

# Aspects of eLearning

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# Outline

- **Educational Theory**
  - **Educational Technology**
    - **Theory & Technology**
      - **E-Learning Standards**



# Proposition I

(Inglehart 1997)

**The predominant educational assumptions of a society are not invented freely but reflect the predominant cultural values of this society.**

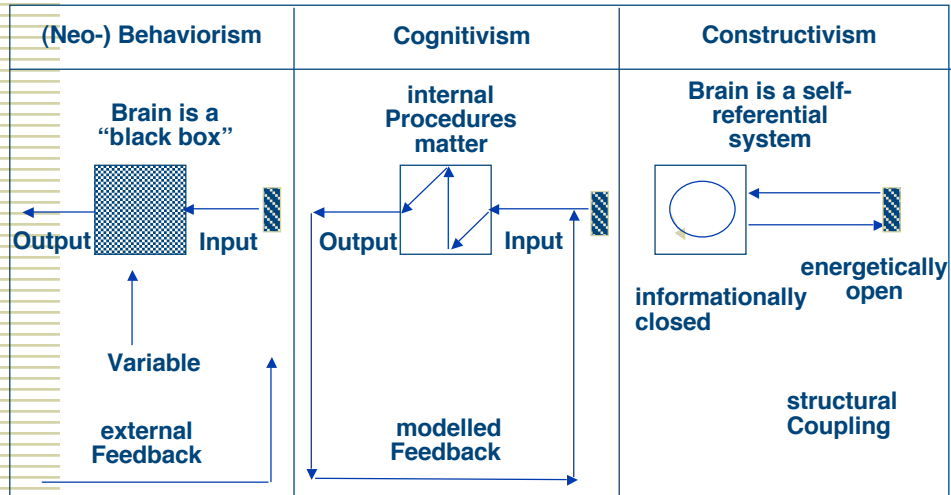
# Proposition II

(Baumgartner/Payr 1999)

**Every piece of Educational Software, Authoring Tool or Learning Management System (LMS) implements a certain kind of learning theory.**

**Every function of the software has underlying (tacit) pedagogical assumptions.**

# Learning Paradigms



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## Transfer



- factual knowledge, "know-that"
- Transfer of propositional knowledge
- to know, to remember
- Production of correct answers
- Verbal knowledge, Memorisation
- to teach, to explain

## Teaching I

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## Tutor



- procedural knowledge, "know-how"
- Presentation of pre-determined problems
- to do, to practice
- Selection of correct method and its use
- Skill, Ability
- to observe, to help, to demonstrate

