

# Organisatorisches

- Vorstellung Tutorin
- Zeitpunkt Tutorium
  - Dienstag, 18:00 – 19:00
  - Mittwoch, 9:00 – 10:00
  - Mittwoch, 14:00 – 15:00
  - Mittwoch, 15:00 – 16:00
  - Donnerstag, 18:00 – 19:00
  - Freitag, 9:00 – 10:00
  - Freitag, 10:00 – 11:00
  - Freitag, 11:00 – 12:00
- Verfügbarkeit Folien:  
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- Mailing-Liste – bitte email schreiben an:  
christiane.schwieren@awi.uni-heidelberg.de

# **Social Cognition**

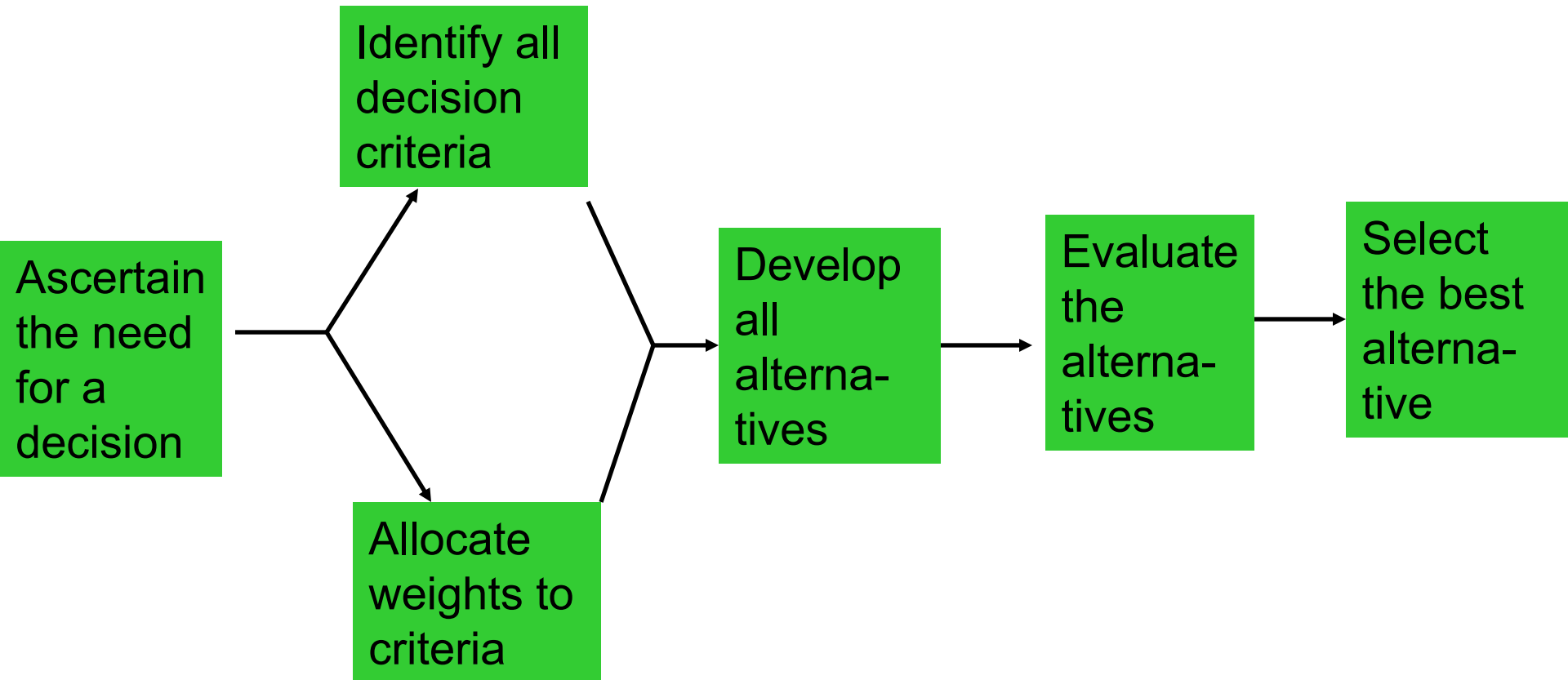
# Social Cognition

- Interpretation, analyzation, remembering and use of information about the social world
- Basis for judgement & decision making
- Descriptive & explanatory approaches
- $\Leftrightarrow$  Economic view of judgement & decision making  $\rightarrow$  normative approach

