

PhD Studies across Europe and the US
Invited Lecture for the Conference

Information and Communication Technologies
in Education Rožnov pod Radhoštěm
September 12-15, 2011

Piet Kommers
University of Twente
The Netherlands

PhD students in Education, Media
and Communication:

A Global Concern

Piet Kommers
University of Twente
The Netherlands

Education and Technology

Communicational Awareness

Distributed Cognition

Need for Authenticity

Encourage New Publication Channels

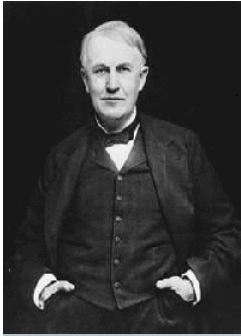
Social Media

Altruism

Evidence-based Theory or v.v.?

How to Measure the Dependent Variable

Trends in Educational Technology



Thomas Edison

- Motion pictures as educational tool
 - “Scholars will soon be instructed through the eye.”
- 1913
 - “I believe that the motion picture is destined to revolutionize our educational system and that in a few years it will supplant largely, if not entirely, the use of textbooks.”
- 1922



Benjamin Darrow

- Radio as educational tool:

“radio may come as a vibrant and challenging textbook of the air.”

- 1932

- Founder, first director of the Ohio School of the Air
- “Radio: the Assistant Teacher”, 1932

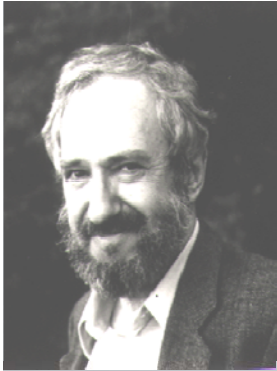


Alan Kay

... Montessori's idea was that school should always be an extended kindergarten and it's the job of people who design the kindergarten to make what happens when kids use it for their own reasons more interesting than the regular world is. I think that's an excellent way of thinking about designing a learning system."

Brown/MIT Vannevar Bush symposium
(October 1995):

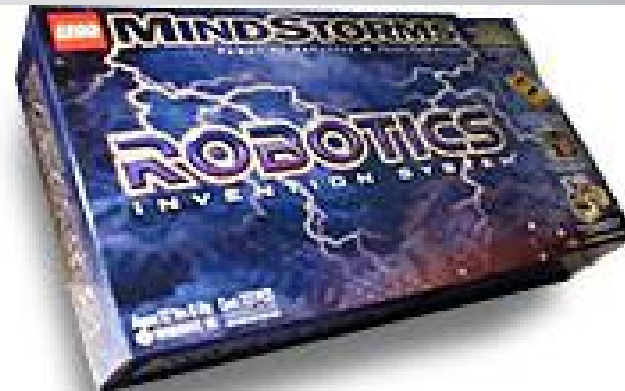
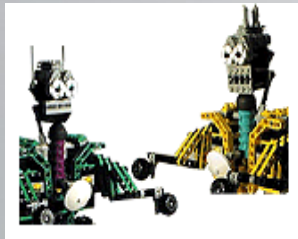
http://www.cs.brown.edu/memex/Bush_Symposium_Panels.html

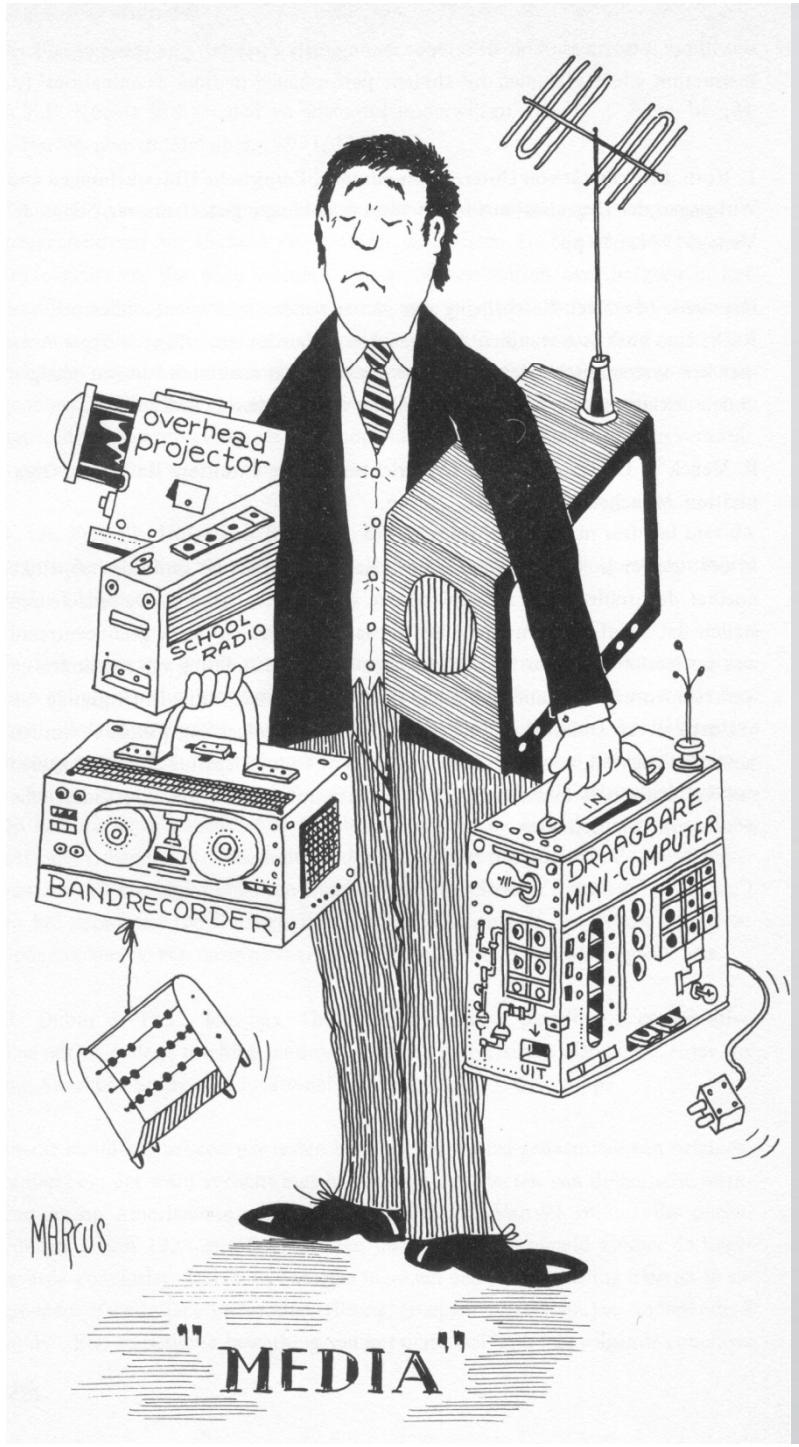


Seymour Papert

- Computer + student choice as educational tool
There won't be schools in the future... I think the computer will blow up the school. ... but this will happen only in communities of children who have access to computers on a sufficient scale."

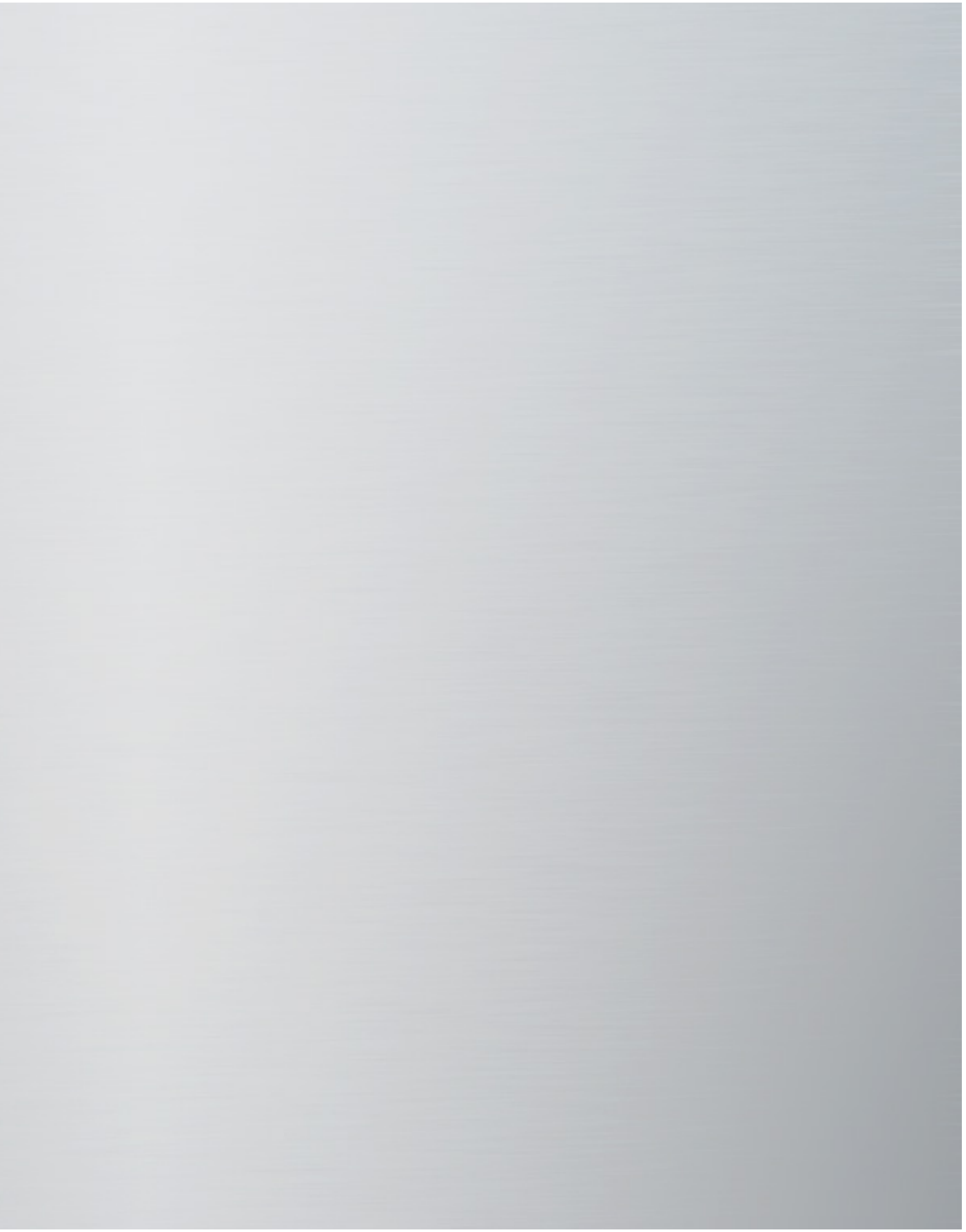
"Trying to Predict the Future", *Popular Computing*, October 19