## Teaching II

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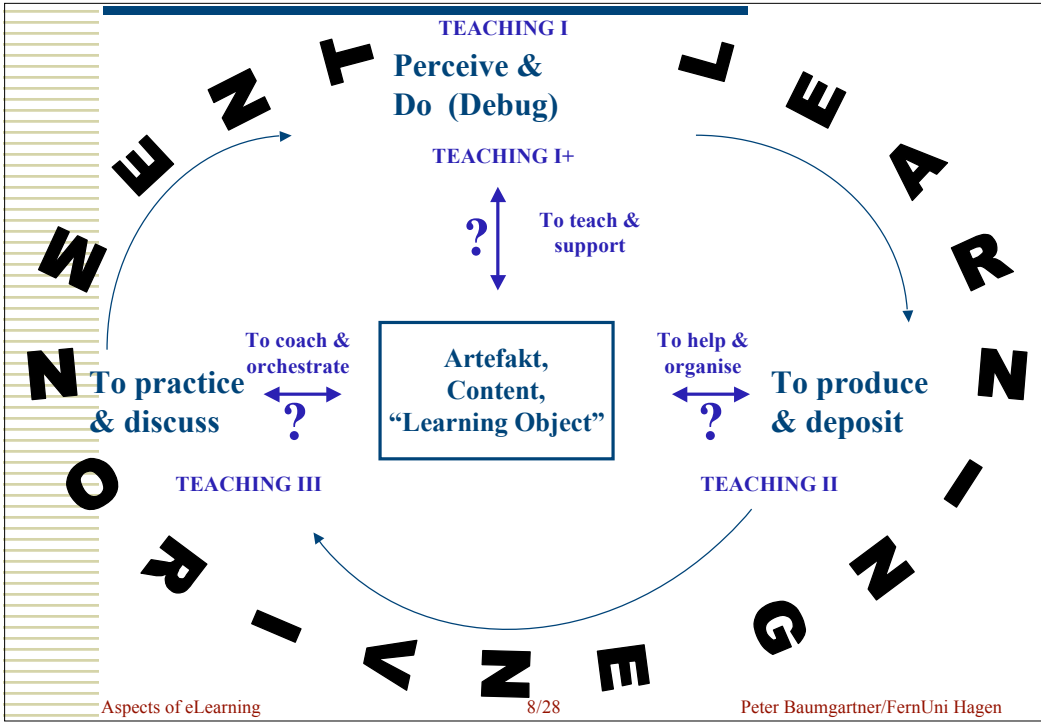
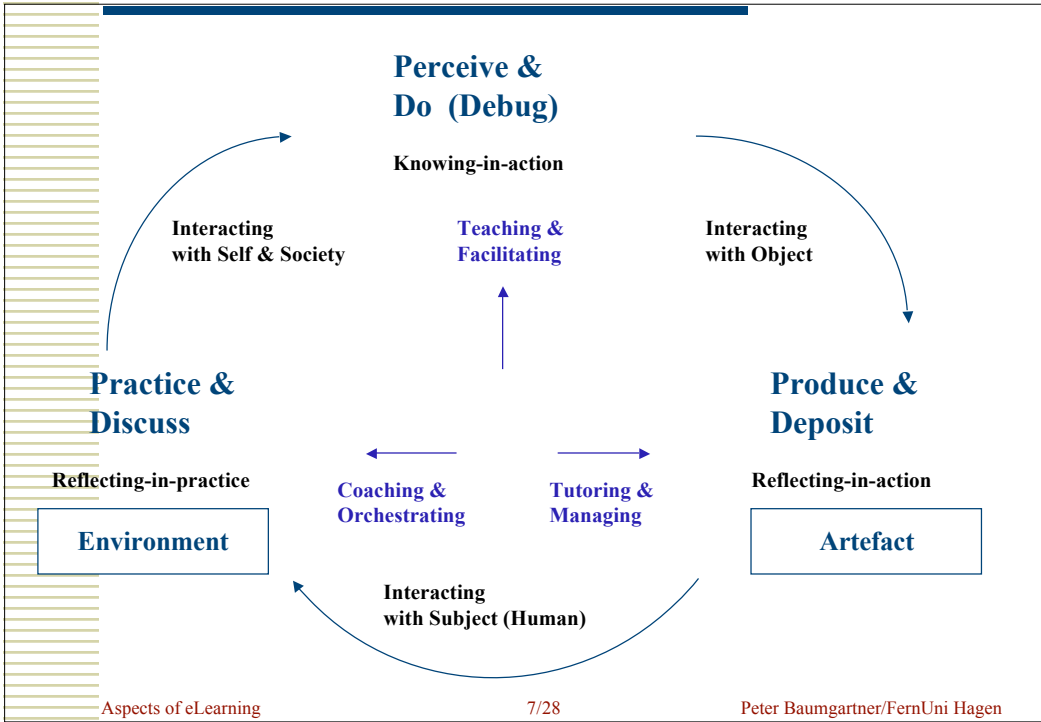
## Coach