# Economic Model of Decision Making

- Classical decision theory
  - Decision makers are objective
  - Decision makers have complete information
  - Decision makers consider all possible alternatives & their consequences
  - Decision makers select the optimal solution
  
- ➔ Traditional approach to decision making
  - Sequence of steps that enhance probability of attaining a desired outcome

# The Optimizing Model



# Criticizm

- Rarely possible to consider all alternatives
  - Impractical to consider all consequences
  - Estimation process costs time & effort
  - Information is rarely complete, accurate...
  - Individuals lack mental capacity to process all the information
- ➔ Ideal model, doesn't tell us how people really make decisions!
- ➔ Development of descriptive models

# Descriptive & Explanatory Approaches To Decision Making

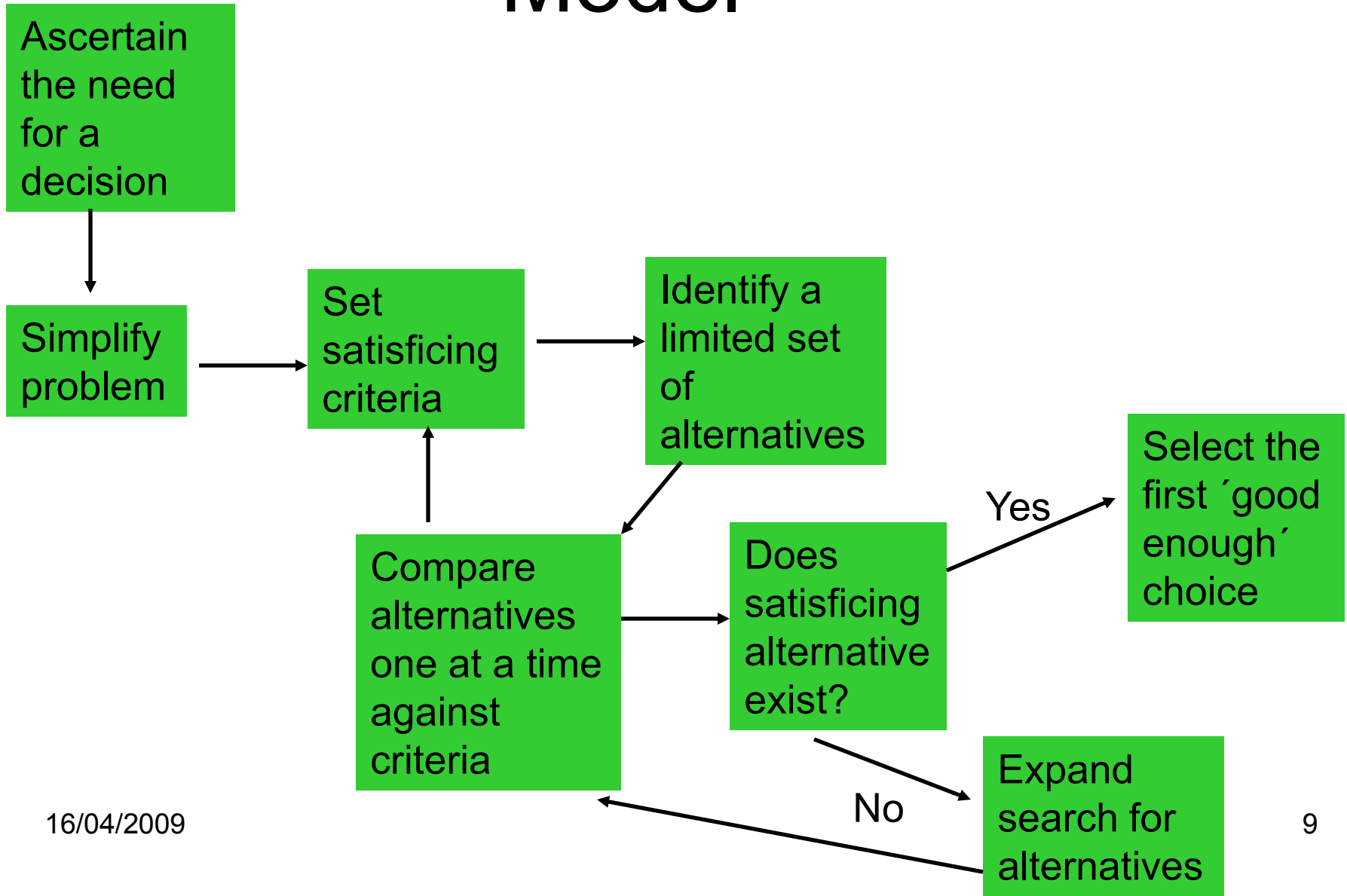
- Satisficing (Behavioural theory of decision making; e.g., Herbert Simon)
- Heuristic decision making & Biases in decision making (Explanatory models of decision making; e.g., Amos Tversky & Daniel Kahneman)
- Heuristic decision making – fast and frugal tools (e.g., Gerd Gigerenzer)