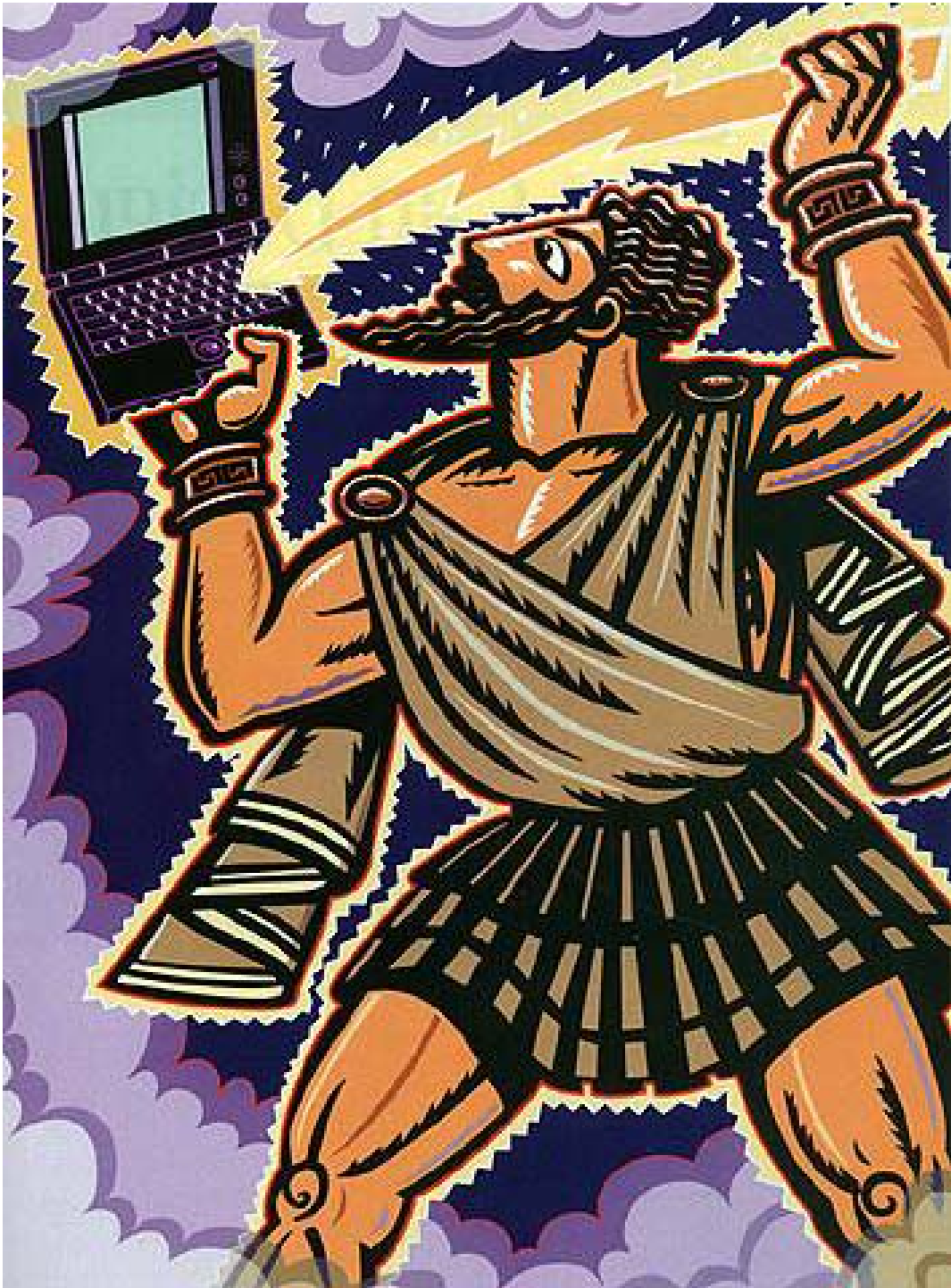




MARCUS

"MEDIA"







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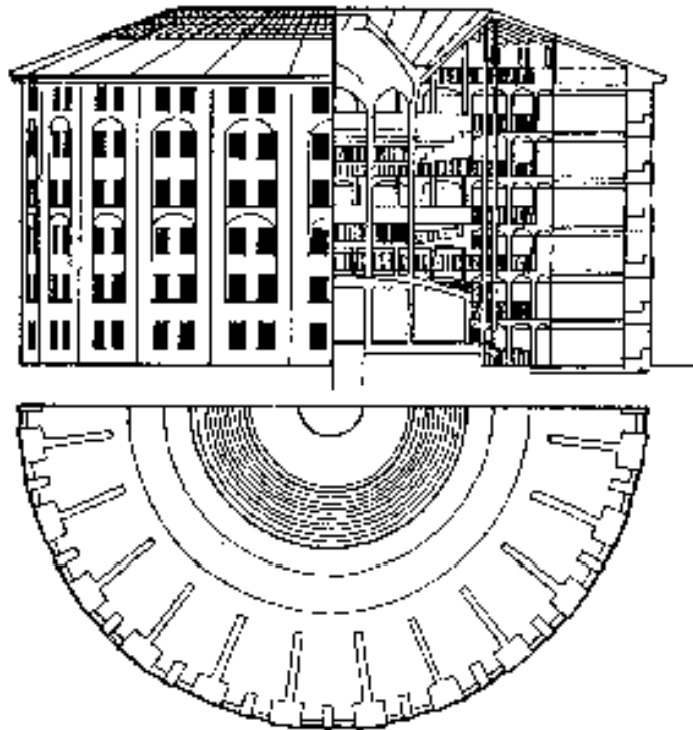
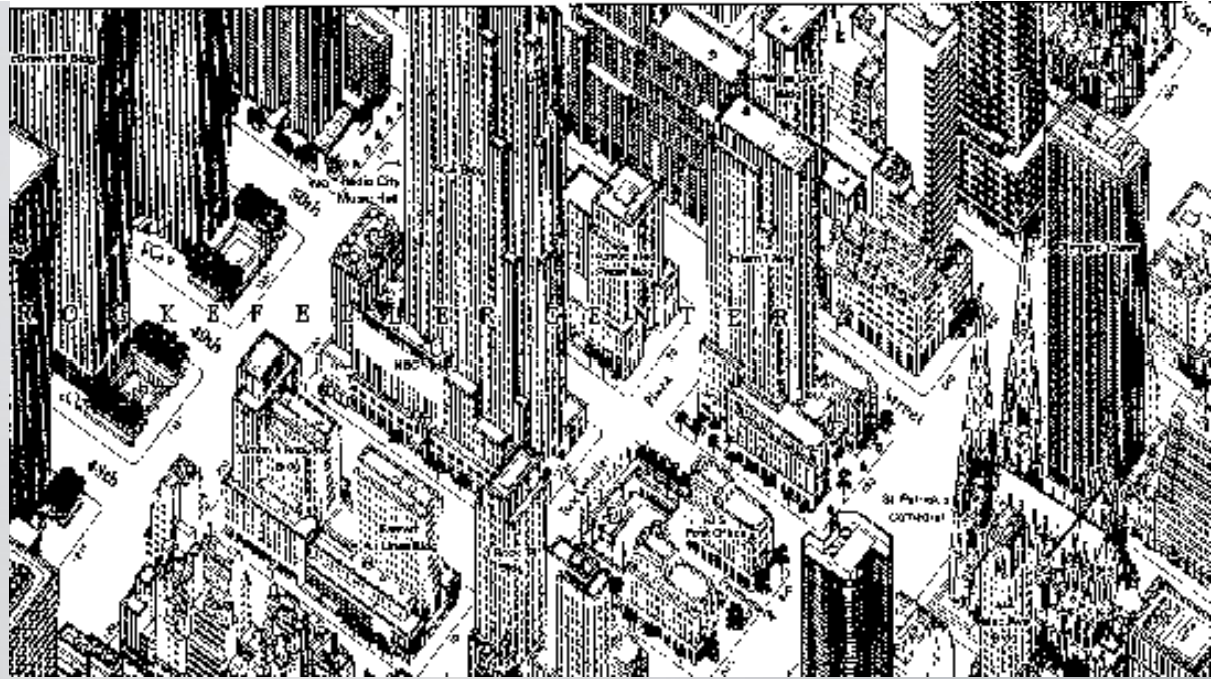
How to Measure the Dependent Variable

Trends in Educational Technology

William Glasser: effectiveness of different modes of learning

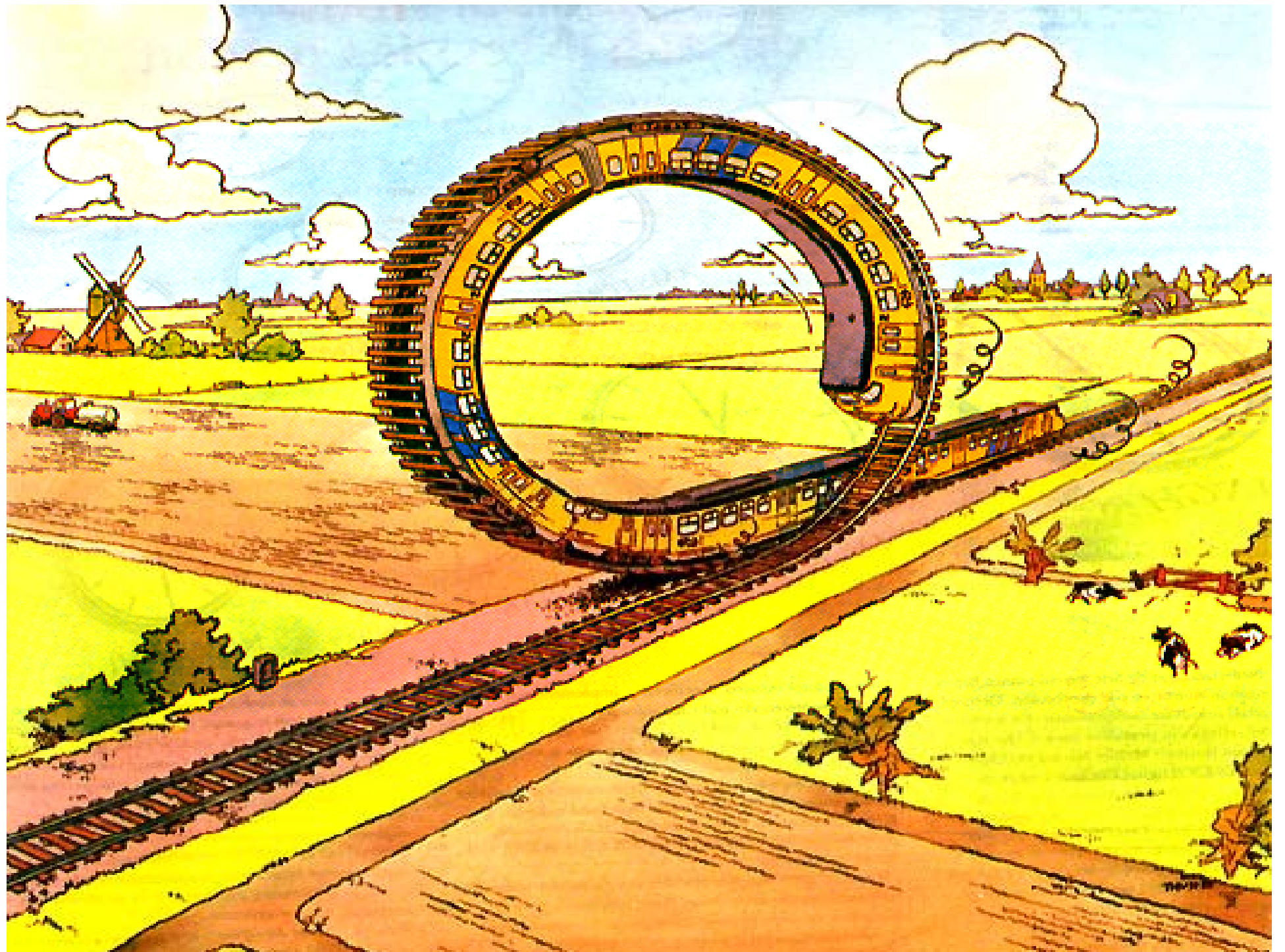
- What we read 10%
- What we hear 20%
- What we see 30%
- What we see/hear 50%
- What we discuss with others 70%
- What we experience 80%
- What we teach someone else 95%



