European HCI Theory
uniquely disparate perspective

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lots of theory (& methods) in europe

Why?

- can’t afford to build anything
- weight of history
  deep intellectual roots ...
  or historical shackles?

Aristotle
Voltaire
Russell
Heidegger
different from ... where?

• Asia, Africa, South America, Antarctica, North America, ...
  ... or USA :-)  

• not just distance
• not just reactions to imperial ACM!
• deep intellectual gulfs
close yet far

- differences within Europe
  - intellectual style
  - academic structures: hierarchical v.s. flat
  - stability
  - disciplinary boundaries

EU  funding
Close yet far

- differences within Europe
  - intellectual style
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what theory?

- lots of soft stuff
  - participatory design
  - activity theory

- lots of hard stuff
  - ‘methodology’
  - formal methods
formal methods in HCI

• why?
  - formal traditions of southern europe, engineering credibility, last decade’s fashion, solid foundations?

• lots around ... see DSVIS especially

• the “York School”
  - 1984 Alvey project, EU Amodeus
  - my first book!, lots more ...

• and now ...
  - ubiquity, time, location, ...

P.S. tutorial @ AVI in Gallipoli!
need for theory

- Rise of postmodernism
- Anti-intellectualism
- ....
changing expertise

in the past ...

psychologists
computer scientists
etc.

who do HCI

now ...

HCl people

who use psychology
computing etc.
the danger

- loss of roots
- intellectual decoupage
- professional practice passed off as academic
importance of HCI

• late 20th and 21st century
  ... technology meets people

• so where is our own theory and methods?

• some ... MHP, Norman, Inf. Foraging Theory ...
  ... but enough?

• do we need it anyway?
a little story ...

- BIG ACM sponsored conference
- ‘good’ empirical paper
- looking at collaborative support for a task X
- three pieces of software:
  - A - domain specific software, synchronous
  - B - generic software, synchronous
  - C - generic software, asynchronous
experiment

- reasonable nos. subjects in each condition
- quality measures

- significant results $p<0.05$
  - domain spec. > generic
  - asynchronous > synchronous

- so really want asynchronous domain specific
what's wrong with that?

interaction effects
   - gap is interesting to study
   - not necessarily good to implement

more important ...
   if you blinked at the wrong moment ...

NOT independent variables
   - three different pieces of software
   - like experiment on 3 people!
   - say system B was just bad
can we fix it?

- borrowed psych method
  - ... but method embodies assumptions
  - single simple cause, controlled environment
- HCI needs ecologically valid exp.
  - multiple causes, open situations
- what to do?
  - understand assumptions and modify
- both and ...
  - quantitative - what is true end to end - phenomena
  - qualitative and anecdotal - why - mechanism
So ...

- HCI needs theoretical and methodological foundations
- European HCI community ...  
  ... in unique position to develop it