# Behavioural Theory of Decision-making

- Bounded rationality
  - Definition of a situation usually incomplete
  - Impossible to generate all alternatives
  - Impossible to predict all consequences
    - Limited information processing
  - Personal & political factors have an influence
    - Judgmental heuristics
- Decisions that are GOOD ENOUGH -> “satisficing”!
  - Like search process: once a satisfactory solution has been found search tends to stop



# The Satisficing Model



# Heuristic decision making – Biases

- Used because of information overload
- Definition: “Simple rules for making complex decisions or drawing inferences in a rapid [...] manner” (B & B)
- Can lead to biases in decision making!
- Examples:
  - Representativeness
    - Tendency to assess the likelihood of an event occurring based on impressions about similar occurrences
  - Availability
    - Tendency to base decisions on information readily available in memory
  - Anchor-and adjustment heuristic
    - Judgement made by starting from an initial value (anchor), making then adjustments from that point

# Other Biases

- Framing effects
- Hindsight bias
  - Tendency to perceive outcomes as more inevitable after they have occurred than they did before.
- Escalation of commitment
  - Tendency to continue to support previously unsuccessful courses of action

# Framing Effects

- Tendency to make different decisions based on how the problem is presented
- Examples
  - Risky choice
  - Attribute framing

# Heuristic Decision Making – Fast and Frugal Tools

- Maybe heuristic decision making is not a “mistake” or a “bias”, but a useful tool!
- In real life, we cannot use all information
- Generalizations often difficult!
- **Ball-example:**
  - [http://library.mpib-berlin.mpg.de/ft/gg/GG\\_Adaptive\\_2001.pdf](http://library.mpib-berlin.mpg.de/ft/gg/GG_Adaptive_2001.pdf)

# Comparison

- Rational model
- Satisficing
- Heuristics
  - Biases
  - Adaptive tools

Think of any decision you have been taking recently (e.g., where to study abroad, what to study, where to go on holiday...) – did you maximize or satisfice, or use heuristics? How did this influence the decision taken?

Affect

# The influence of affect on cognition

- Mood-dependent memory
- Mood congruence effect
  - Tendency to recall positive things when in good mood and to recall negative things when in bad mood
- How does affect influence cognition?
  - Affect infusion model



# The somatic marker hypothesis – Damasio et al.



According to a research at Cambridge University, it doesn't matter in what order the letters in a word are, the only important thing is that the first and last letter be at the right place. The rest can be a total mess and you can still read it without problem. This is because the human mind does not read every letter by itself, but the word as a whole.

# Perception

# Definition

- Perception is the dynamic psychological process responsible for attending to, organizing and interpreting sensory data.....to give meaning to the environment

(H & B/Robbins)

- Influenced by
  - Context factors
  - Stimulus factors
  - Expectations
  - Motivation
  - Learning
  - Personality

# Perceptual Sets – Perceptual Worlds

A perceptual set is an individual's predisposition to respond to events in a particular manner.