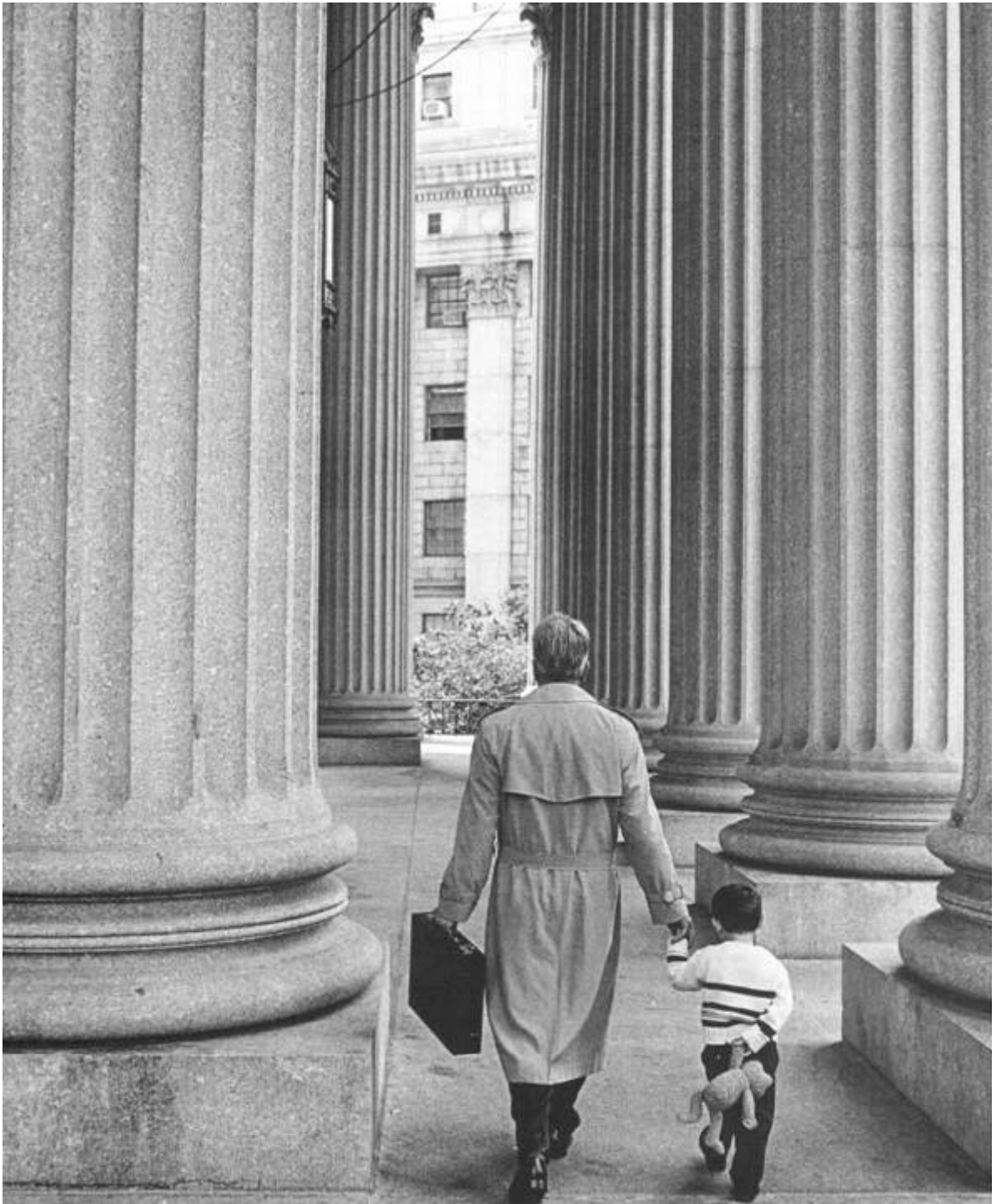


Bentham's
Panopticon
by
Kenneth Wain





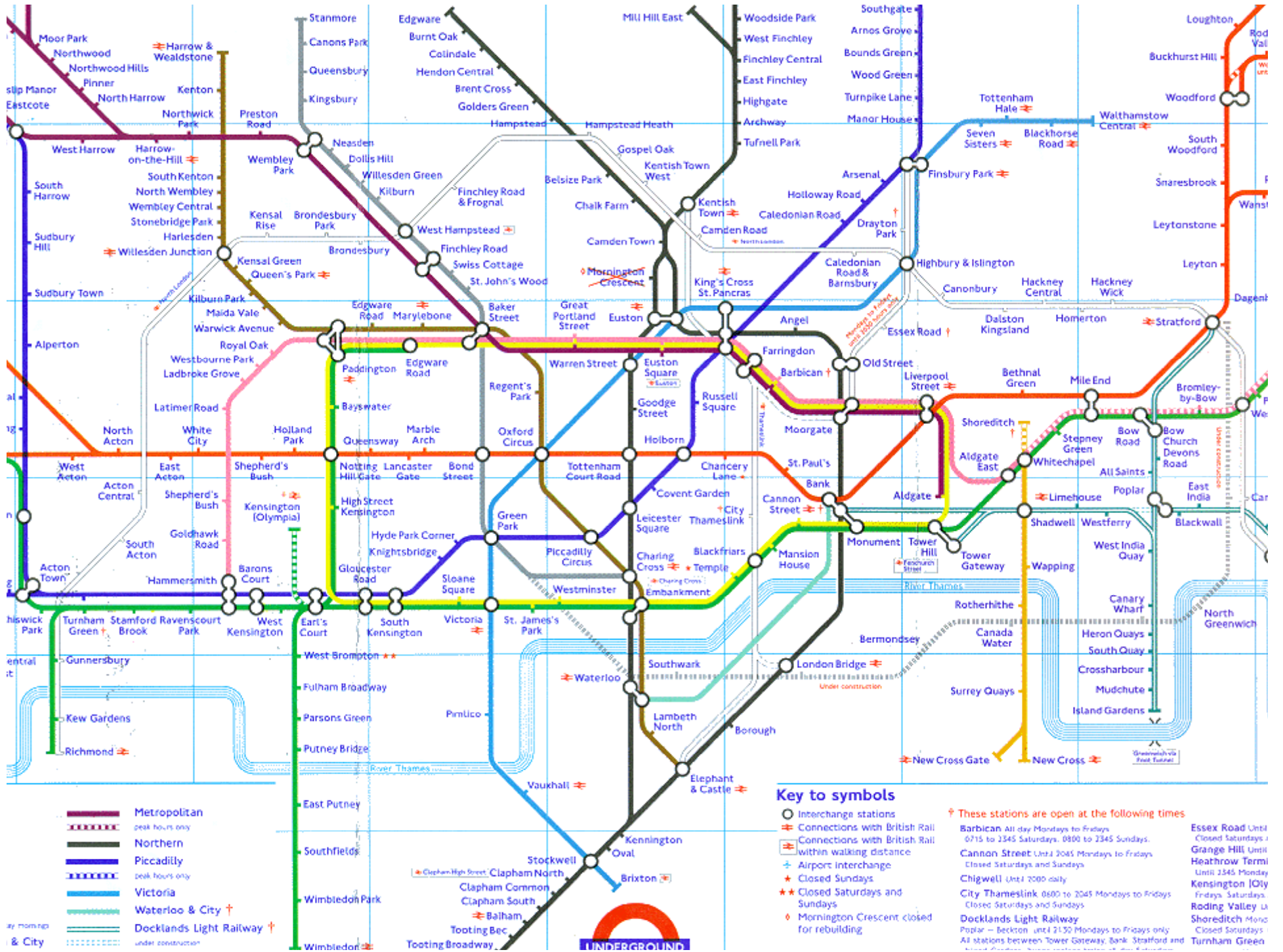


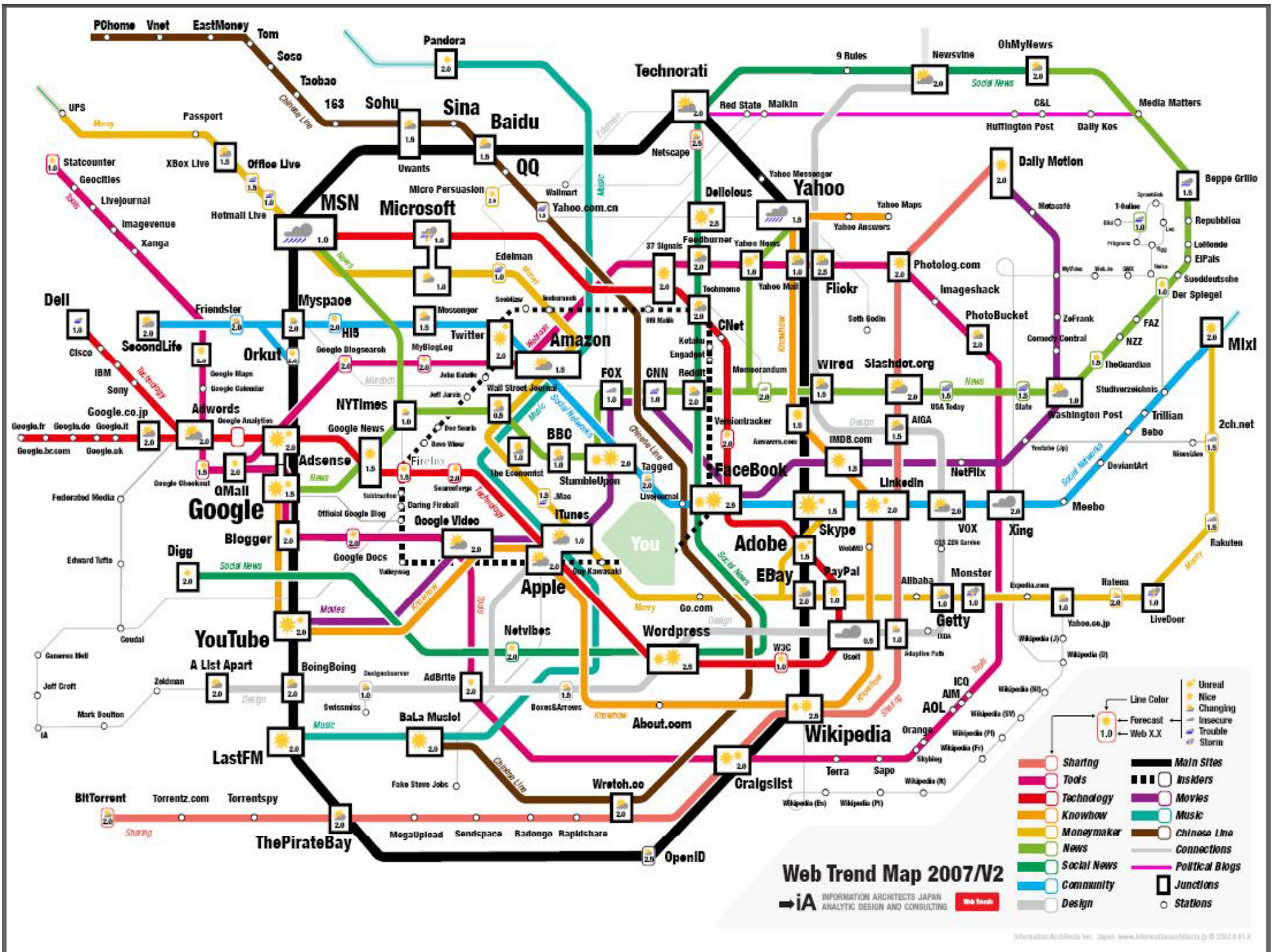


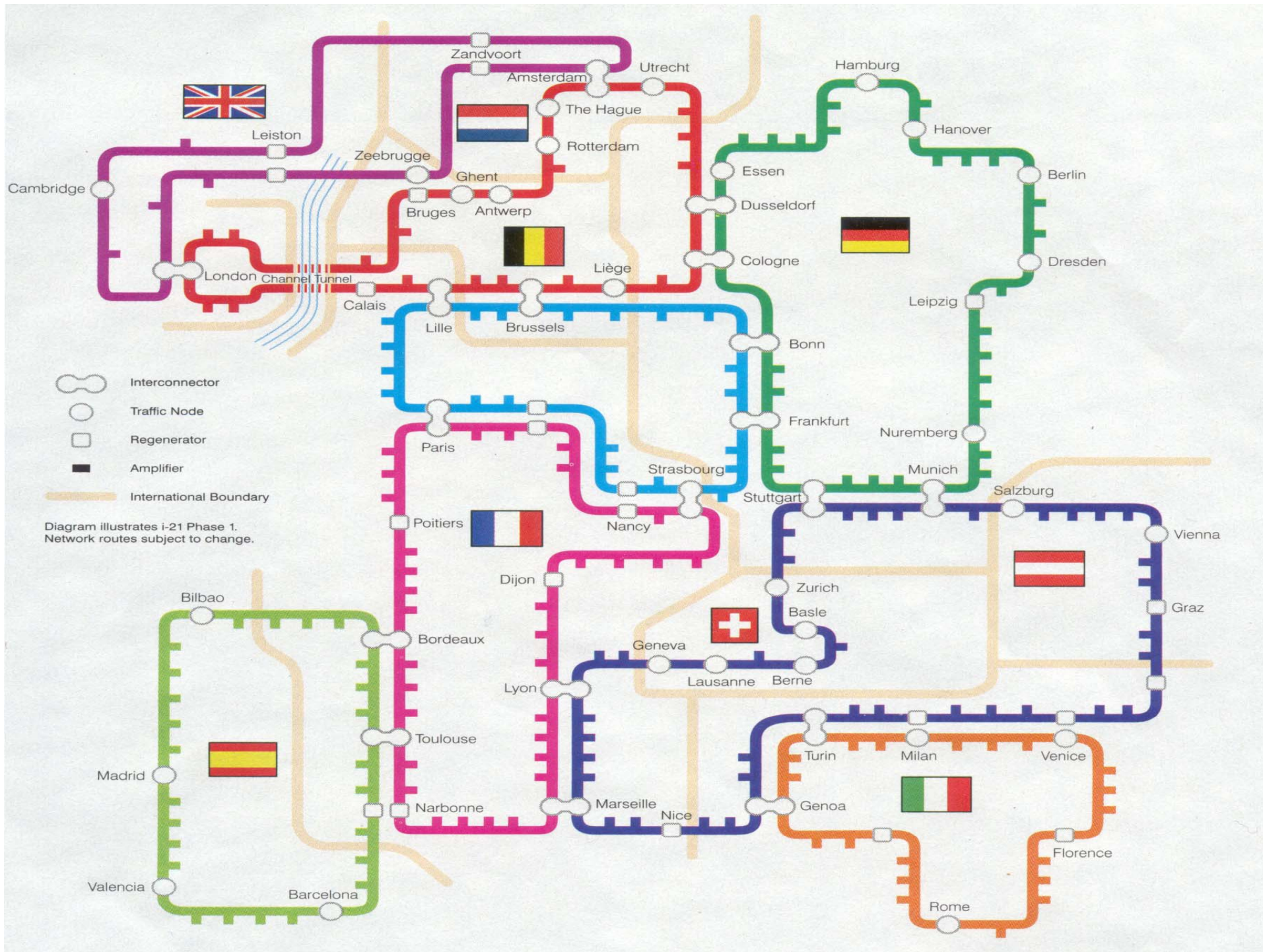
SOFIA











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Expertise is both In and
Between the Persons



