

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



IS THIS GUY
CRAZY?

SO, MORE
CAN BE
LESS??



TAPPING THE SUBCONSCIOUS

3 CRITICAL DISTINCTIONS

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



PLEASE, MR. JOE
BE CONCRETE.

HMMM, BEYOND
JUST THE PHYSICAL?

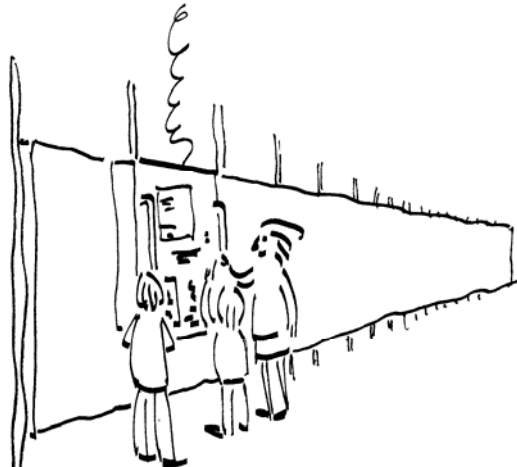


THE BUTTON THAT IS CHANGING THE WEB



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 CRITQUES



MUCH INFO LIES
IN THE PERIPHERY,
CONTEXT MATTERS

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

- ENCULTURATING 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 SHOULDERS 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, 20K NETWORKED GAME PARLORS
 POROUS MEMBRANE BETWEEN THE PHYSICAL AND VIRTUAL

TAPPING THE SUBCONSCIOUS

3 CRITICAL DISTINCTIONS

1. CENTER - PERIPHERY
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AUDIO ICONS



AHH -- ICONS
WITH A
LEITMOTIF!

THANKS
BILL
GAYER.



WHICH ONE DO YOU TRUST MORE?

LARGE
DICTIONARY



POCKET
DICTIONARY

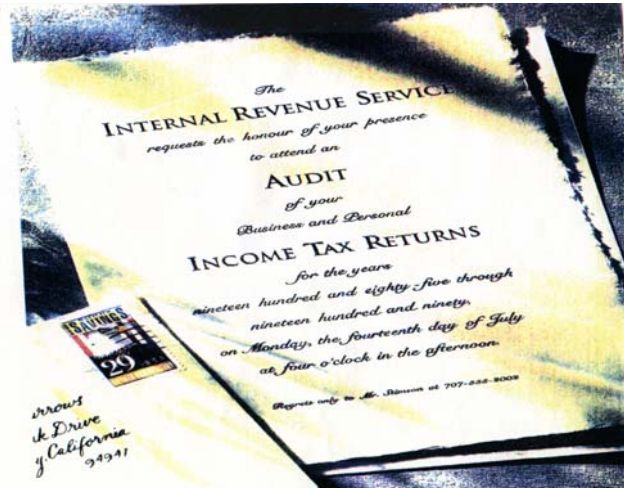


OH! BUT WHICH ONE
DOES WORD USE?

I DON'T KNOW!



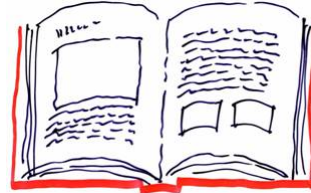
WHAT IS WEIRD HERE?



MEMO, EMAIL, IM, SMS, PHONE CALL -
EACH SUPPORTS DIFFERENT GENRES.

GENRE

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

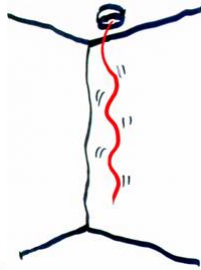
1. CENTER - PERIPHERY
2. EXPLICIT - IMPLICIT
3. ATTENDING - ATTUNING

WHAT IS ATTUNING?



STEPS TOWARD ATTUNEMENT

THE DANGLING
STRING
(INDICATOR OF ETHER TRAFFIC)



THANKS
NATALIE

THE WATER
FOUNTAIN
(INDICATOR OF STOCK PRICES)



THINGS THAT
THINK LIKE
TO LINK!

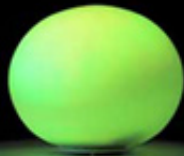


AMBIENT DEVICES

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



TODAY'S DIGITAL STUDENT

MULTIPROCESSING GALORE



EMAIL, INSTANT MESSAGING,
CHAT ROOM, CELL PHONE, RIP MUSIC
AND MAYBE WATCH MTV - ALL AT ONCE?