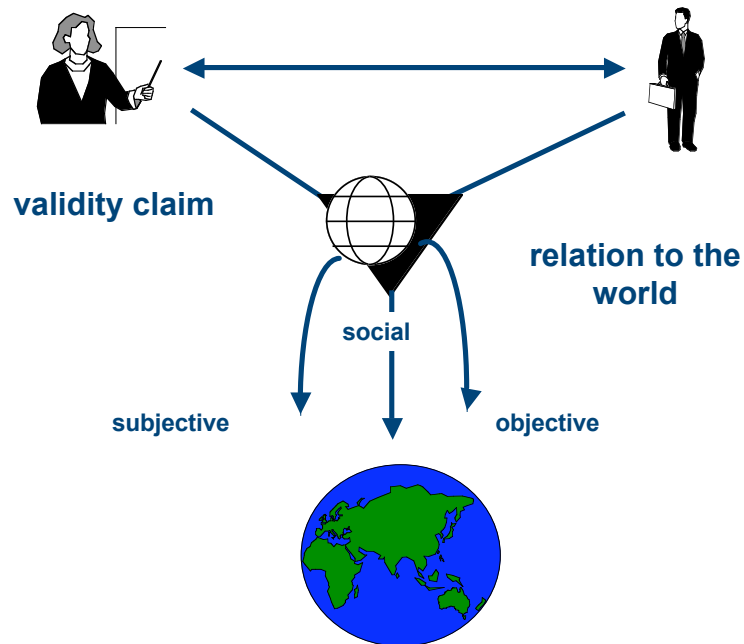
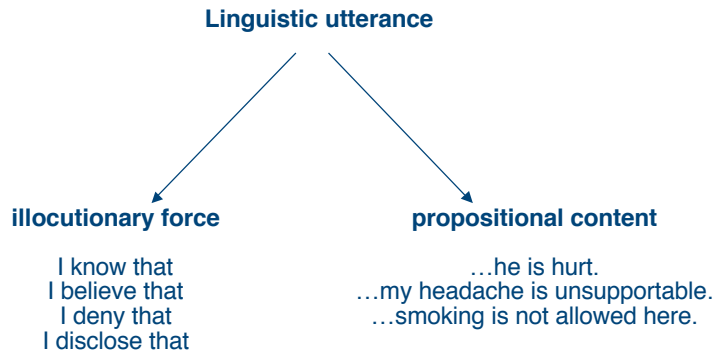
- social Practice, "knowing-in-action"
- Action in real (complex and social) situations
- to cope, to master
- Realisation of adequate action strategies
- Social Responsibility
- to cooperate, to support