The individual's perceptual world is their personal internal image, map or picture of their social, physical and organizational environment.

- Culturally shaped
- Can be a barrier to understanding and communication!
- Important: language!

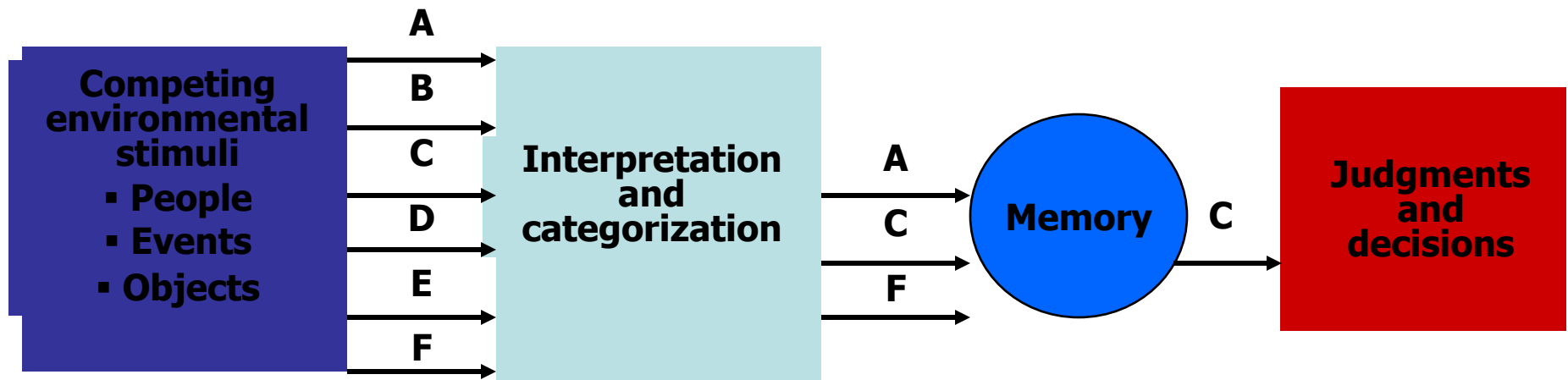
# Perception: A (Cognitive) Information Processing Model