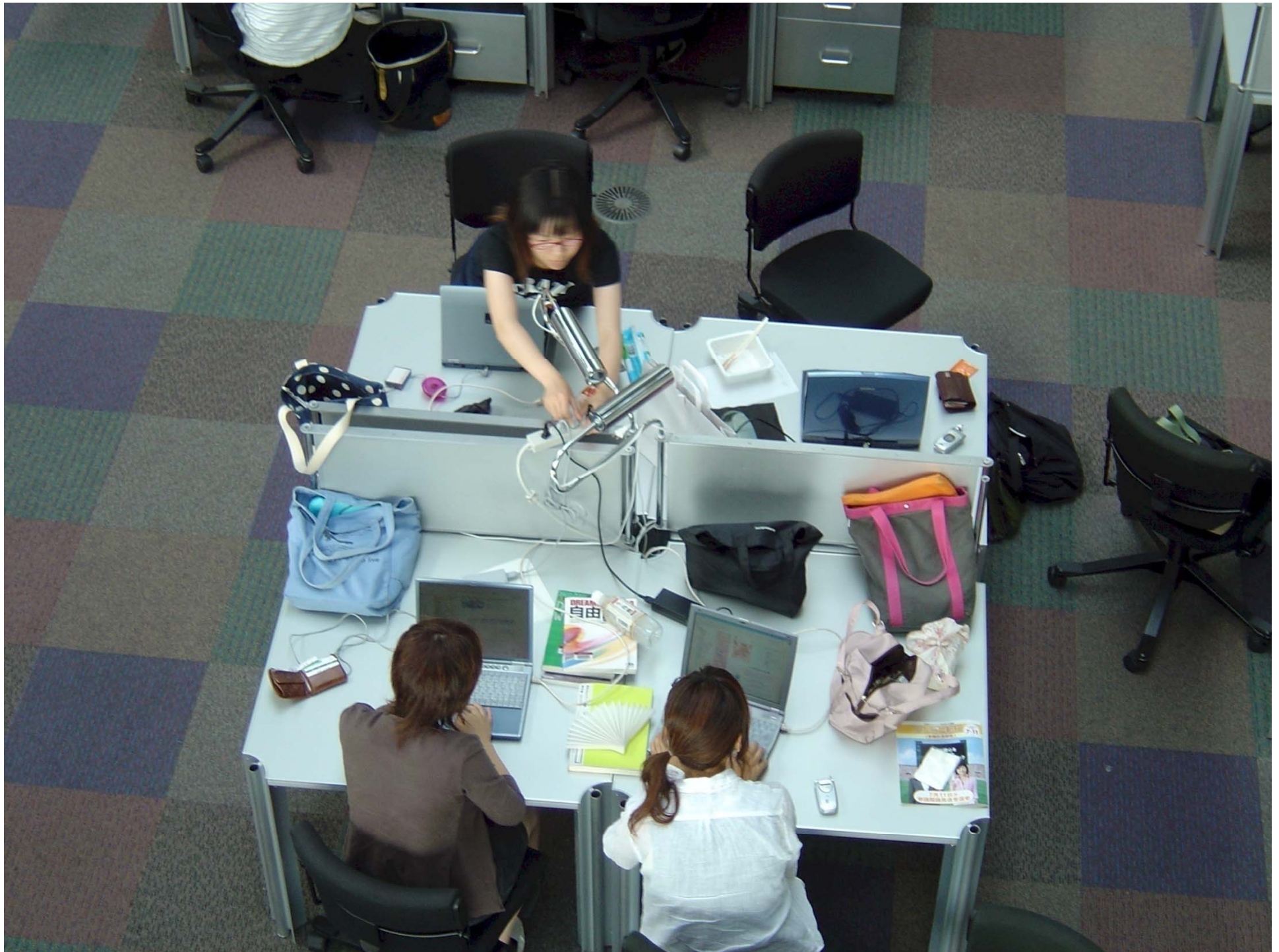


Media,
Virtuality and
the Shift in
Learning
Paradigms

General Talk for the Future University –
Hakodate
Friday, July 9, 2004

Piet Kommers





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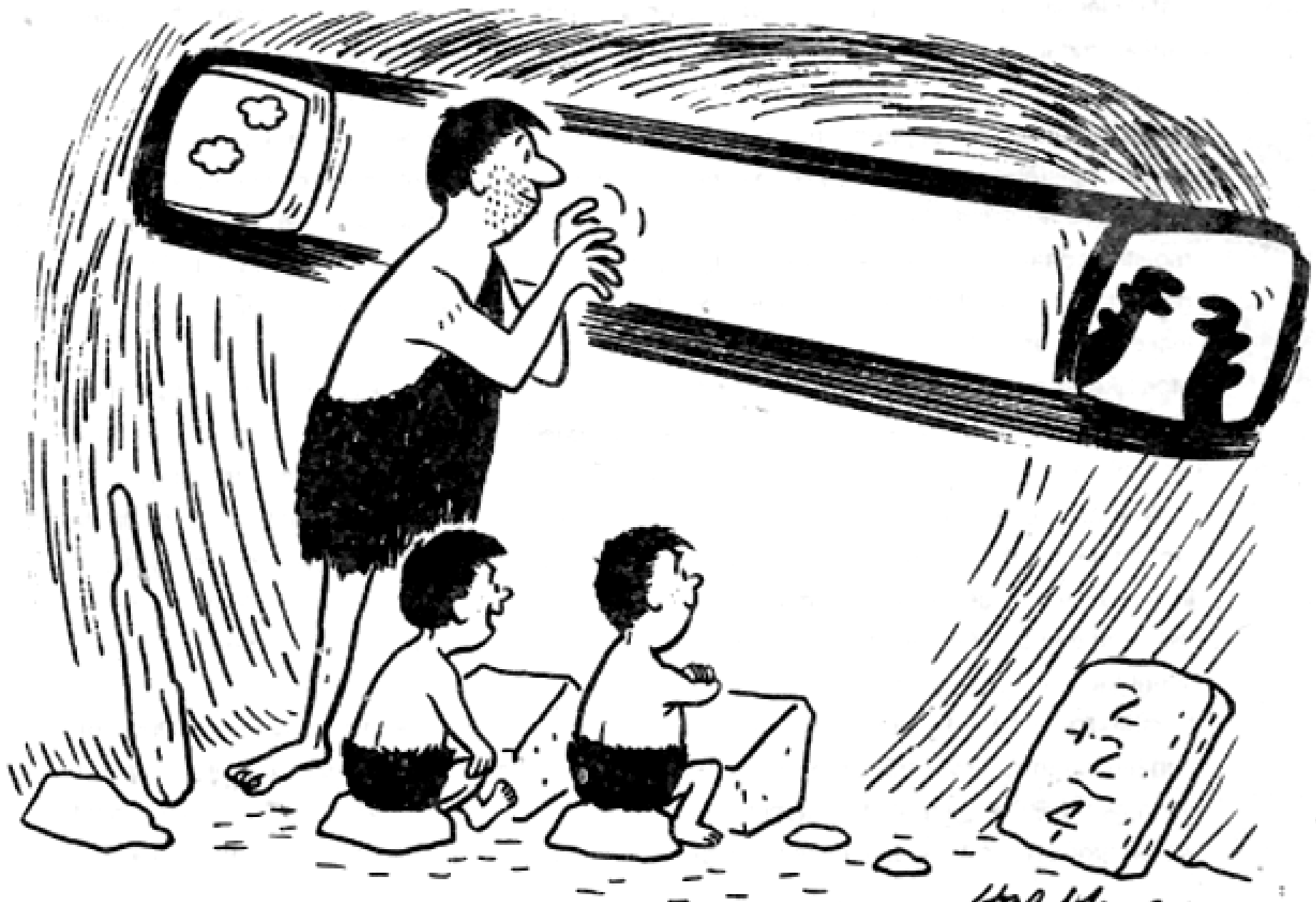
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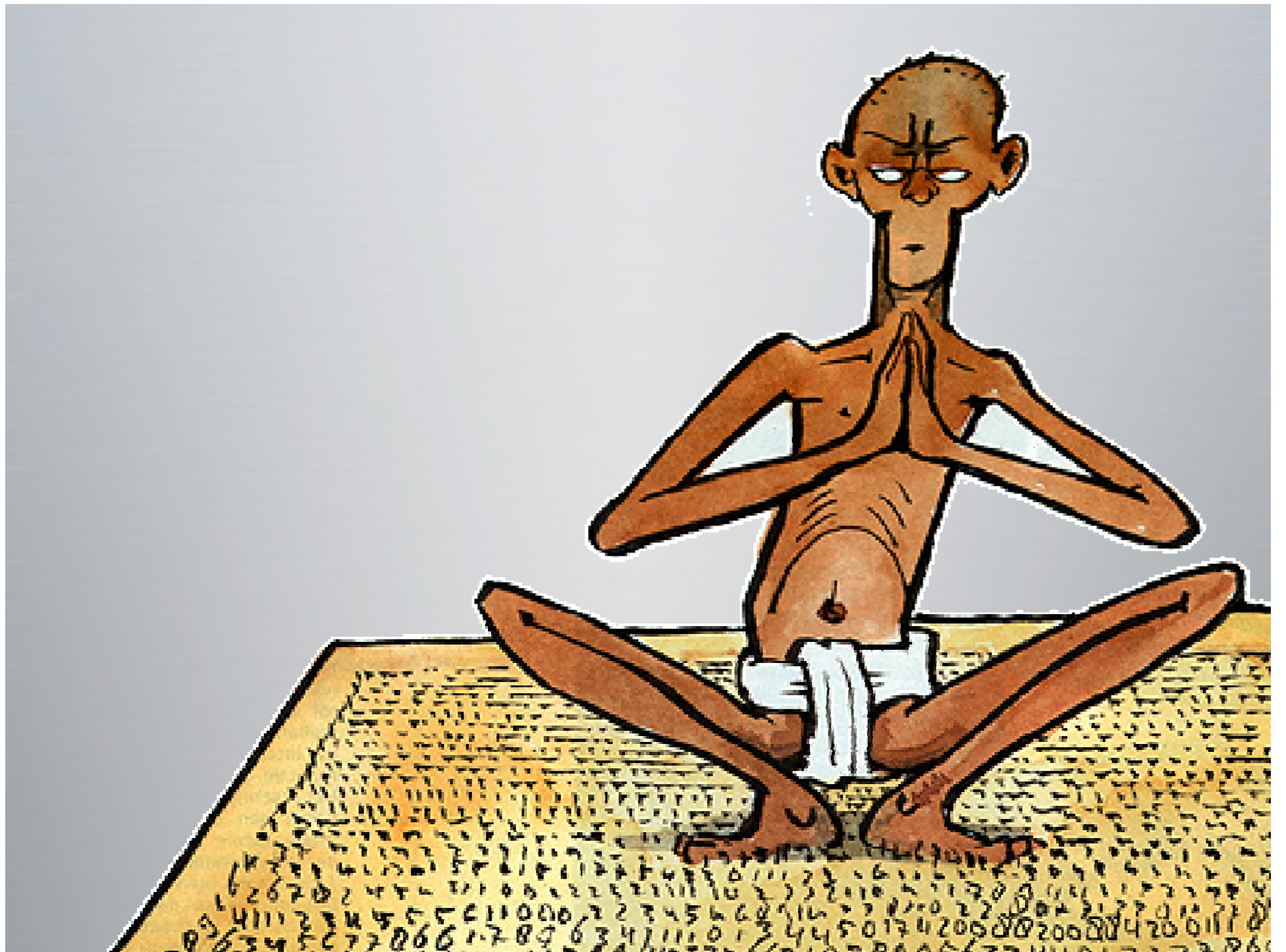
Trends in Educational Technology





Bill Moneys

PhD Research should bring