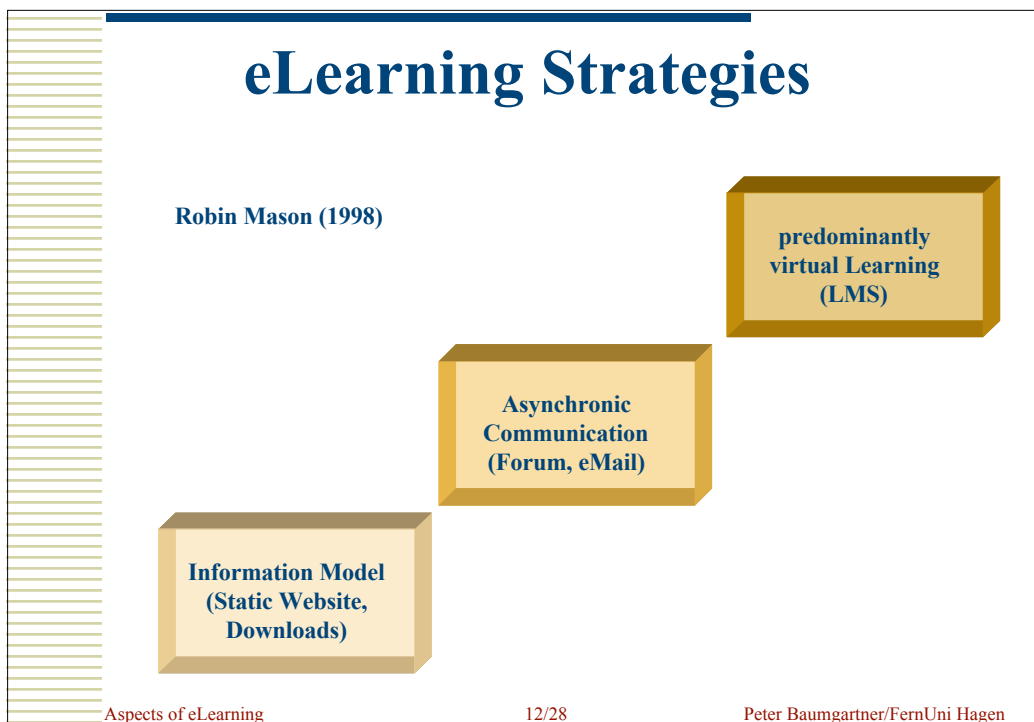
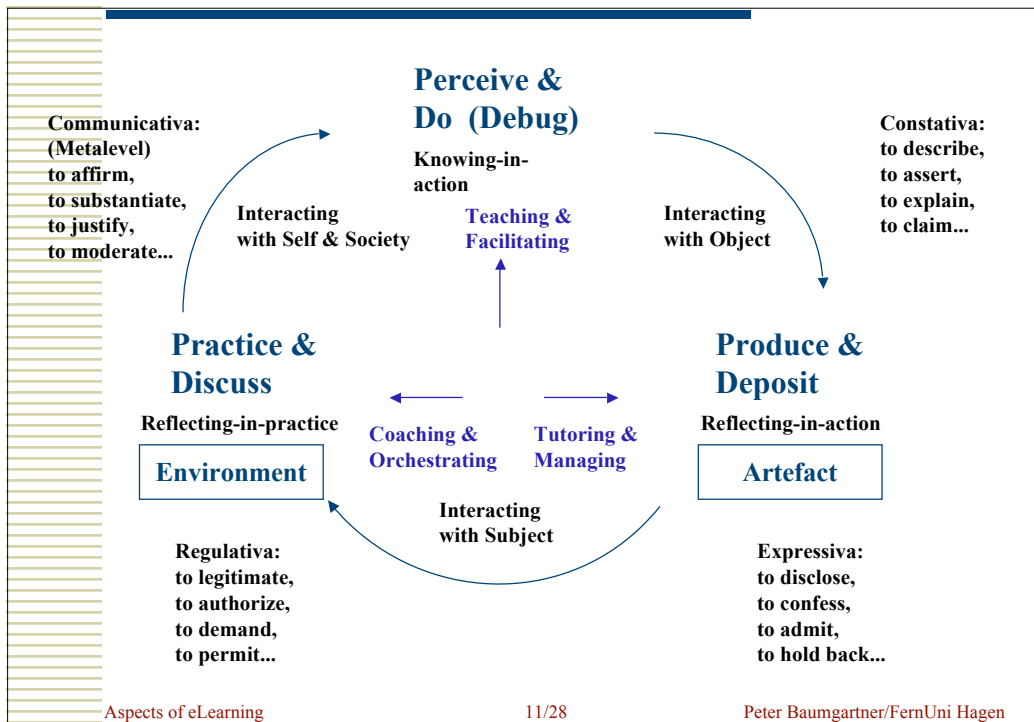
## Teaching III

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# Theory of Speech Acts





# eTeaching-Strategies

Gilly Salmon (2000)

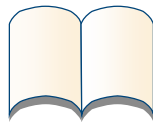


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# Educational Potentials



**Book**

Text, Fotos, Images

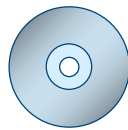
Linear

Limited amount

Presentation

References

Assessment indiv.



**CD/DVD-ROM**

+ Audio, Animation, Video

Indiv. + Adaptive

More but still limited

+ Automatic Feedback, Simulations

Hyperlinks, Tooltips

Assessment indiv.



