Affect Control Theory

Tobias Schröder

University of Waterloo
Centre for Theoretical Neuroscience

UNIVERSITY OF
WATERLOO

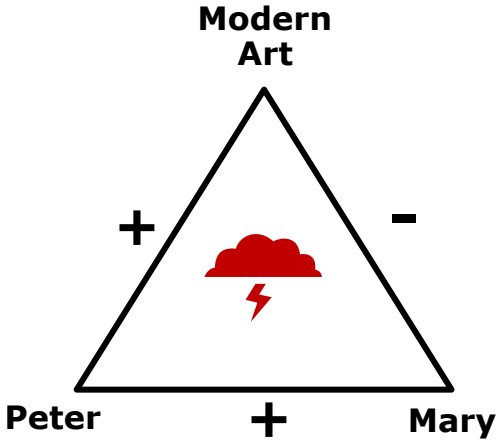
Recap

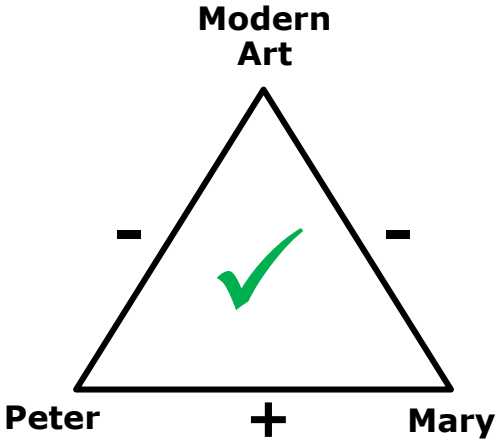
- Emotions are multi-level: From body to culture
- Evaluation, Potency, Activity (EPA) “allow the mind and body to communicate” (Clore & Pappas, 2007)
- Micro-social perspective: Emotions allow efficient coordination between agents
- Macro-social perspective: Emotions and actions are based on culturally shared conceptual structures => Maintenance of the social order

Balance

(or congruity/consistency/coherence/dissonance avoidance…)

(e.g., Heider, 1946; Osgood & Tannenbaum, 1955; Festinger, 1957; Thagard, 2000)





- Basic human motive: “orderly representations”
- Incoherent representations motivate corrective action
- The role of identity: Align experiences and actions with situational self sentiments: Who am I?

Twenty-Statements Test (Kuhn, 1960)

