Calm computing: A challenge for the 21st century

Art Center College of Design

Questions anytime

What’s calm computing?

Outline

• Information underload and the subconscious
• Three distinctions that change the game
• Role of borders as social resources
• Why I love motorcycles

Wow, in 40 minutes?
A PARADOX OF THE DIGITAL WORLD

Increasing the amount of information presented may decrease the feeling of information overload and create a state of flow and calmness.

But

First, one must leverage the subconscious. And honor both physical and social resources.

TAPPING THE SUBCONSCIOUS

3 CRITICAL DISTINCTIONS

1. CENTER - PERIPHERY
2. EXPLICIT - IMPLICIT
3. ATTENDING - ATTUNING

Please, Mr. JSB, be concrete.

Hmmm, beyond just the physical?
THE TOILET TUBE PHENOMENON

HYPERBOLIC TREE

DESIGNED BY RAMANA RAO - CHIEF TECHNOLOGIST, INXIGHT - A PARC SPINOFF.
THE BUTTON THAT IS CHANGING THE WEB

WHERE ART-MATH-SCI-BUSINESS MET

WHERE VIRTUAL MEETS PHYSICAL--HONORING THE PERIPHERY/CONTEXT

A MAGIC LENS ON A TIME WALL
CELL PHONES NEXT?
AN EXPERIMENT BETWEEN PARC & MIT
REMOTE/VIRTUAL STUDIO CRITIQUES

MUCH INFO LIES IN THE PERIPHERY, CONTEXT MATTERS

PARC

MIT

BUT WHAT ABOUT THE SOCIAL PERIPHERY

LEARNING TO USE TECHNOLOGY FROM AND WITH OTHERS...

LEARNING AND HELPING WHILE WAITING

WHERE A CONSTRAINT BECOMES A RESOURCE
LEARNING ON CAMPUS

EXTENSIVE
• EXPOSURE TO MULTIPLE COMMUNITIES OF PRACTICE/SCHOLARS
  • EXPERIENCING:
    WHAT CONSTITUTES AN EXPLANATION
    WHAT IS ELEGANT OR INTERESTING, ETC

INTENSIVE
• ENCUULTURATING INTO A PARTICULAR PRACTICE:
  LEARNING TO READ, WRITE, SELECT PROBLEMS, ETC
• PICKING UP THE AESTHETICS OF THE PRACTICE
• LEARNING TO BE (NOT JUST LEARNING ABOUT) - COGNITIVE APPRENTICESHIP

KEY: RUBBING SHOULDER WITH MULTIPLE SENSIBILITIES
RUTH SIMMONS - CAMPUS LIFE: INTELLECTUALLY QUARRELsome

TOWARDS IMMERSIVE MEDIA

PERSISTENT, ACCRETIVE, MULTI AUTHORED NARRATIVE

LINEAGE - CONSTRUCTIVIST ECOLOGIES

3 MILLION PLAYERS IN KOREA, 26K NETWORKED GAME PARLORS
POROUS MEMBRANE BETWEEN THE PHYSICAL AND VIRTUAL
TAPPING THE SUBCONSCIOUS

3 CRITICAL DISTINCTIONS

1. CENTER - PERIPHERY
2. EXPLICIT - IMPLICIT
3. ATTENDING - ATTUNING

AUDIO ICONS

AHHH -- ICONS WITH A LEITMOTIF!

THANKS BILL GAYER.
Which one do you trust more?

Large dictionary

Pocket dictionary

Oh! But which one does word use?

I don’t know!

What is weird here?

MEMO, EMAIL, IM, SMS, PHONE CALL - each supports different genres.
TAPPING THE RESOURCES CREATED BY SOCIAL PRACTICES - A KIND OF NEGOTIATION IN PRACTICE BETWEEN TWO COMMUNITIES OF PRACTICE - WRITERS AND READERS

AREN'T THESE ALSO SOCIAL AFFORDANCES?

TAPPING THE SUBCONSCIOUS

3 CRITICAL DISTINCTIONS

1. CENTER - PERIPHERY
2. EXPLICIT - IMPLICIT
3. ATTENDING - ATTUNING

WHAT IS ATTUNING?
**Steps Toward Attunement**

- The dangling string (indicator of ether traffic)
- The water fountain (indicator of stock prices)

**Ambient Devices**

- Stock Orb: keep an eye on markets movements $149
- Weather Forecast Beacon: subtly shifting colors show when to golf, garden, or grab an umbrella $179

Thanks Natalie Things that think like to link!
TODAY’S DIGITAL STUDENT
MULTIPROCESSING GALORE

Email, instant messaging, chat room, cell phone, rip music and maybe watch MTV - all at once?

Ahh, the digital world becomes the oxygen that student’s breath. Think ‘student life’, not classes.

CHAT ROOM, IM, IM

A POSSIBLE MIND BUG

All this multiprocessing means they don’t pay much attention to any one thing.

Not so quick! Perhaps remember the distinction between attending and attuning (continuous partial attention?)
CALM COMPUTING: REBALANCING --

EXPLICIT CENTER ATTENDING

IMPLICIT PERIPHERY ATTUNING

COOL, BUT HOW?

CONSIDER BORDERS AND SOCIAL PRACTICES

BORDERS AS SAFE SPACES--
DOORWAYS AFFORD CONVERSATIONS
PORCHES FOR SUPPORTING COMMUNITY

WHAT'S THE EQUIVALENT IN THE E-WORLD

A RICH SET OF OPPORTUNITIES

A NEW WORLD! FUNDAMENTALLY NEW WAYS TO CREATE MEANING FROM BITS.
A TWO WHEELED COMPUTATIONAL PLATFORM

WHERE DRIVER AND PLATFORM MERGE

AH, AND ENABLES A STATE OF FLOW

TUNNEL VISION

INFORMATION INDIVIDUALS

COMMUNICATION, COMMUNITIES & CONTEXT
Thank you.

And thanks to Mark Weiser for ubiquitous computing, etc.