**Web**

+ Communication (Chat, Forum)

Collective Adaptive + Generative

no limits

+ Communication, Social

Dynamically Interconnected Web

360 Degree Assessment

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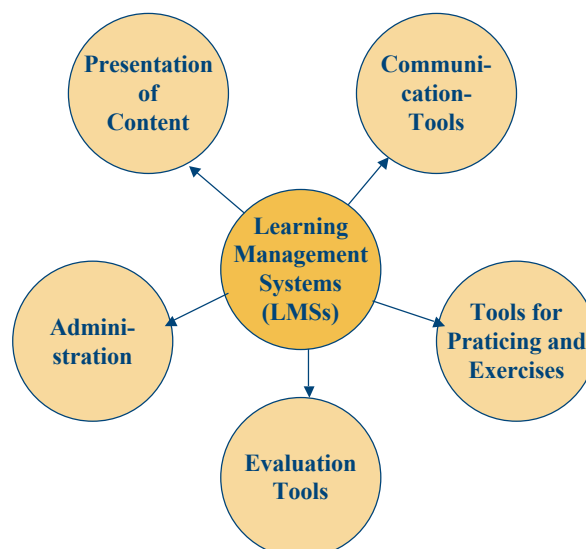
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## What are VLEes?

- **Web-based: Browser = central tool**
  - ≠ locally installed educational software
  - ≠ CD-ROM
  - ≠ Distance Education
- **A<sup>3</sup> = Anytime, Anywhere, Anybody**
- **„Flexible Learning“, (competence based, student centered)**
- **Selforganised, supported and directed learning**
- **Face-to-interface and face-to-face (“blended learning”)**

## What are LMSes? (1): Functions





## What are LMSes? (2): Definition

**A Learning Management System (LSM) is  
a tool for the organization and the  
coaching process of  
webbased learning**

## What are CMSes? (1): Functions



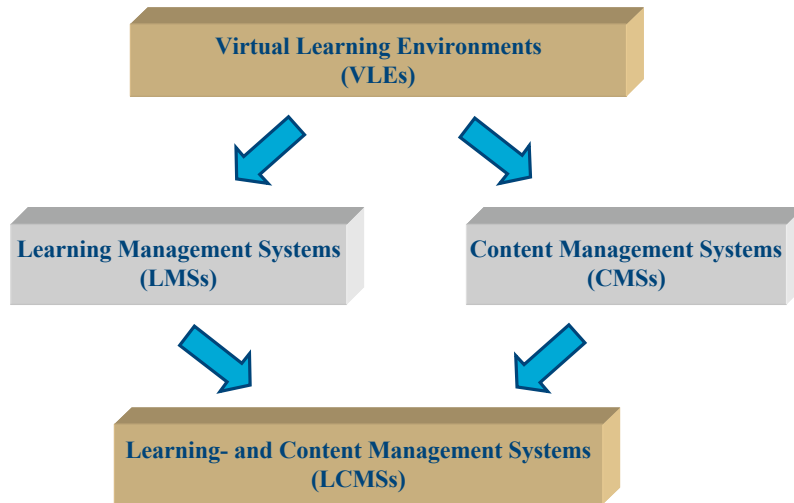
## What are CMSes? (2): Principles

- **Content separated from the form of the presentation**
  - (via templates, stylesheets)
- **Management of content components**
  - (via metadata and database)
- **Workflow Management**
  - (via hierarchical and/or participative role concept: e.g. Managing Editor, Content Editor, Design Editor, Associate Editor, Member, Guest etc. buzz word: Webcommunity)

## What are CMSs? (3): Types

- 1. Production systems (P-CMS):** Traditional form of CMS
- 2. Groupware, Collaborative Systems (C-CMS):**  
Asynchronic Communication and Interaction of members of a working (or learning) group
- 3. Portal, Community-Content-Collaboration Systems (C3MS):** Communitybuilding
- 4. Weblogs, Discussion oriented (D-CMS):** Micro-Content, Syndication/RSS-Feed, Trackback.
- 5. Wiki, Editing oriented (E-CMS):** Everybody has the same full rights. Participative generation of content.