I am…

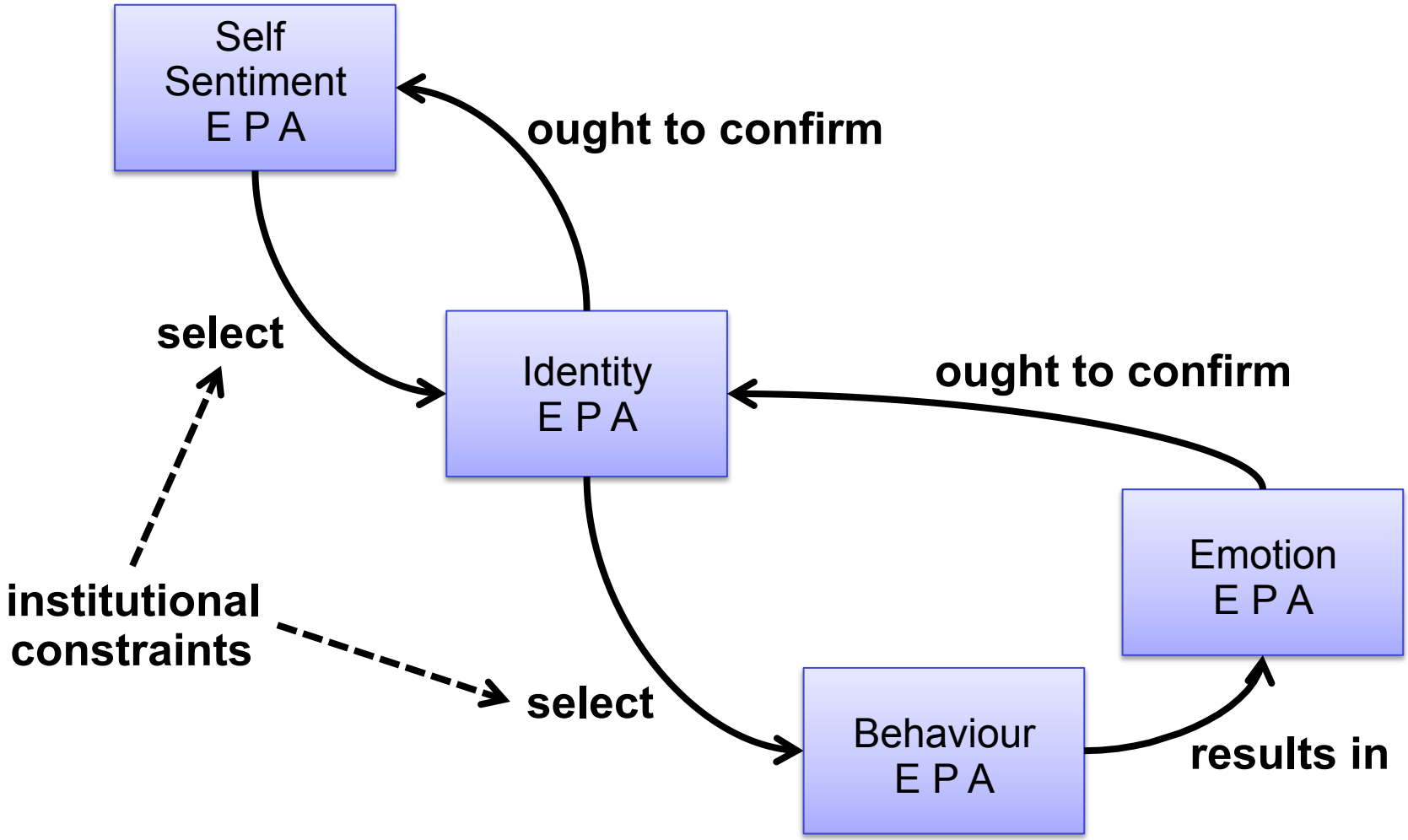
1. _____
2. _____
3. _____

...

20. _____

Affect Control Theory at a Glance

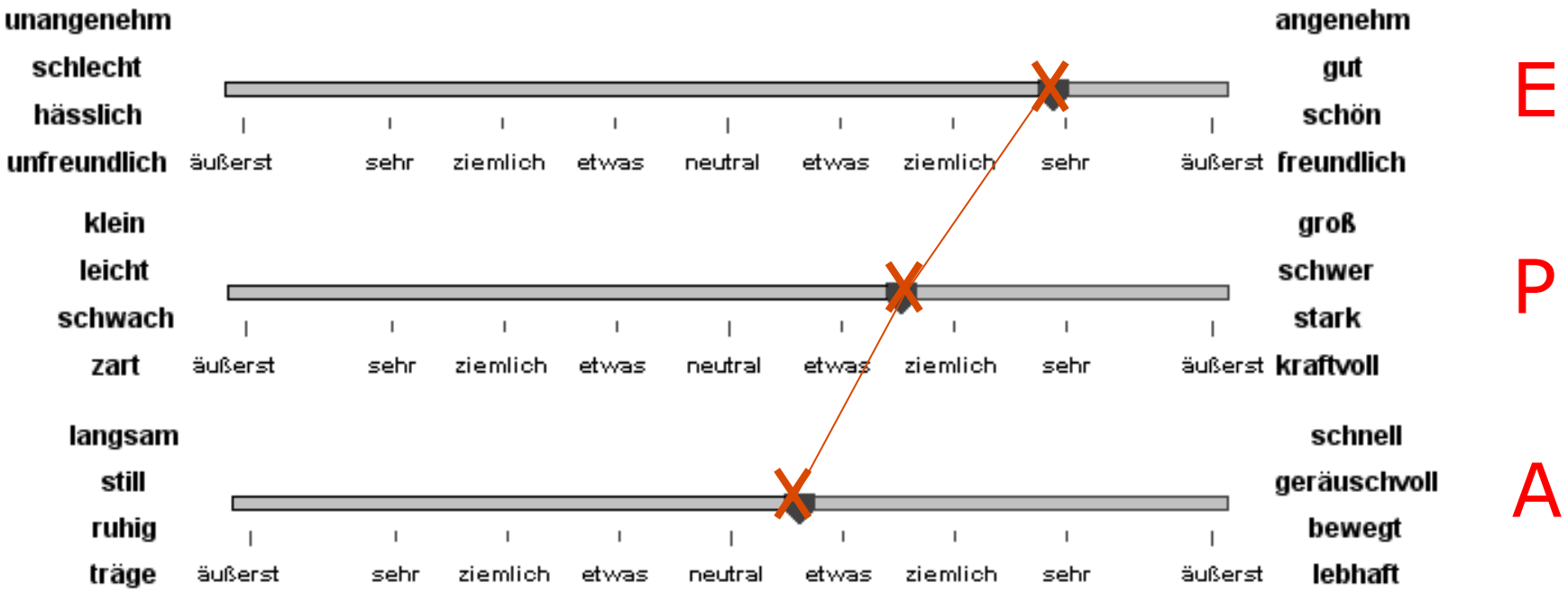
(Heise, 1979; 2007; MacKinnon & Heise, 2010)



Impression Formation

(e.g., Schröder, 2011; Smith, Matsuno, & Umino, 1994; Smith-Lovin, 1987)

a mother (2.9 / 1.5 / 0.6)

