Why Site-Specific Design?

EVALUATION & DESIGN TECHNIQUES
- Heuristic [Mankoff et al. 2003]
- Comprehension-based [Holmquist 2004]
- Result-centered guidelines [Gross 2003]

BUT HOW TO GET DESIRED RESULTS?
- Need to link abstract qualities to site-specific conditions
- Guide design from first step

USE INFORMATION AS GUIDE
- Choosing what info is hard
- Take cue from nature
- Where display is site-specific

CHOOSE SITE FIRST
- Observe users
- Find appropriate info
- So display fills a need

Questions

IS INFO SPECIFIC TO CERTAIN GROUP?
- Exploit group attributes
- Makes display feel more natural

HOW QUICKLY DOES INFO CHANGE?
- Too fast: distraction
- Too slow: won’t be noticed
- Need to find balance
- E.g., if changes are quick make a less sensitive display

DOES PAST INFO PERSIST IN PRESENT?
- Added complexity

HOW DOES INFO RELATE TO OTHER ON-SITE INFO?
- Seamlessly integrate with all aspects
- Not overload user

IS INFO ITSELF SITE-SPECIFIC?
- Relate display to site [Skog et al. 2003]
- Increases comprehension

IS SITE MOBILE?
- Can update site-specific relationship

IS SITE FRAGMENTED?
- Display cannot be perceived as a whole
- Inherently lossy
- Can use this to mitigate rate of change

IS INFO ALREADY DISPLAYED SOMEHOW, OR IS IT ABSTRACT?
- Draw on existing modes of presentation
- Do not contradict previous perceptions
- Basic concepts have existing displays
- E.g., increase/decrease
- Redundant use of existing semantics

IS DISPLAY PRIMARILY AESTHETIC OR INFORMATIVE?
- Can relax quality of info
- Favor artistic liberty

Example

BOSTON’S WEATHER BEACON
- “Old” Hancock tower
- Lit in 1950
- Shut off in ’79 energy crisis
- Resulted in public complaint
- Re-lit in 1982

RHYME
Steady blue, clear view
Flashing blue, clouds due
Steady red, rain ahead
Flashing red, snow instead*
*In summer: baseball game cancelled

ANALYSIS
- Boston’s history of rhymes
- Updates every 3 hours
- Large change
- Simple (2 states/2 colors)
- Integrates with skyline
- Predictions from 26th floor
- Blue ≈ blue sky
- Red ≠ warning (precip.)
- Not completely intuitive

versus