# VLE/LMS/CMS/LCMS?

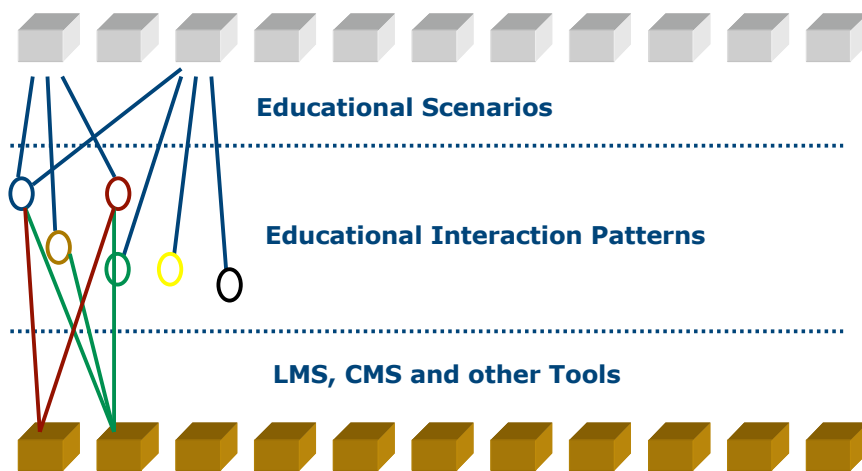


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