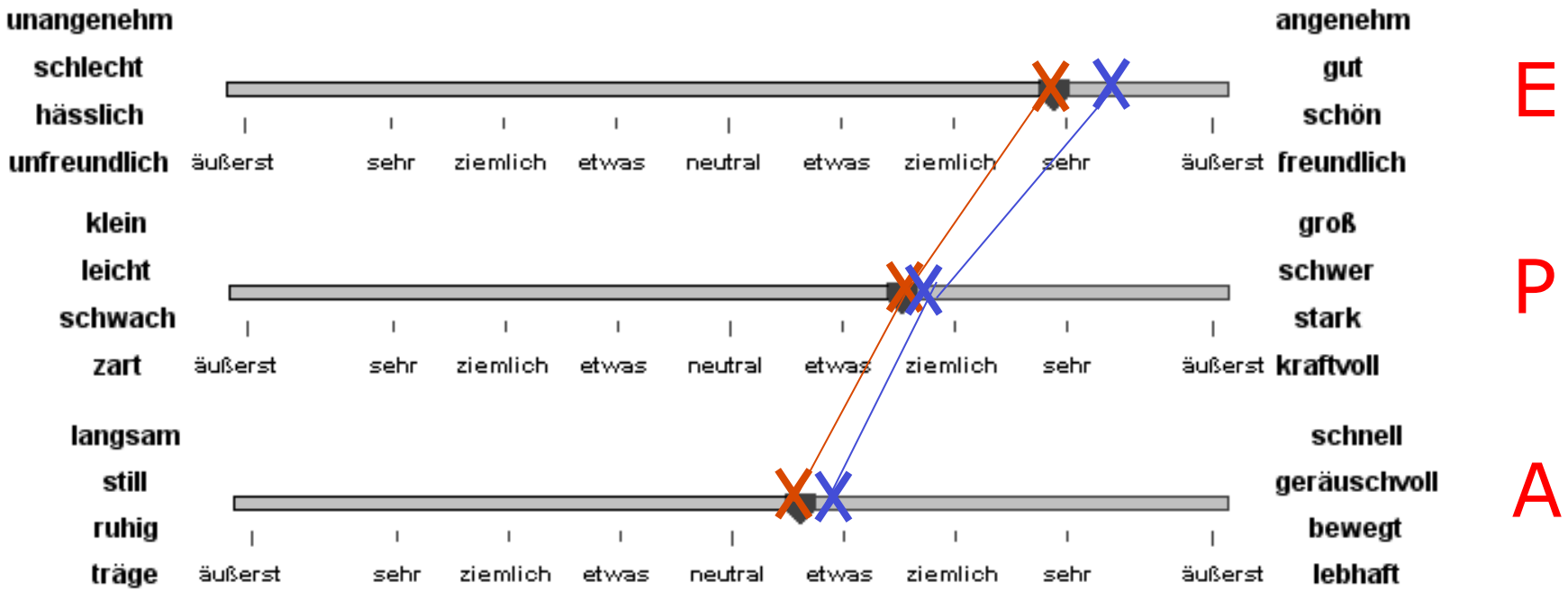


Impression Formation

(e.g., Schröder, 2011; Smith, Matsuno, & Umino, 1994; Smith-Lovin, 1987)

A mother plays with a child. (3.4 / 1.8 / 0.9)

a mother (2.9 / 1.5 / 0.6)