New Evidences





Cognitive Style, STM and Diff. Treatment

Serialist



Holist



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Trends in Educational Technology

Traditionally Conferences and Journals

ISI

Scopus

Harzing Score

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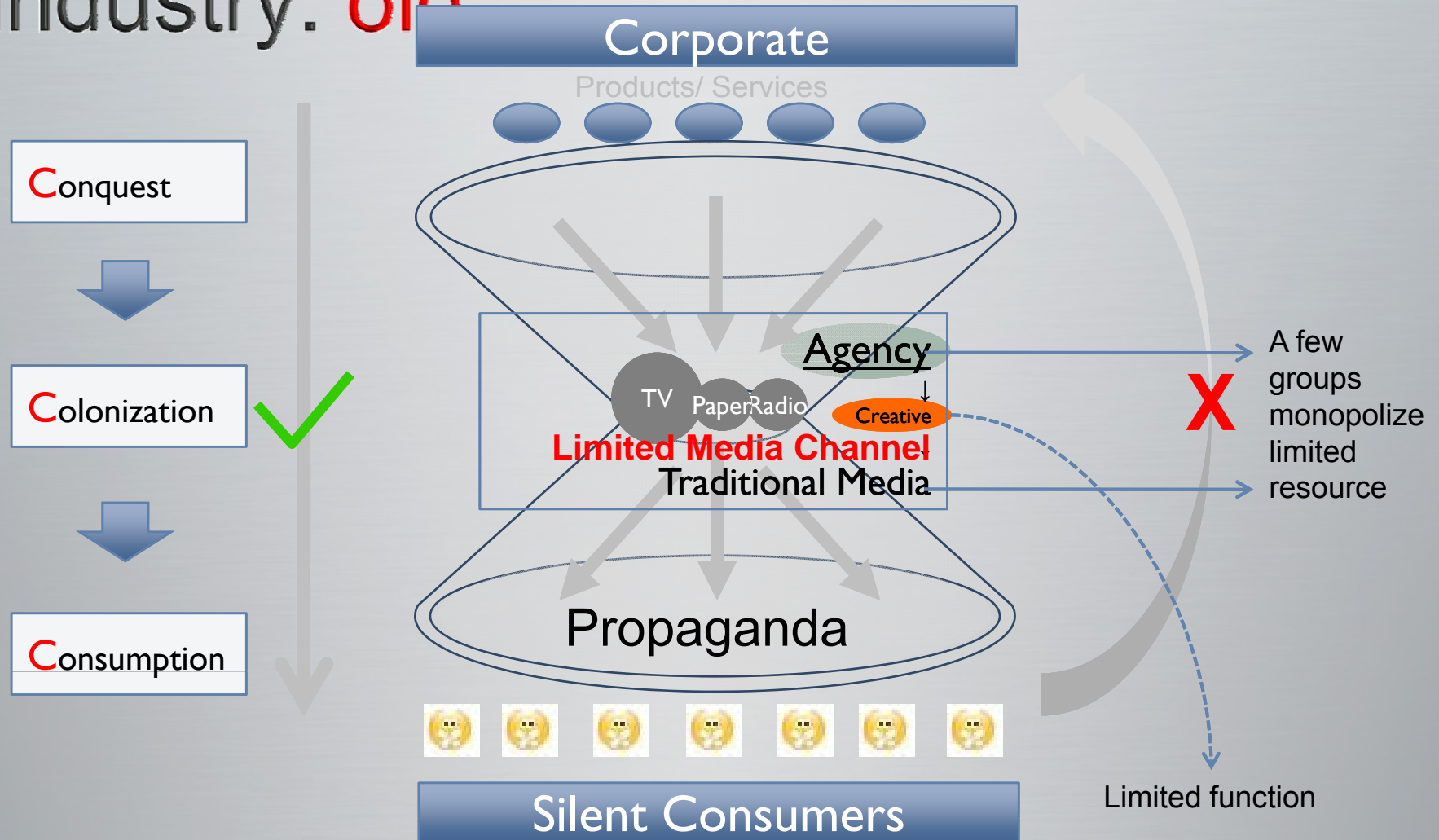
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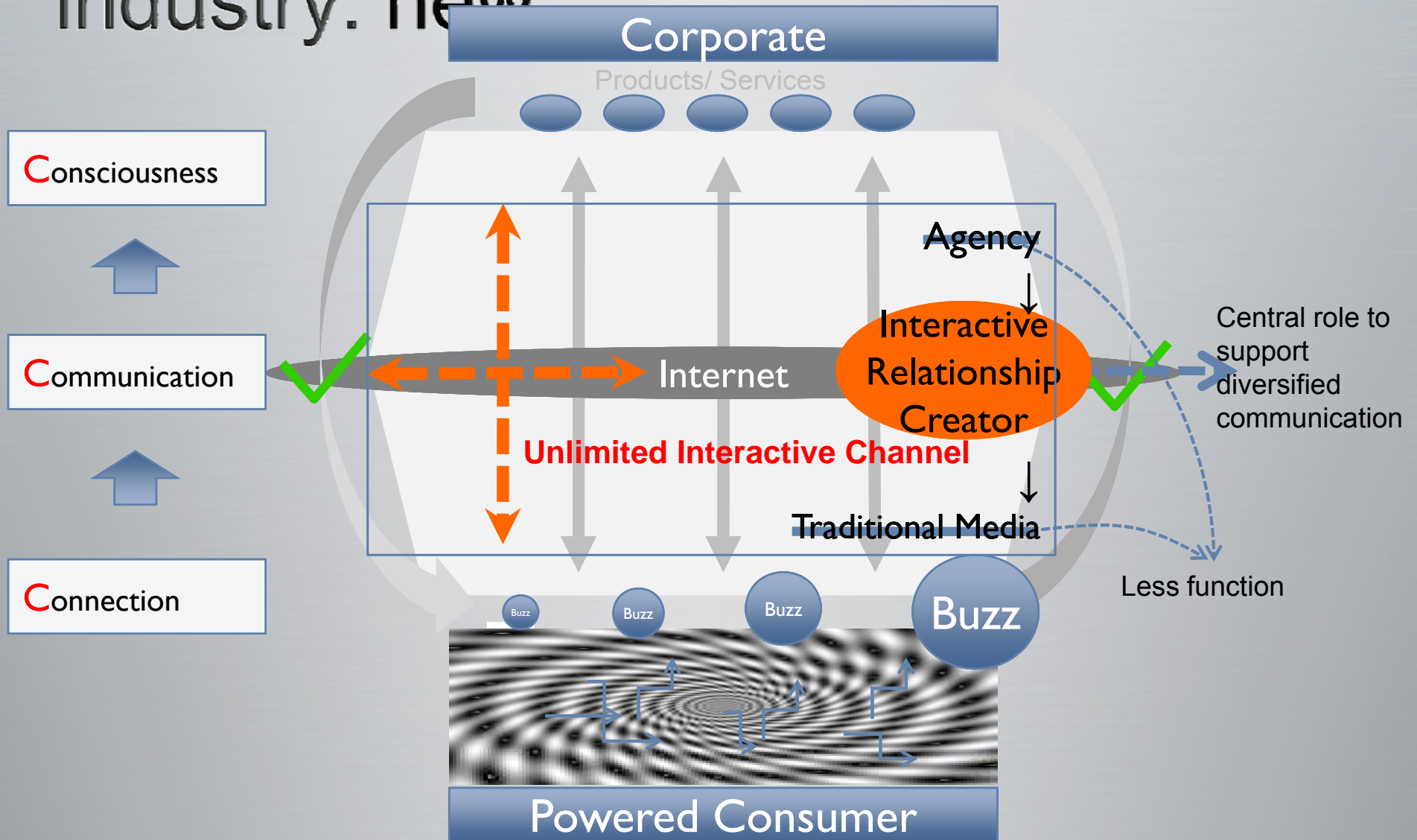