**Stage 1**  
**Selective Attention/Comprehension**

**Stage 2**  
**Encoding and Simplification**

**Stage 3**  
**Storage and Retention**

**Stage 4**  
**Retrieval and Response**



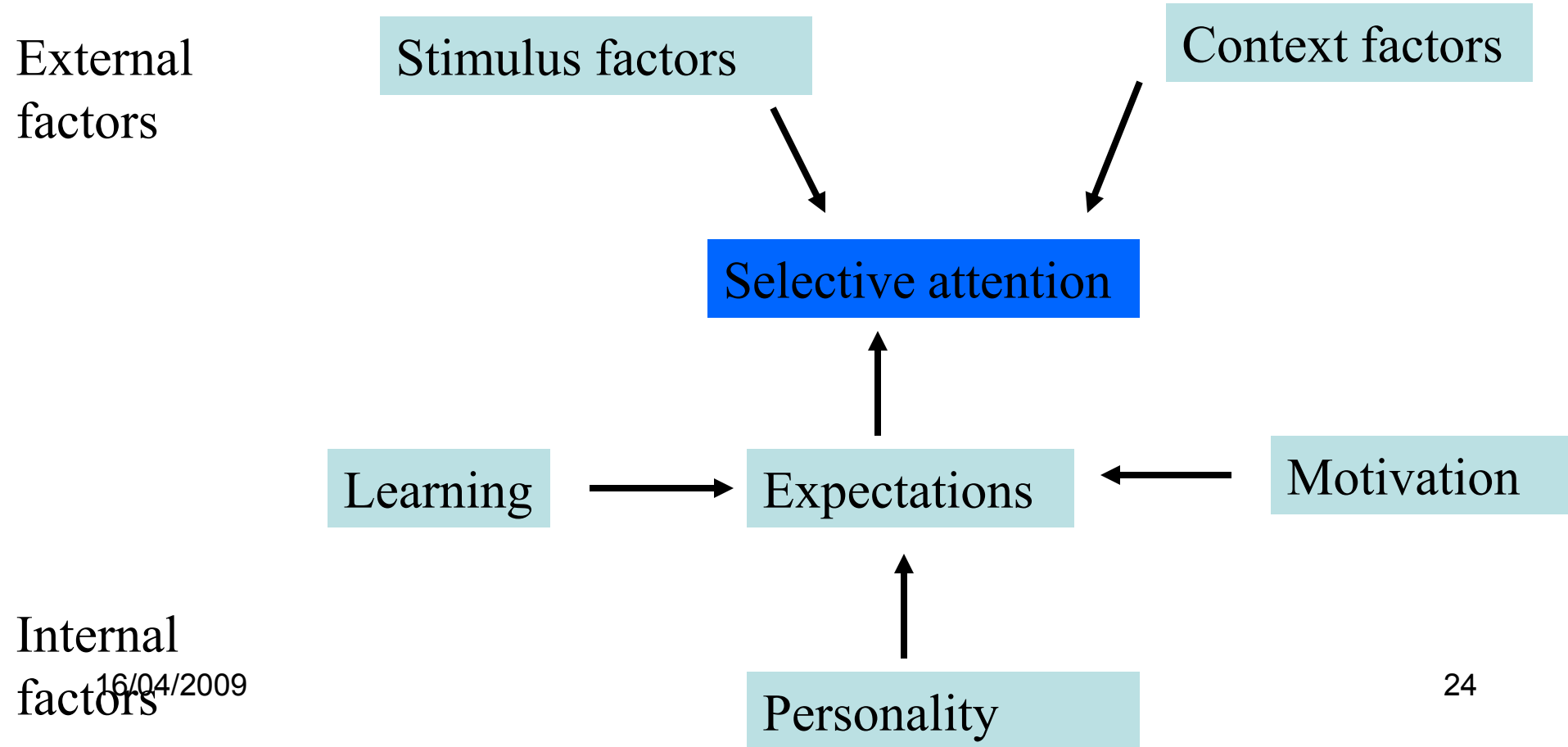
# Stage1: Selective Attention

- The ability, often exercised unconsciously, to choose from the stream of sensory data, to concentrate on particular elements and to ignore others. (H & B)

- Habituation
- Perceptual filters

- Positive & Negative Aspects!