CHAT ROOM, IM, IM

AHH, THE DIGITAL WORLD
BECOMES THE OXYGEN
THAT STUDENT'S BREATH.
THINK 'STUDENT LIFE', NOT CLASSES.



A POSSIBLE MIND BUG



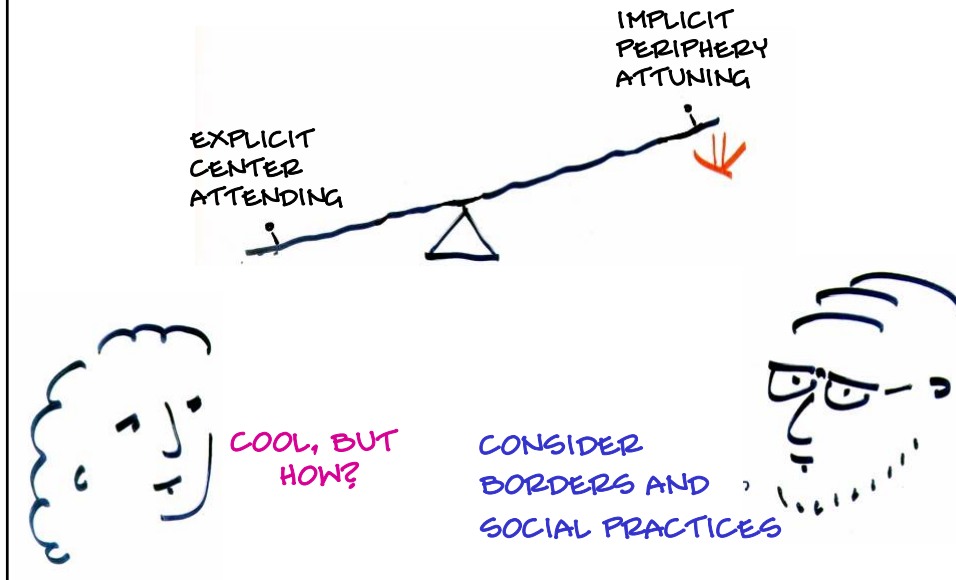
ALL THIS MULTIPROCESSING MEANS THEY
DON'T PAY MUCH ATTENTION TO ANY ONE
THING.

NOT SO QUICK! PERHAPS REMEMBER
THE DISTINCTION BETWEEN
ATTENDING AND ATTUNING



(CONTINUOUS PARTIAL ATTENTION?)

CALM COMPUTING: REBALANCING --



BORDERS AS SAFE SPACES-- DOORWAYS AFFORD CONVERSATIONS



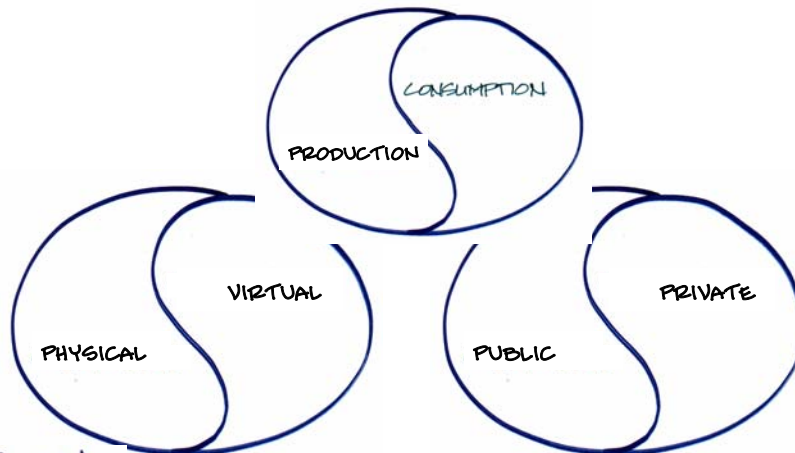
PORCHES FOR SUPPORTING COMMUNITY



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

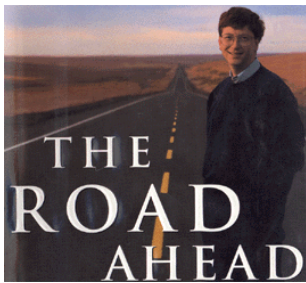
AH, AND
ENABLES A
STATE OF FLO



TUNNEL VISION

COMMUNICATION, COMMUNITIES & CONTEXT

INFORMATION
INDIVIDUALS



THANK YOU.

AND THANKS TO MARK WEISER
FOR
UBIQUITOUS COMPUTING, ETC