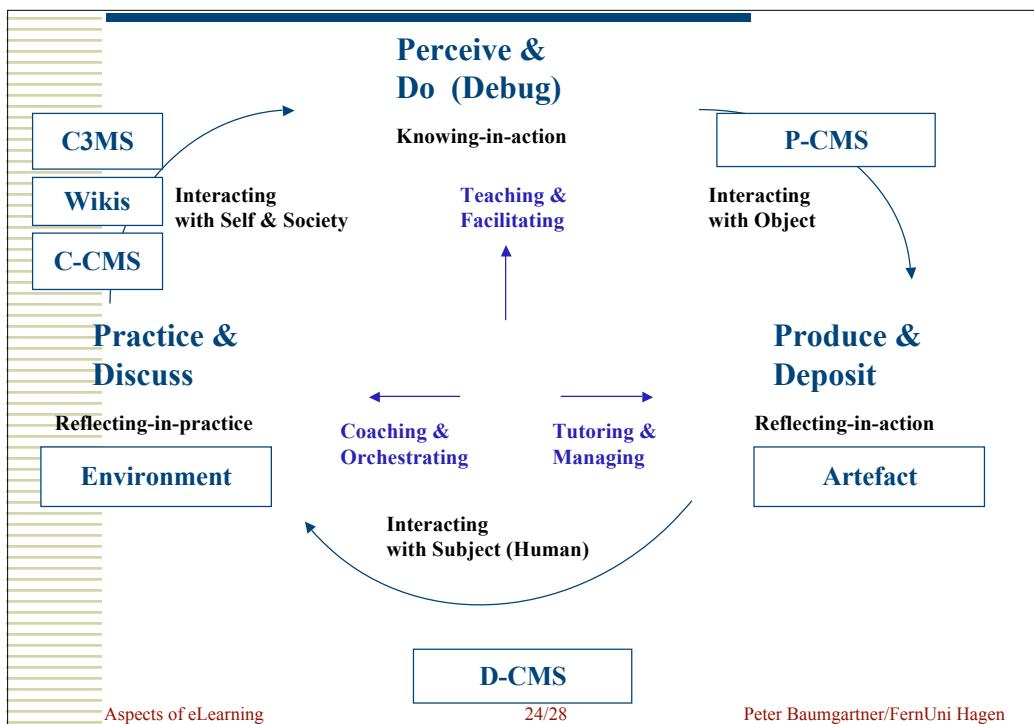
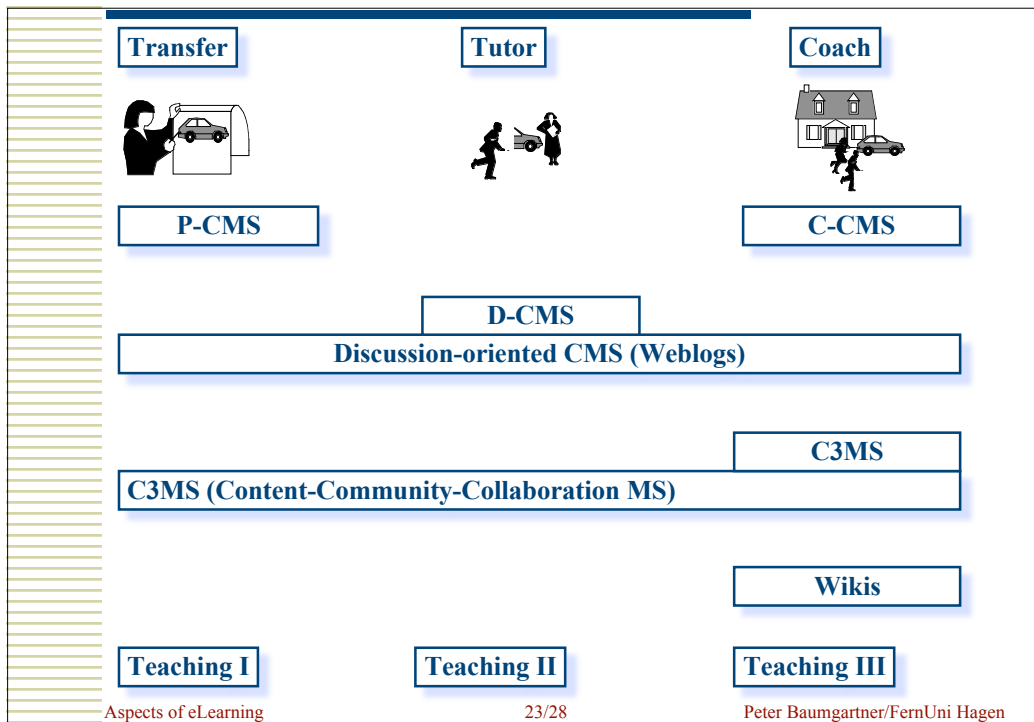
# 3 Levels of Abstraction

