

SESSION 6  
CONSUMER ORIENTED APPLICATIONS

Main issues: TV and Broadband Internet: Convergence and New Applications / Consumers Facing the Complexity of Technologies, Standards and Prices / Home and Ambient Computing (including Entertainment, Games, e-Health, e-Work, e-Citizens, e-Commerce,...) / Public/Private Models for Cooperation

## Digital communication the long way toward a proper “format”

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## Communication

**Digital communication is the most recent ring of a long chain ...**  
 ....probably started with non verbal communication and gesture, languages, signs and writing, print, broadcasting and ...  
 ...many other media and formats .....

Recently we faced some new technologies ...  
 ...enabling new media and formats ...  
 ....or bringing to new life “lost” formats.

## Signs, ideograms, symbols ... Icons

Signs, icons, metaphors → meaning

**Signifiant / signifié (code)**  
(Ferdinand de Saussure)

## Alphabet, Grammar, Format

- Literature
- Painting
- Sculpture
- Music
- Movies
- Television
- Poetry
- Photography
- Theatre
- ...multimedia ...

## Printing process

1350 - 1450

Starting from ideograms, able to express a meaning by themselves to phonetic writing compressing in linear one-dimensional format the way to communicate.

From manuscripts to books.

Printing process enabled the dissemination of pure text arranged in lines and pages

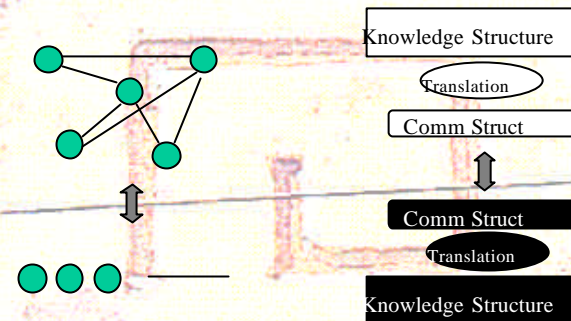
.....

We lost some formats  
graphs & texts



## Linear format

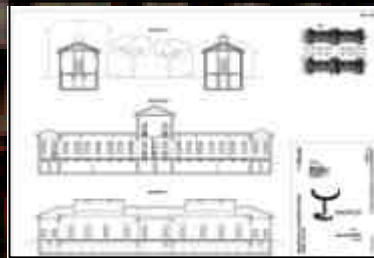
Linear format – serial, sequential, from beginning to end ...



## Non Linear

Graphs, Technical drawings,  
Sketches, Charts, etc....

Non linear, there is no  
beginning, end, versus, ....



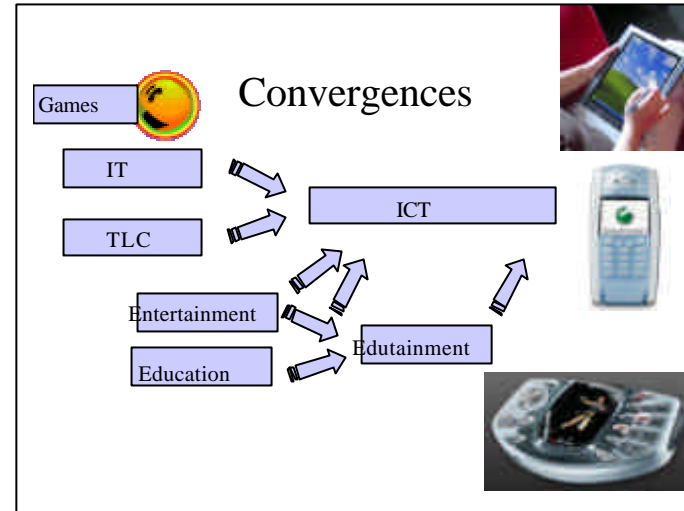
## The role of new technologies

- Some technologies are (re) enabling (new) communication formats
- Digital objects (new class of objects - ontology)
- Multimedia
- Internet
- Virtual & enhanced reality
- ...



## Different models


- Asyncro / Syncro
- Mono / Bi directional
- One to one / One to Many / Many to Many
- Location dependent / independent
- Immersive / non immersive
- Interactive / non interactive
- With log / without log
- Wired / wireless
- .....



## Content

- Content is still a challenge. We need to reach a critical mass of cultural content.
- We are currently in a digital “dark age” with respect to lack of content.
- Without a critical mass of information, technological capacity is a hollow structure, like a library without books, or a highway without cars.

- Video games represents an interesting case study



## Format

Availability of high quality content through digital “channels” is still a challenge even because of a lack of appropriate format.

We are biased by linear / textual format

Following the evolution of communication from oral tradition, manuscripts up to printed books and later on movies, radio and television broadcasting every time a specific format was adopted or re-adopted; in the era of multi-media we did not found a proper format for multiple media channels, we are still “porting” books on line.

## Conclusions

Looking to some technologies we are still facing a “library without books”, ICT companies are still looking for the so called “killer applications”, on the opposite side there are some applications and technologies that let the user foresee some useful services (or support creativity) but are not yet well focussed or developed at the moment.

Please refer to my paper for further details

Acknowledgments: Francesco Antinucci

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