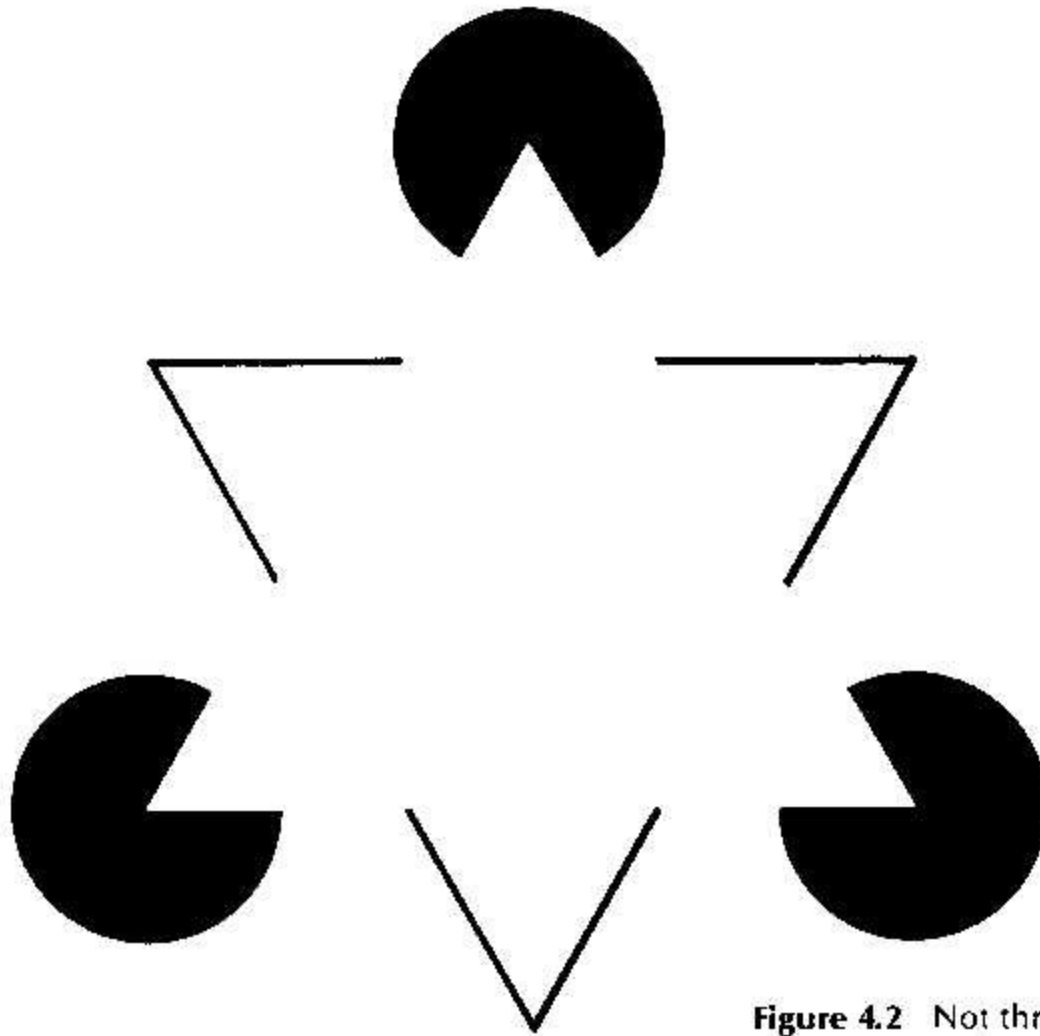
# Internal & External Factors Influencing Perception





# Stage2: Encoding & Simplification

- Aspects of perceptual organization
  - Proximity principle
  - Similarity principle
  - Principle of closure
- Categorization
  - By person, by attributes, by content....
  - Influenced by existing knowledge
  - Influenced by goal of information-processing
- Schemata



**Figure 4.2** Not three black sectors and three angles, but a white triangle in front of three black disks and an outlined triangle.



16/04/2009

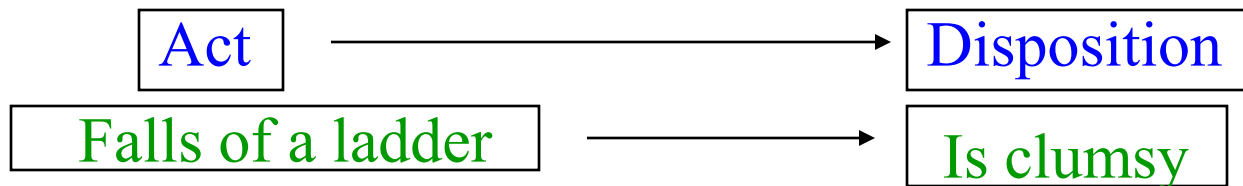
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# Important 'biases' in perception

- Sterotyping: Judging someone on the basis of one's perception of the group to which that person belongs (robbins).
- Attribution errors: (An attribution is a belief about the cause or causes of an event or an action).
  - Fundamental attribution error.
  - Self-serving biases.

# Attribution

- “Attribution is the proces by which we make sense of our environment through our perceptions of causality. An attribution is a belief about the cause or causes of an event or an action.” (H & B)
- Correspondent Inferences:



You observe an individual complaining about the food, service, decor in a restaurant. To answer “why?” you note that...

You conclude that....

No one else complains. **(Consensus low)** + She always complains in this restaurant. **(Consistency high)** + She also complains in other settings. **(Distinctiveness low)** → She complained because she is difficult to please. **(Internal attribution)**

Several others also complain. **(Consensus high)** + She always complains in this restaurant. **(Consistency high)** + She does not complain in other settings. **(Distinctiveness high)** → She complained because the restaurant is terrible. **(External attribution)**

# Literature

- Huczinsky & Buchanan
- Articles provided in library