Market Change in AD

industry: **old**



Market Change in AD industry: new



Gangster

laggard

pioneer

lurker

pirate

dushi

nerd

1% Heavy Contributors

9%
Intermittent
Contributors

90%
Lurkers

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Das ist ein Bild von der Geschichte
von dem Mann und der Frau
die in dem Wald lebten.

The more you give,
the more you get

Finding:

**Web-based Communities
Good Sparring Partners
Generating Challenging
Hypotheses**

Education and Technology

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Trends in Educational Technology

Theoretical and Pragmatic Relevance

10 beliefs about learning

- Students learn best when seated upright at a table or desk
- Students learn best in well illuminated areas and damage their eyes when they read and work in low light
- Students learn more and perform better in an absolutely quiet environment
- Eating should not be permitted in classrooms

10 beliefs about learning

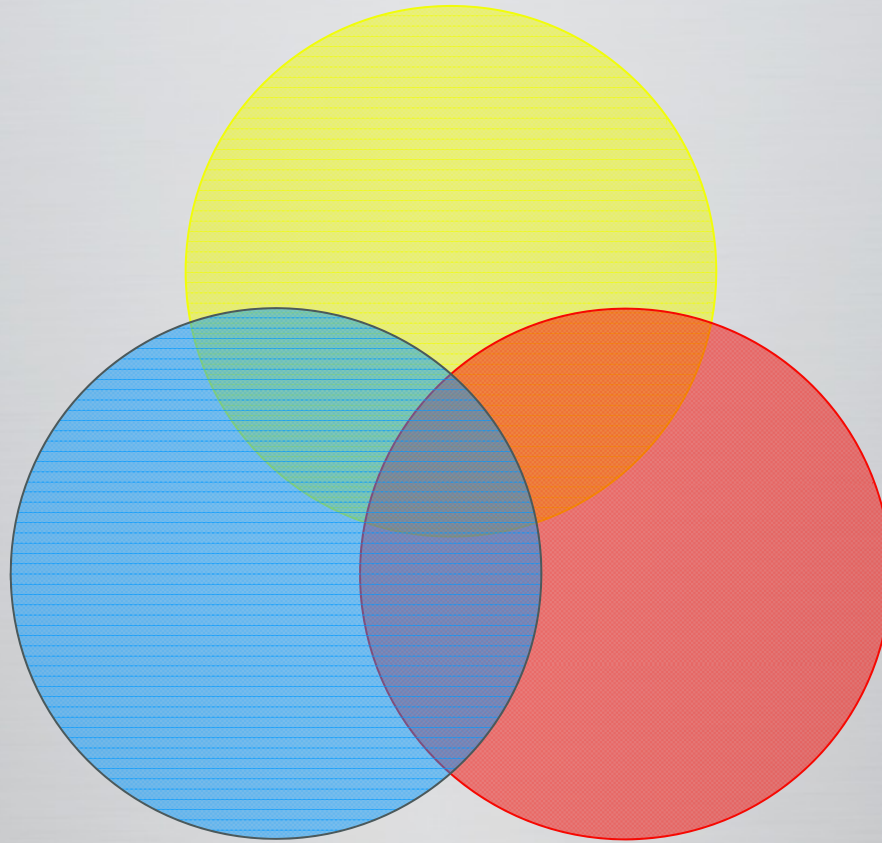
- Effective teaching requires clearly stated objectives followed by detailed step-by-step sequential explanations until students understand what is being taught
- Truancy is related to poor attitudes, home problems, lack of motivation, and other factors which have nothing to do with students' preferred learning time

10 beliefs about learning

- Students learn difficult subjects best in the early morning when they are most alert
- Generally the older the students, the easier it is for them to adapt to the teachers' style
- Students who do not sit still are not ready to learn
- Whole group instruction is the best way to teach



Learning



Playing

Working

Education and Technology

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How to Measure the Dependent Variable

Trends in Educational Technology

How to measure the Dependant Variable?

E.g.

The Quality of Learning?

Lecture Hall in 2011



26 september

conference
2002

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Education and Technology

Web-based

Mobile

Ubiquitous

Virtual

Kenneth Dunn

If students don't learn the way we teach them, let's teach them the way they learn.

