



Carnegie Mellon University

Communicating Technical Ideas To a Non-Technical Audience

Metaphor

- What is a metaphor?
- What metaphors have been added to the popular IT lexicon recently?
- What metaphors are you dealing with in your scope of work?
- What other meaning(s) of the word does the metaphor borrow from?

Metaphors can be graphical

- What is this?



Icon Metaphors

- What is this?



- What is this?



Icon Metaphors

- Hourglass



- The sui (needle) became a damru (Shiva's drum) when the "thing" (computer) was doing something.

- Shiva's Drum



Evaluating metaphors

- Useful
 - Is there a need for it?
- Clearly understood
 - Is it rooted in common understanding?
- Close
 - Is the inference simple?
- Clarifies the target
 - Does it make the concept clearer?
- Acceptable
 - Not annoying or offensive?
- Economical
 - Brief, succinct?
- Memorable
 - Easy to remember?

Which characteristic did it break?

- Useful?
- Clearly understood?
- Close?
- Clarifies the target?
- Acceptable?
- Economical?
- Memorable?

Communicating Technical Ideas...

- 1) OBSERVE:
 - What questions or misunderstandings might a non-technical person have about the concept?
 - What problems might they run into?
 - Where could they get stuck in planning, managing, or sustaining a solution in terms of this concept?
- 2) SYNTHESIZE:
 - From a technical perspective, how would you define the concept? (Try to define it in your own terms, without Google or Wikipedia.)
 - What are the relevant design and implementation issues / tradeoffs / problems?
- 3) DESIGN COMMUNICATION:
 - Explain the concept using NO technical jargon. (Write as if for someone with no formal technical background.)
 - Use analogies, metaphors, physical models or other means to get across the concepts.

Why bother?

Why bother?

- For your client
- For you:
 - Synthesize IT knowledge
 - Build skills to communicate with non-technical colleagues
 - Good for interviews
 - A Bank of America interview question:
“Discuss a situation where you had to describe a complex technical problem to a non-technical person.”

Communicating Technical Ideas...

- We will focus on DESIGN:
 - Explain the concept using NO technical jargon.
 - Use analogies, metaphors, physical models or other means to get across the concepts.
- What technical concepts did you explain?
 - Group them
 - Topics beyond the list?
 - Present

Evaluating metaphors

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