

Designing Interactive Systems I

Lecture 4: Knowledge, Feedback, Errors, 7 Principles of Design

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<http://hci.rwth-aachen.de/dis>

Review

- What are the Seven Stages of Action?
 - Variations? Gulfs? Design implications?
- What are mappings, natural mappings? Types?
- What are constraints? How do they differ from affordances? Types?

3 Levels of Processing

(originally from *Emotional Design*)

I. Visceral Level

- Fast, totally subconscious
- Reflex action, impulse
- E.g., vertigo, feeling of warmth and happiness when basking in the sun
- Not exactly 'emotions', more like hard-coded responses



2. Behavioral Level

- The level of “classic usability”
- “Learned responses”, triggered by situations matching a pattern
- Mostly subconscious, fast, lower level of emotions
- E.g., sports, walking, etc.
- Behavioral action is associated with an expectation
 - *Hope or fear*: Am I doing the right set of actions? (feedback)
 - *Relief or despair*: Did things work out in the way I intended? (conceptual model)



3. Reflective Level

- Conscious thinking on events that have occurred
- Slow, deep thinking
- Highest level of emotions e.g., *guilt, pride, blame, praise*, etc.
- Retained in memory (\Rightarrow most important)