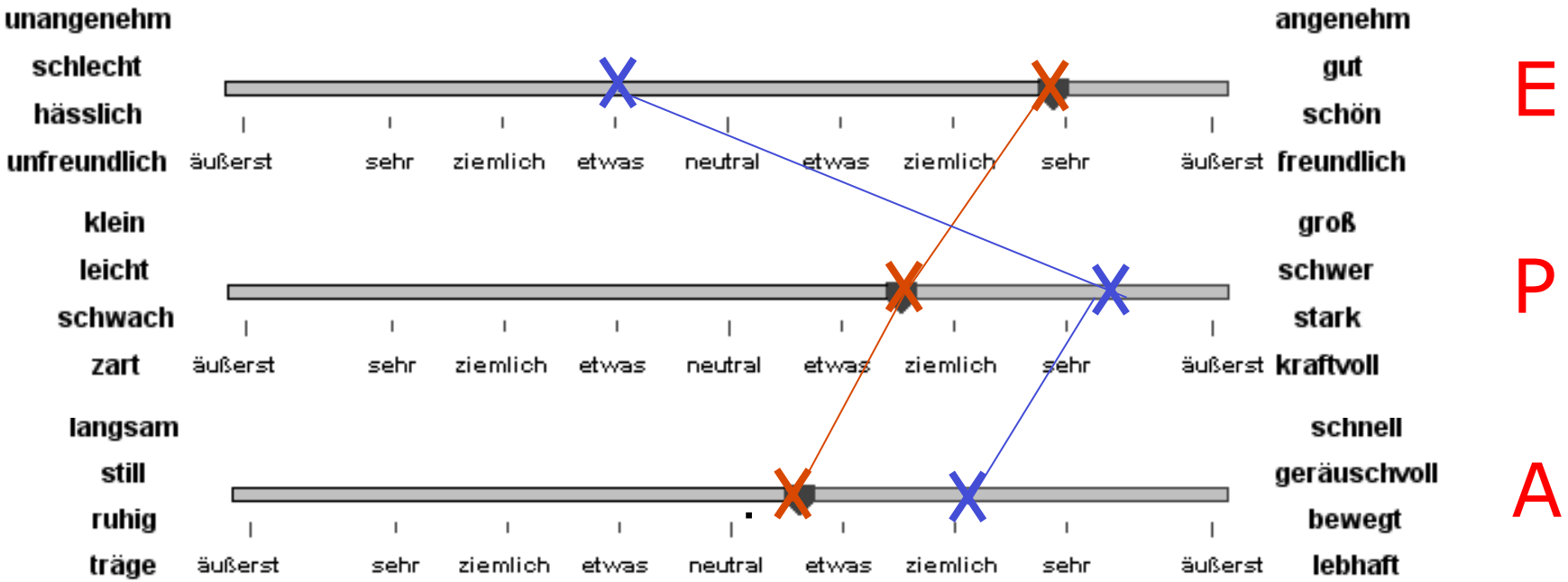


Transient Impressions vs. Fundamental Sentiments

Deflection: (Transient-Fundamental)^2

A mother beats a child. (-1.0 / 3.5 / 2.2)

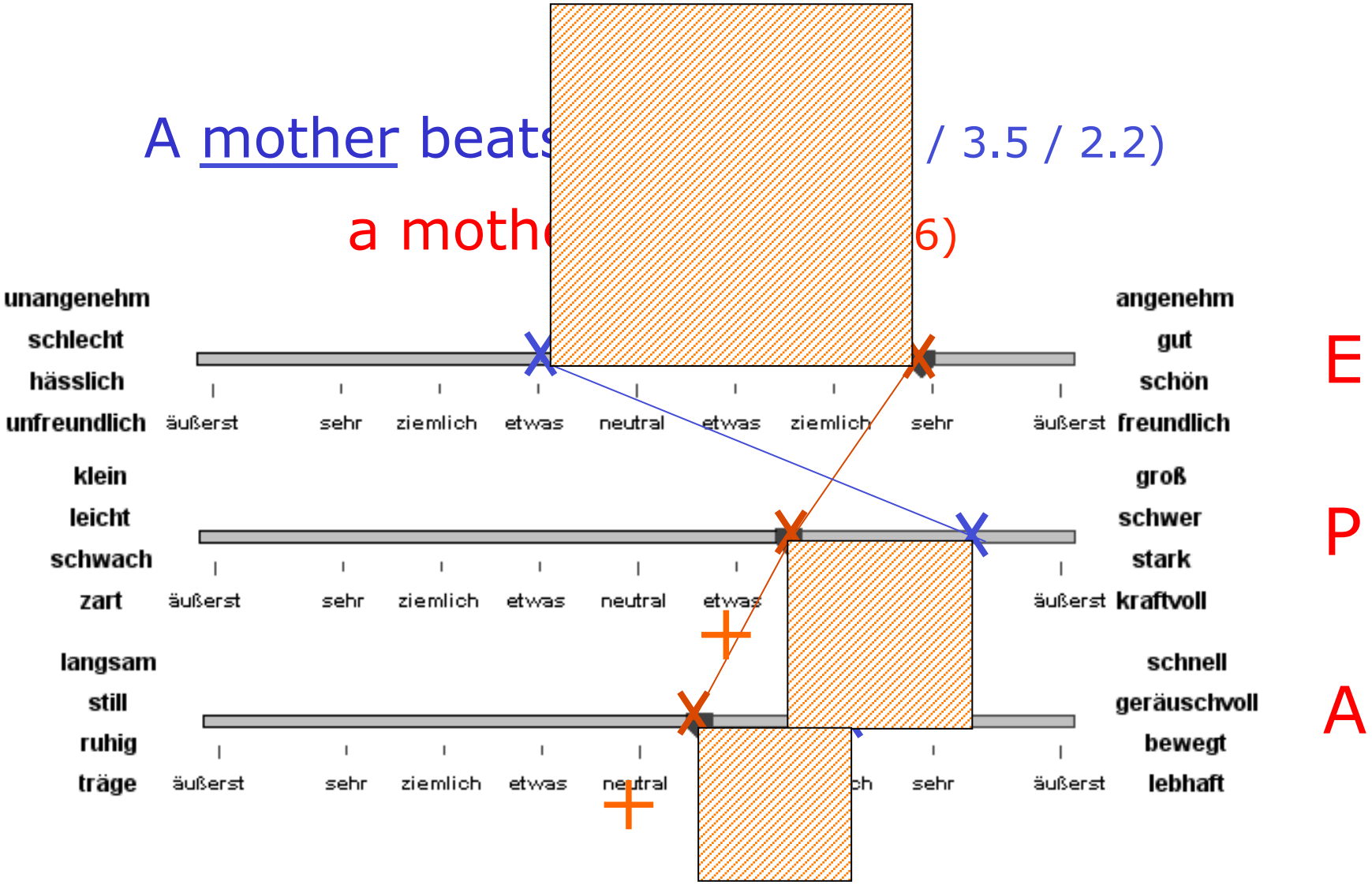
a mother (2.9 / 1.5 / 0.6)