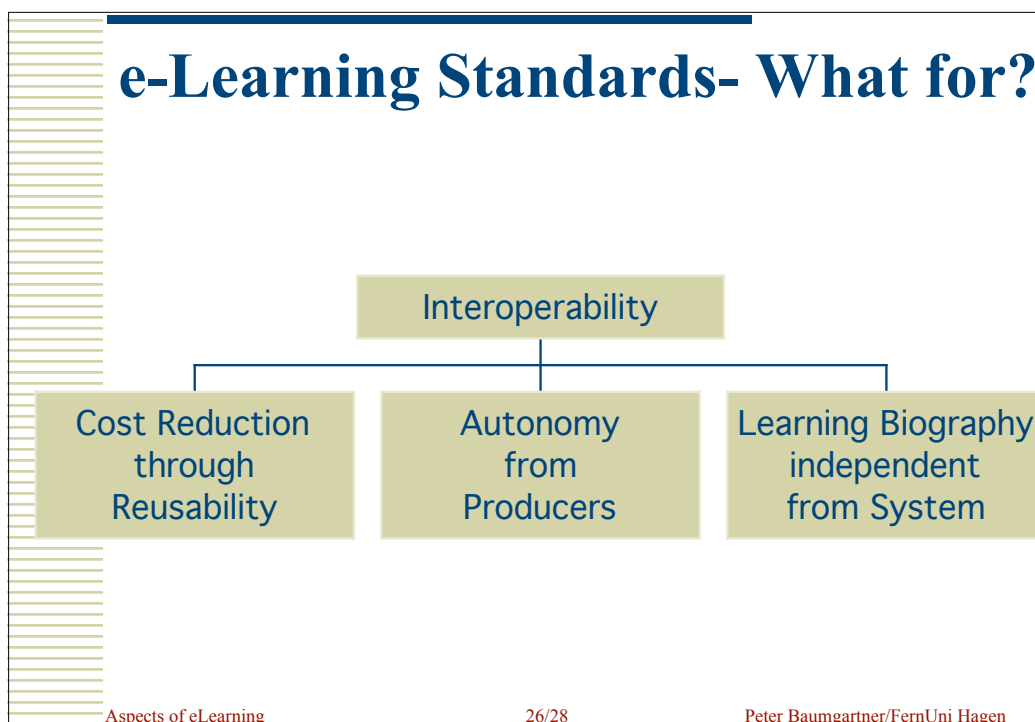
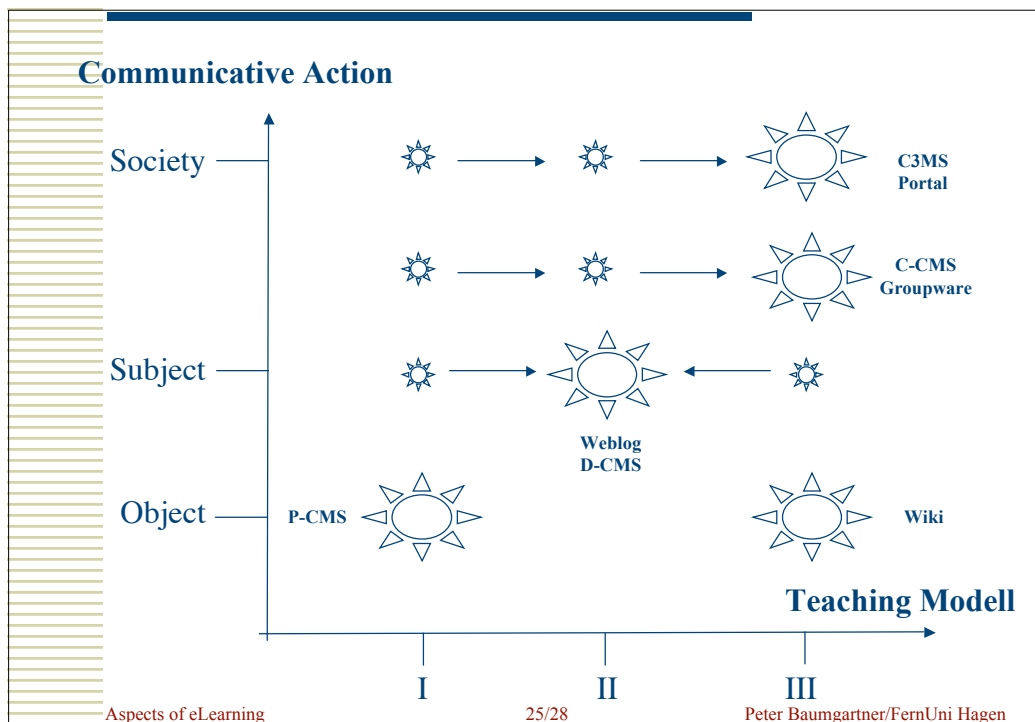


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## Goals of Standards

- ◆ **Interoperability**
  - Does the system work with other systems?
- ◆ **Re-usability**
  - Is content in other context reusable? (Learning Object)
- ◆ **Manageability**
  - Are there transferable notes on learning behaviour and content?
- ◆ **Accessibility**
  - Are learners able to access content when ever they need it?
- ◆ **Durability**
  - Does the learning environment still operate, even if technology has changed?

**Thank you for your attention!**

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