

# Chapter 11 – Extra Slides

## Quality of Service

# Key Points – Quality of Service

- QoS is not always intuitive.
  - E.g., sometimes slower is better.
- QoS is subjective
  - E.g., opinions based on one-time experiences.
- QoS is situation and user-dependent
  - E.g., complexity and urgency of task, as well as personality and lifestyle of end users, user model of computation
- QoS can be improved through translucency in interfaces
  - E.g., (accurate) progress bars and other visualizations
- QoS issues in interface design affect need (or lack thereof) for technological QoS
  - E.g., relevance of packet loss in networking protocols
- What are end users willing to pay for?
  - E.g., service and component oriented technological models of QoS

# Example Situations

- Installing New Software
- Reading Newspapers On-line
- Reading Email
  - From home computer
  - From “foreign” computer
- On-line Backing
- Talking with a customer representative
- Etc.

# Ex: Connecting a Wireless Network



# See “Walkthrough” in User Guide

- [http://www.linksys.com/servlet/Satellite?c=L\\_Product\\_C2&childpagename=US%2FLayout&cid=1130276681921&pagename=Linksys%2FCommon%2FVisitorWrapper](http://www.linksys.com/servlet/Satellite?c=L_Product_C2&childpagename=US%2FLayout&cid=1130276681921&pagename=Linksys%2FCommon%2FVisitorWrapper)

# Discussion

- What role do mental models play in end users' quality of service?

# Mental Model

- “A mental model is an explanation in someone's thought process for how something works in the real world. It is a kind of internal symbol or representation of external reality, hypothesised to play a major part in cognition.”
- Wikipedia entry for mental model February 23, 2006, 9:45 a.m.

# Re-examine the Linksys Guide w.r.t. Mental Model

# Discussion

- What role does metaphor play in end users' quality of service?

# Metaphor

- “In cognitive linguistics, metaphor is often seen as a basic cognitive function, that humans naturally see common traits in subjects which are factually distinct, and such behavior may be required for comprehension and learning.”
- Wikipedia, February 23, 2006 at 10 a.m.

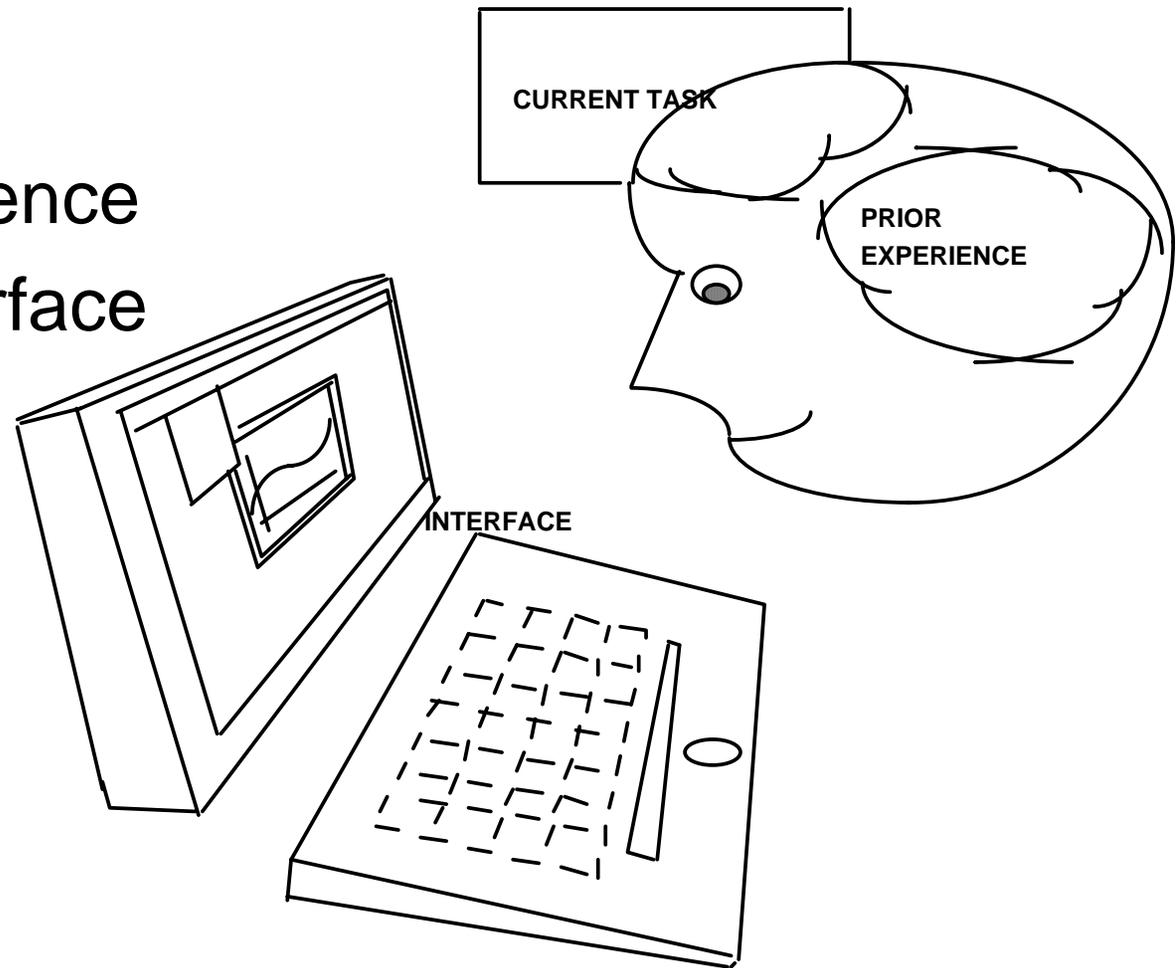
Re-examine the Linksys  
example w.r.t. metaphor

# Discussion

- What role does the information processing theory play in end users' quality of service?

# Information Processing Theory of Human-Computer Interaction

- Users' Tasks
- Users' Experience
- System's Interface



Linksys example again?

Another suggestion?