Deflection: (Transient-Fundamental)^2

A mother beats / 3.5 / 2.2)

a moth 6)



Example Equation: Impression of Actor (E)

$$A_e` = - .38 + .42A_e - .11A_a + .47B_e + .11O_e + .05A_eB_e + .09A_aO_e + .09A_aO_a + .04B_eO_e - .07B_eO_a - .13B_pO_e + [\ldots]$$

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stability

behaviour congruence

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stability

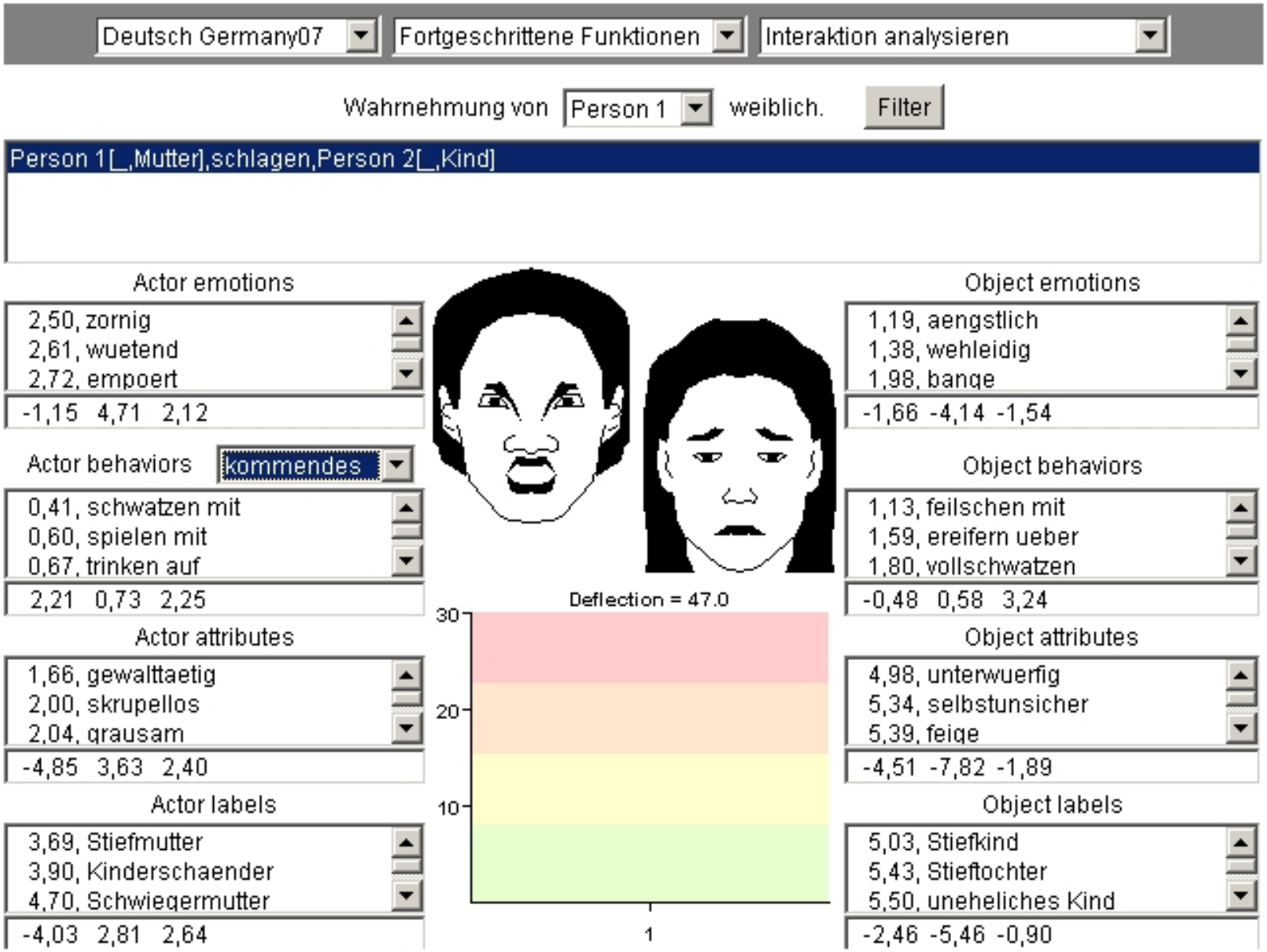
bevaiour congruence

balance effects

rejection of power

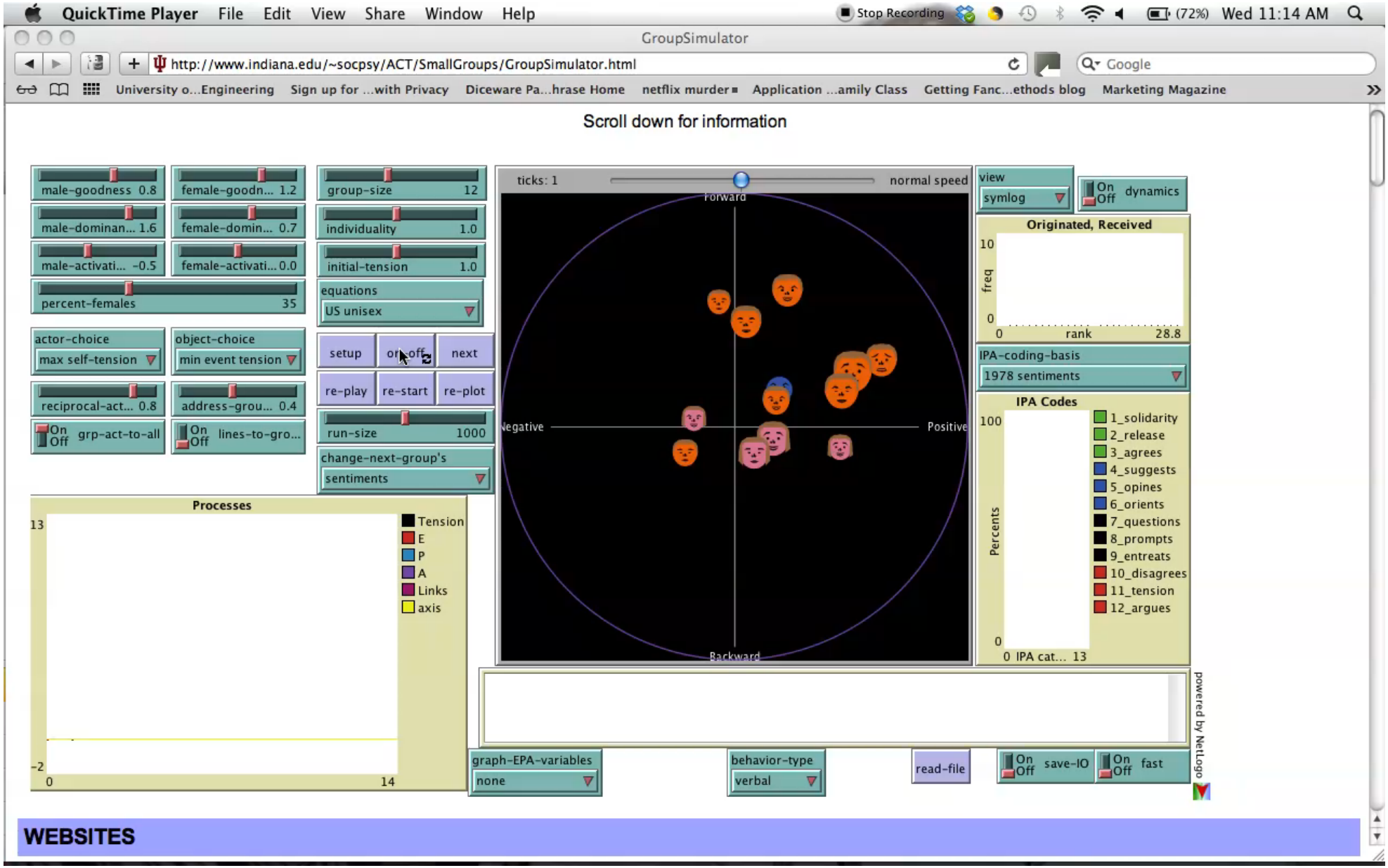
Interact: Simulation of Social Interaction

(Heise, 1997)