Research Lines

Adapt

Differentiate

Model the Learner

Overcome Explicit Instruction

Designing

Learning

Active

Manipulative/
Observant

Intentional

Reflective/
Regulatory

Constructive

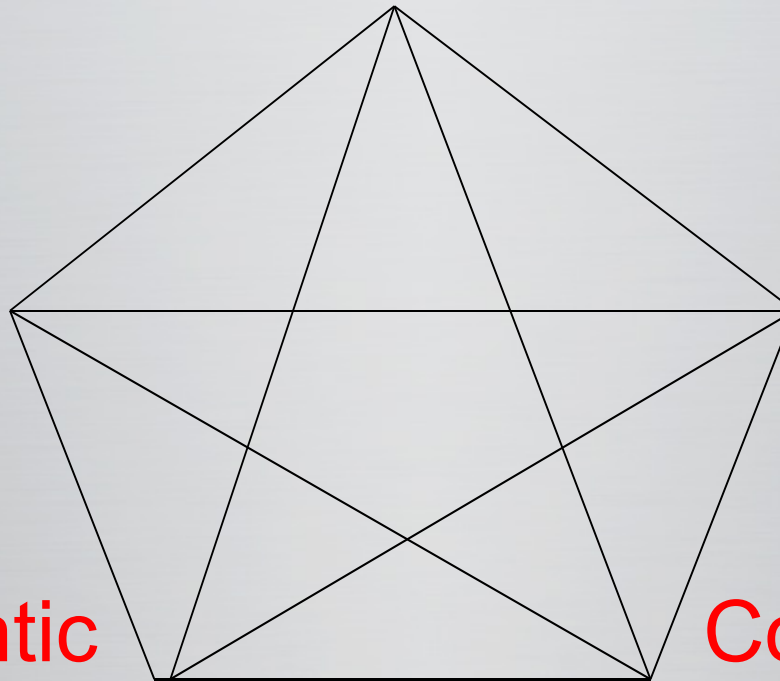
Articulate/
Reflective

Authentic

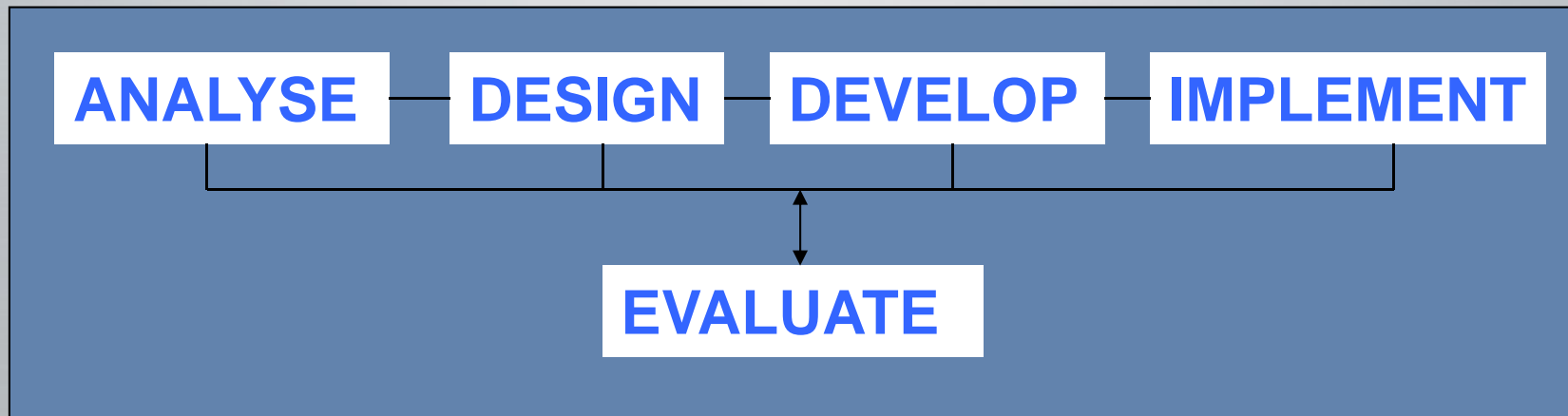
Complex/
Contextualized

Cooperative

Collaborative/
Conversational



Traditional Model of Design



General Design Phases

Pragmatic Design Stages

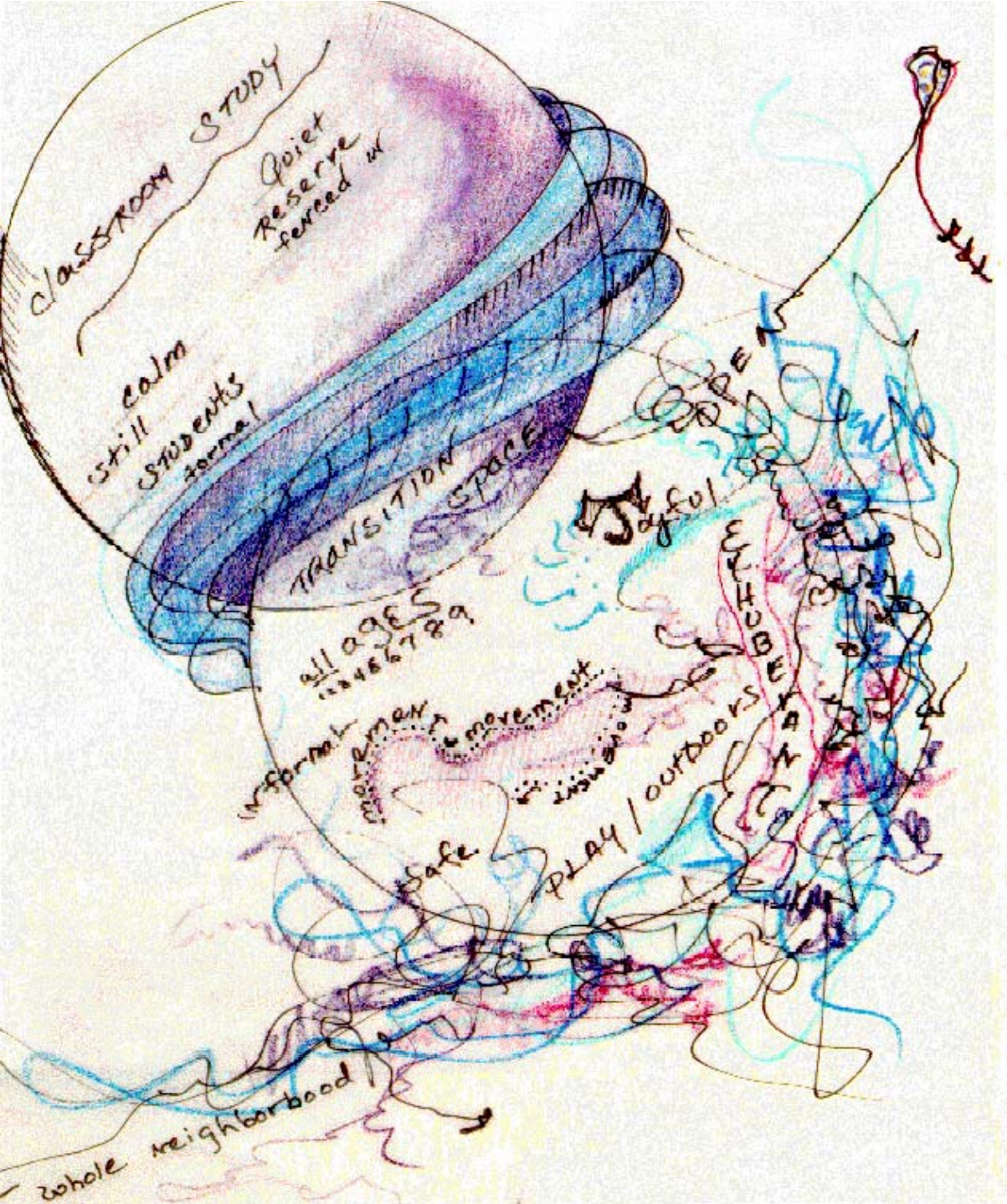
Conceptual

Metaphoric

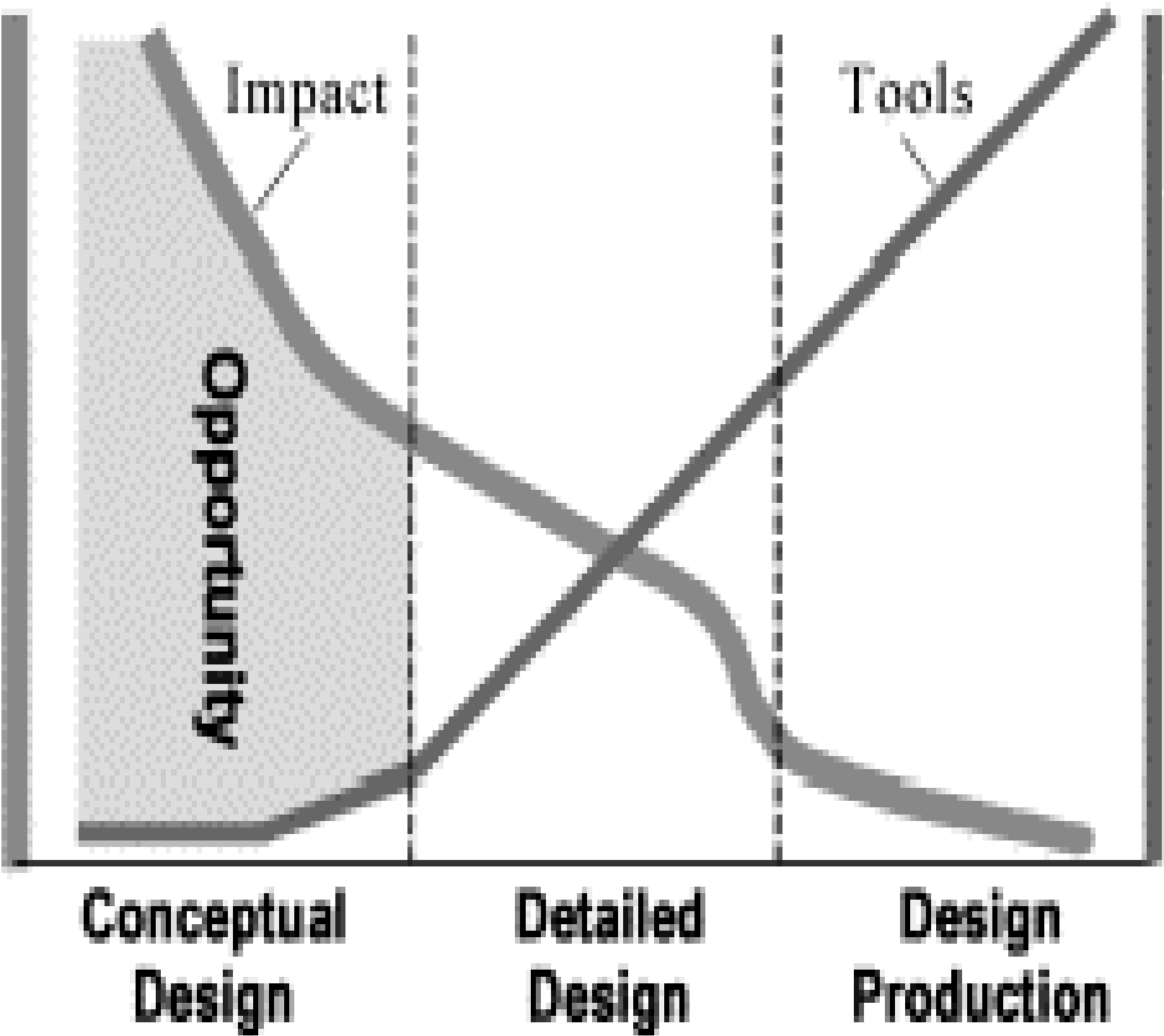
Structural

Navigational

Conceptual Stages in Design



Impact of decisions

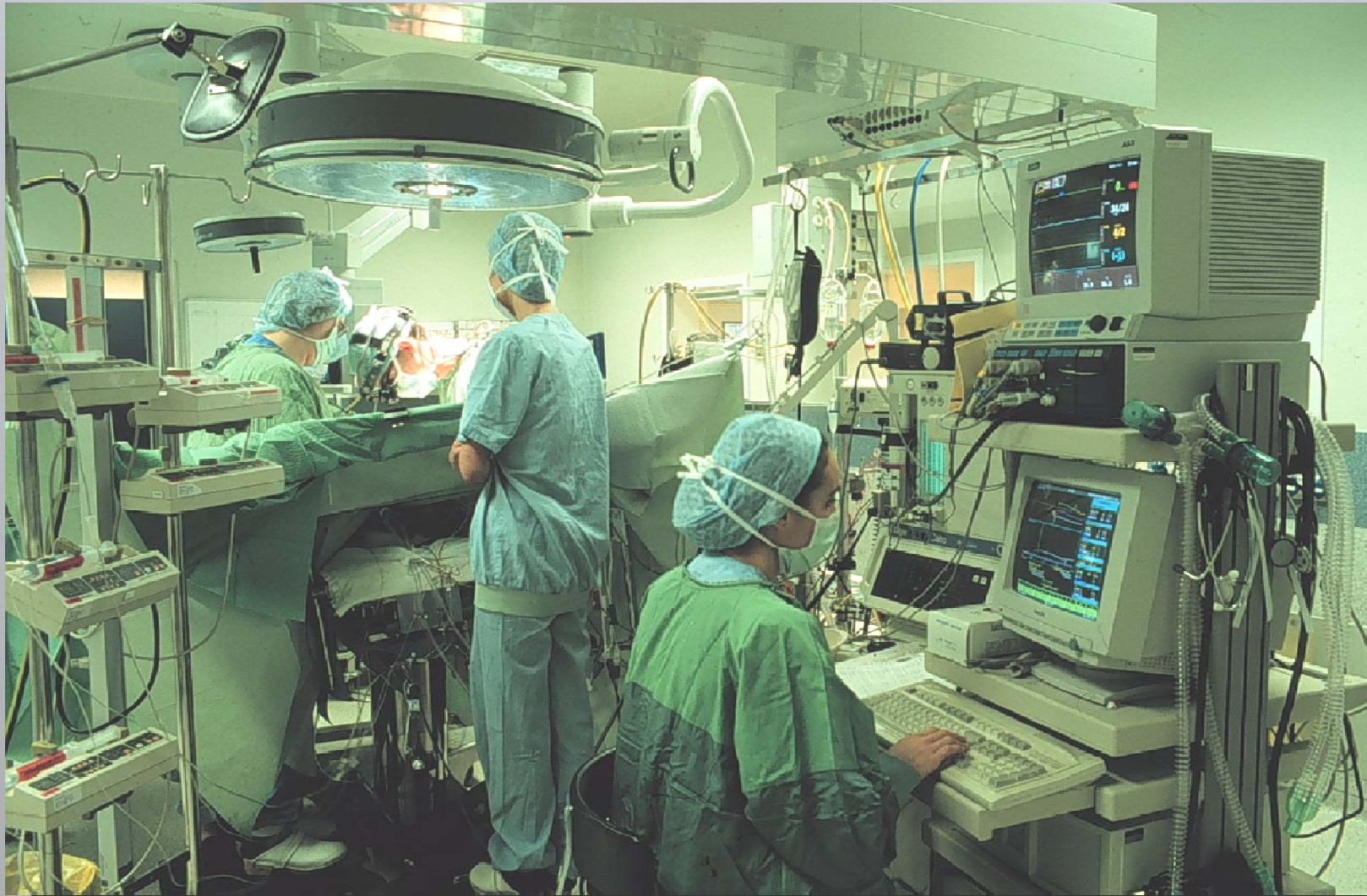


Availability of tools

The Four Pillars of the Global Classroom

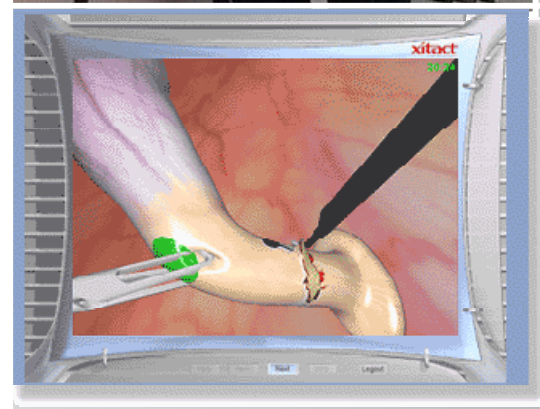
- Education for Survival
- Understanding our place in the world
- Understanding community
- Understanding our personal responsibility

