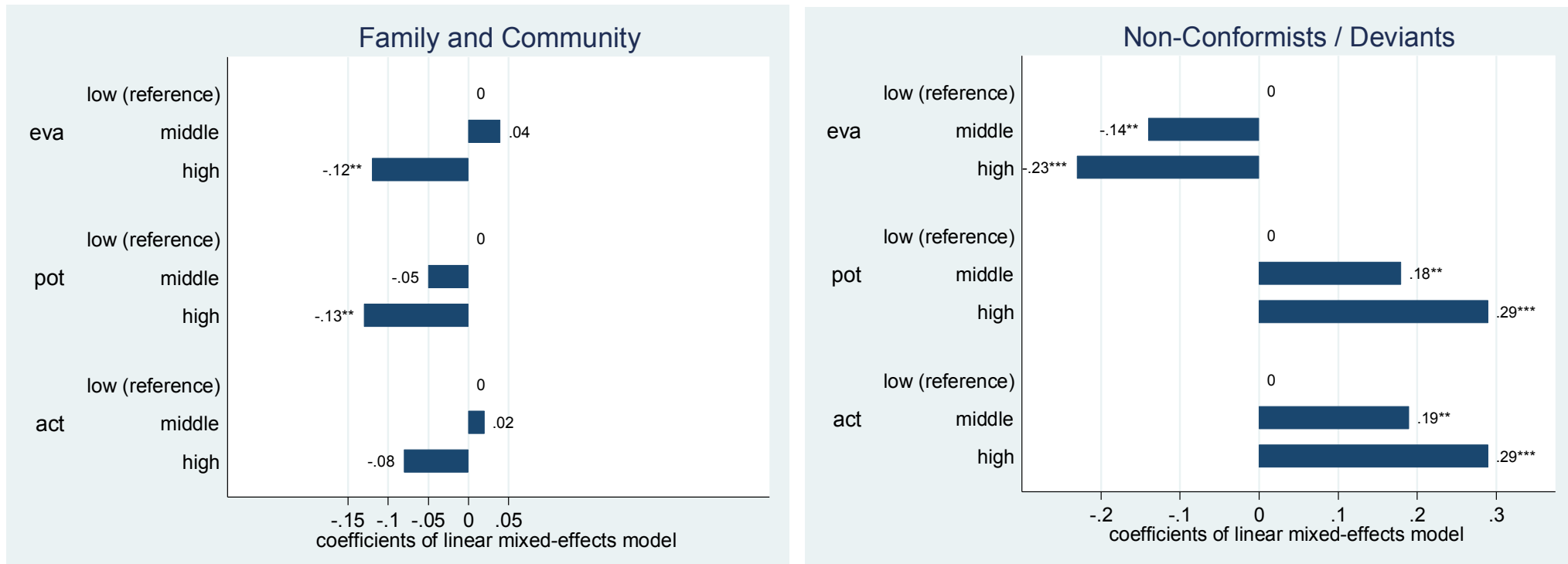






# Subtle (sub-)Cultural Variations: Socio-Economic Status

(Ambrasat, v. Scheve, Schauenburg, Conrad, & Schröder, under review)



- Working-class vs. academic culture, similar to “Eastern”, collectivist vs “Western” individualist (cf. Fiske & Markus, 2012)



# Summary

- Emotions are multi-level: body, mind, culture
- Affective meaning: language is grounded in emotional experience
- EPA: evaluation-potency-activity
- Emotion and social interaction controlled by conceptual structures that are grounded in affect and shared within cultures
- Next: Affect Control Theory