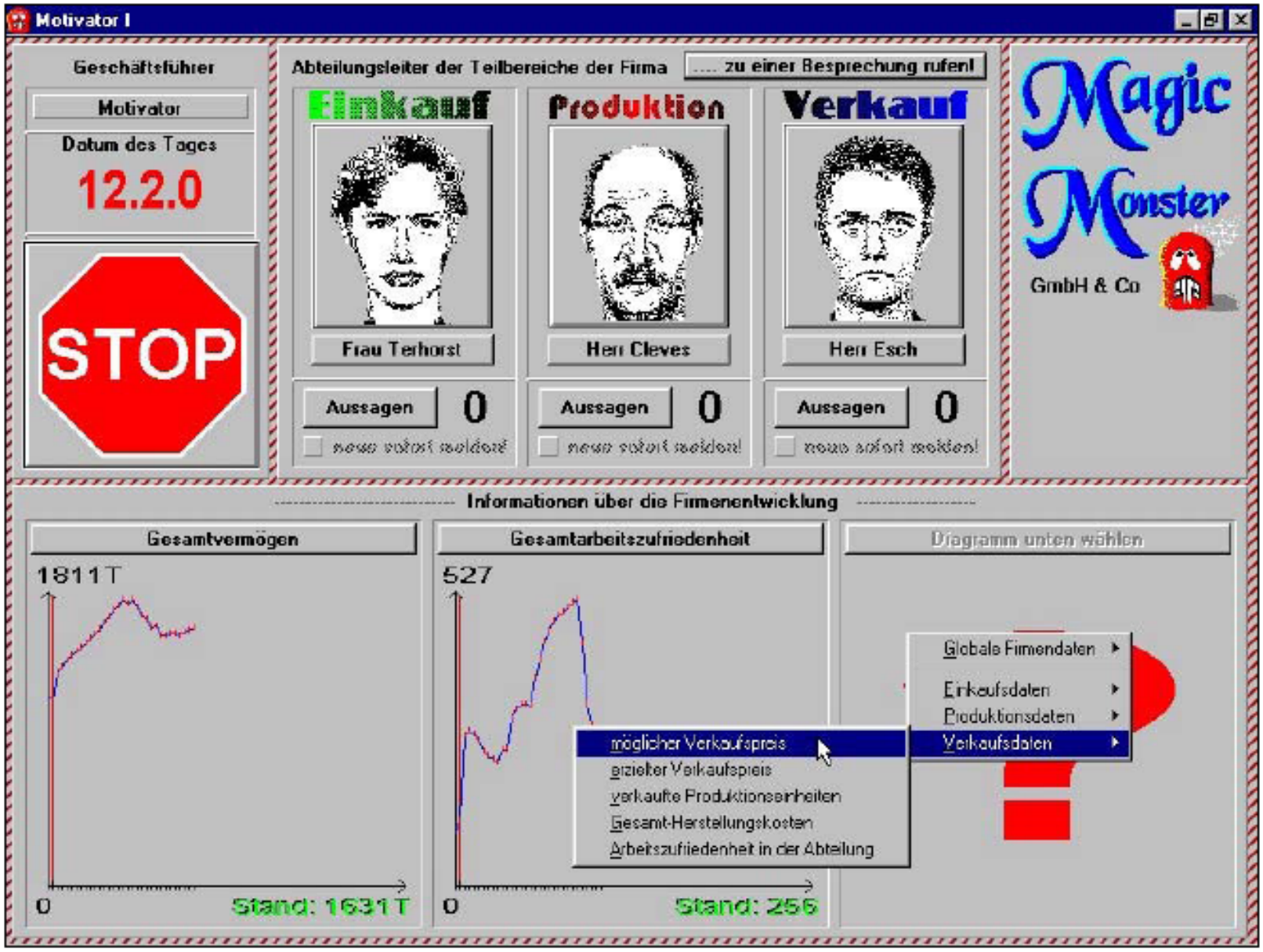
GroupSimulator: Dynamics in Small Groups

(Heise, 2013)



Evidence – Verbal Communication

(Schröder & Scholl, 2009)



Evidence – Nonverbal Communication

(Schröder, Netzel, Schermuly, & Scholl, 2013)