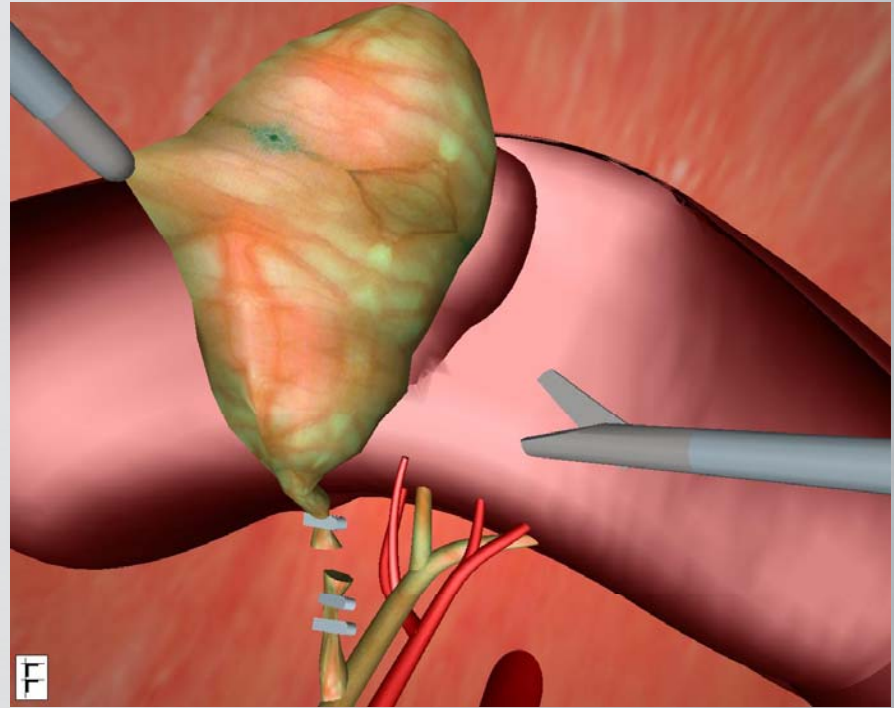
Operation in 2002

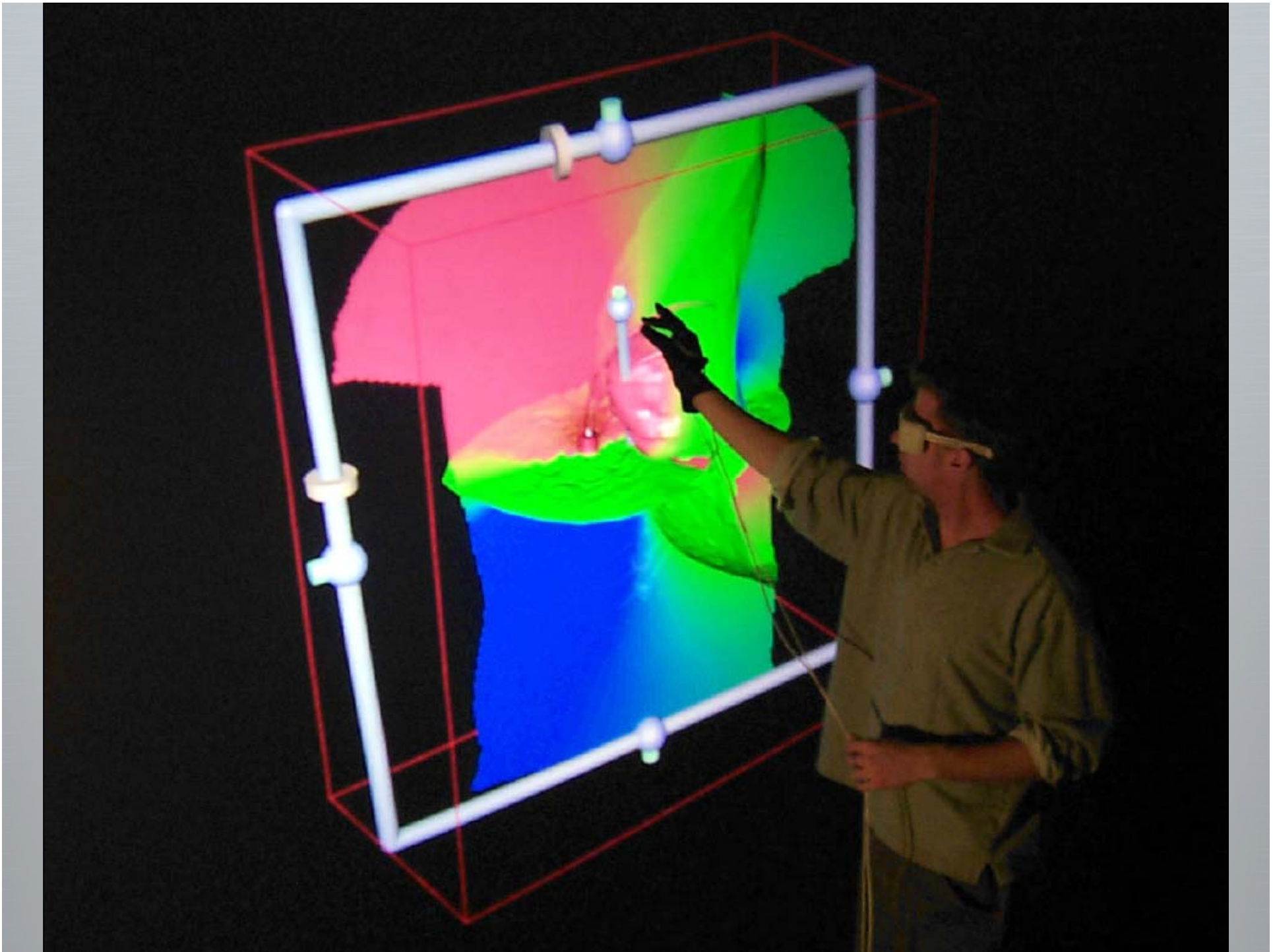


26 september

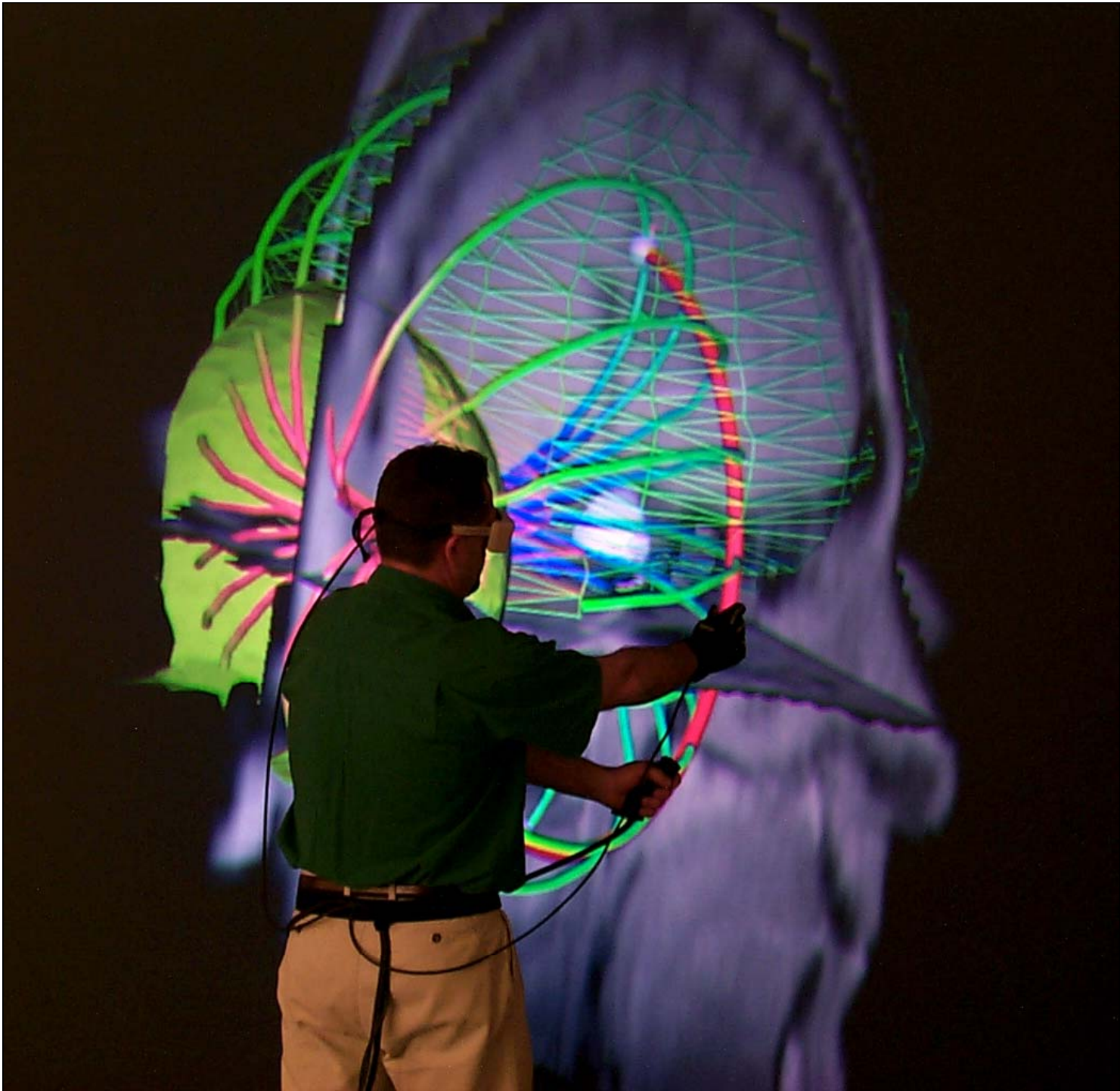
conference
2002











Van fysieke- naar conceptuele navigatie