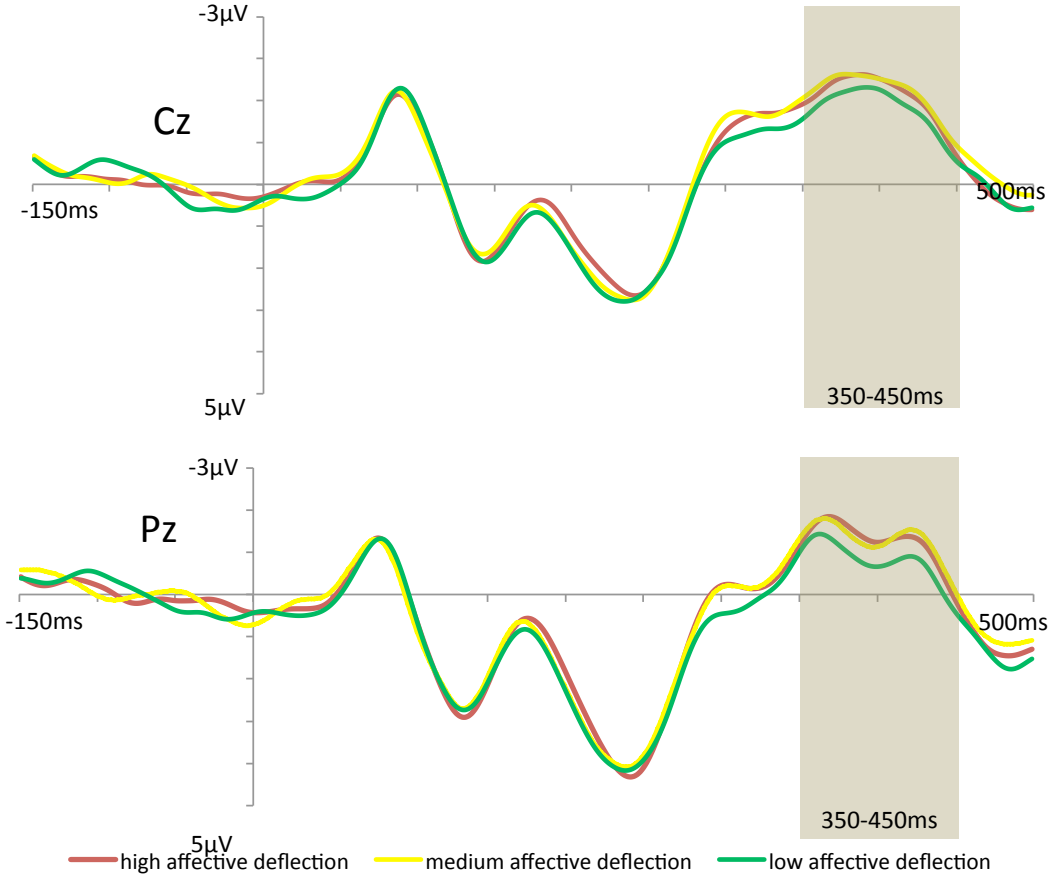
- Dyadic interactions videotaped, subdivided into discrete events, and coded for interpersonal affect.
- Comparison: INTERACT predictions of sequences vs. observed transitions between affective expressions.

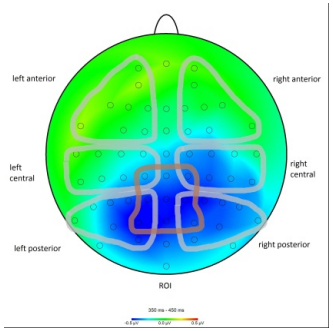
Behavioral Markers:

- E: smile, laugh, small physical distance
- P: posture, relaxation
- A: variation in speech, gestural activity

Evidence – N400 Component of EEG

(Schauenburg, Ambrasat, von Scheve, Schröder, & Conrad, in preparation)

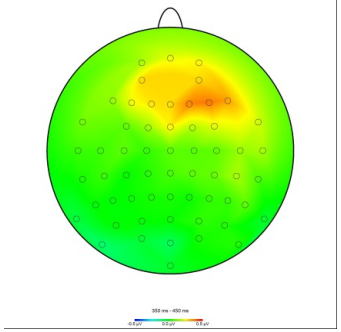




High vs. low deflection

Cluster, *region x deflection*: *p* =.009*

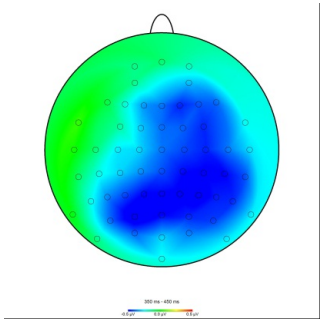
ROI, deflection: *p* = .004*



High vs. medium deflection

Cluster *region x deflection*: *p* = .249

ROI, deflection: *p* = .699



Medium vs. low deflection

Cluster, *region x deflection*: *p* = .023*

ROI, deflection: *p* = .020*

Results (N=26)

Cluster ANOVA: region (3) x hemisphere (2) x deflection (3):

Interaction *region x deflection*, $F(4, 100) = 3{,}307$, $p = .032$*, $\eta^2 = .117$

Region of Interest ANOVA: deflection (3):

Main effect *deflection*, $F(2, 50) = 4{,}565$, $p = .021$*, $\eta^2 = .154$

All p-values are Greenhouse-Geisser corrected

Limitations of Affect Control Theory

- Many social situations are ambiguous, interpretations are probabilistic.
- The consensus paradox: People agree on meanings, but there are subtle differences.
- Identities and their meanings change.
- People can have multiple identities.
- People have external goals, which sometimes compete with the affect control mechanism.

=> BayesACT (next week)