Cyber-economies and the Real World

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vfridge and aQtive

http://www.hcibook.com/alan/papers/SAICSIT2001/

close encounters

Three real and virtual people who have shaped my vision of:

- what will be
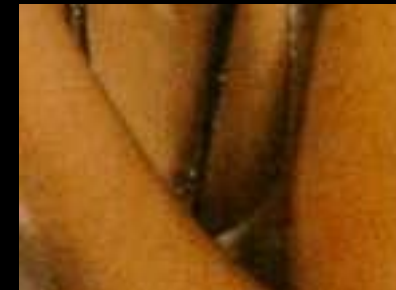- what may be
- what might be if we make it so.

close encounters

a 16th-century
Venetian Monk

Mrs Goggins
at the electronic
village shop

a Birmingham
prostitute

close encounters 1

a 16th Century Venetian Monk

one man's journey

- "A Mapmaker's Dream" (James Cowen, 1996)
  - Fra Mauro, 16th-century Venitian monk
  - cartographer
  - explorer within an island monastery
- the world
  - not just rivers and mountains
  - ideas, imagination, culture

four ages

four ages of information

- Age of Proximity – 40,000-60,000 years
  - control and information by physical contact

four ages of information

- Age of Proximity
- Age of Bureaucracy – 4000-6000 years
  - long-distance remote contact
  - physical messages
  - early cyberspace

four ages of information

- Age of Proximity
- Age of Bureaucracy
- Age of Money – 400-600 years
  - freemarket economies:
  - exchange of value
  - exchange of information

four ages of information

- Age of Proximity
- Age of Bureaucracy
- Age of Money
- Age of Information – 40-60 years
  - electronic messages
  - information objects
  - challenges power structures
  - remolds economics

the 4th age

human-computer interface changes and trends

increasing multiplicity

- 1980s - personal computers
  - one man and his machine
  - and they were men!

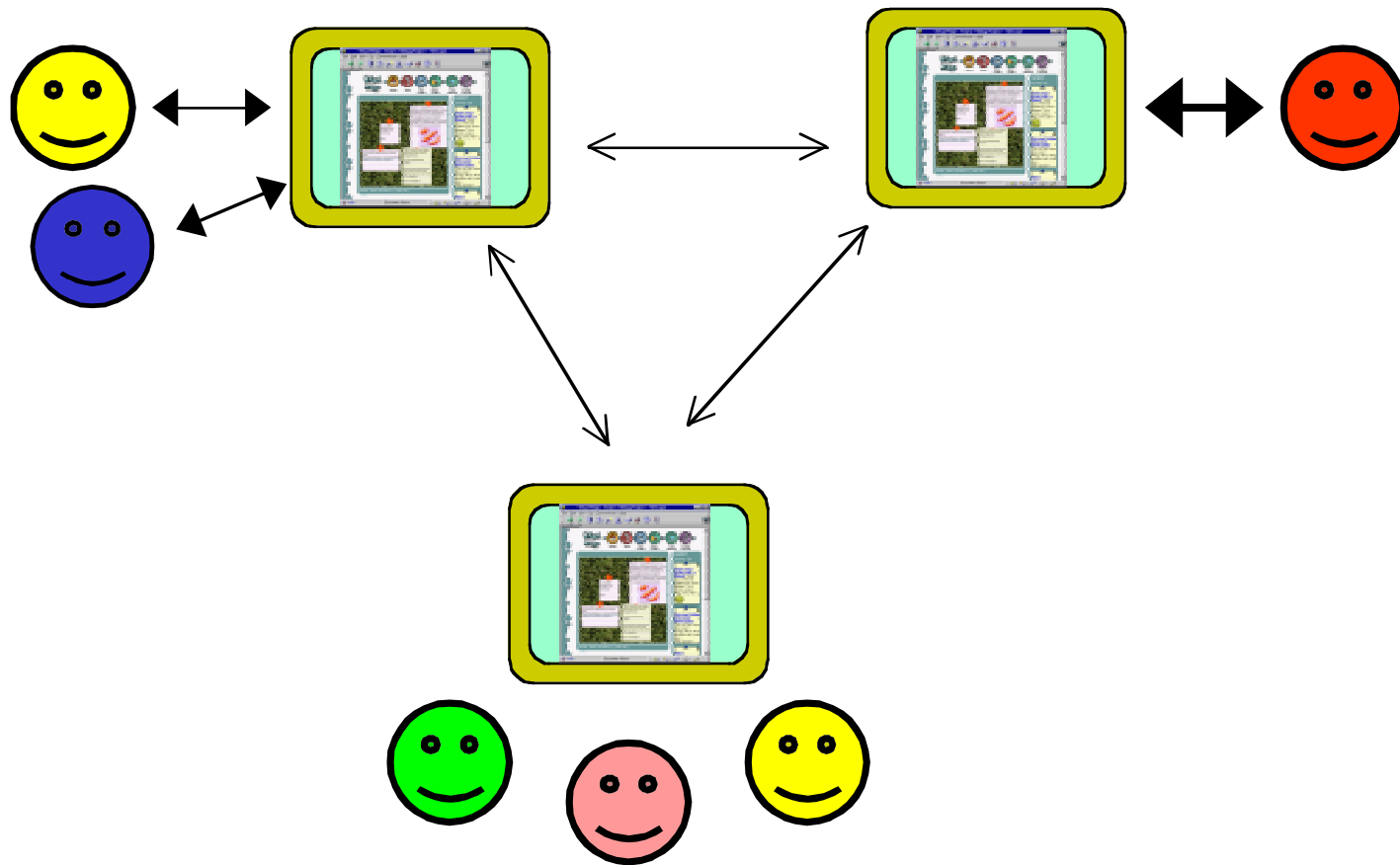# increasing multiplicity

- 1980s - personal computers
- late 1980's & 1990s - CSCW
  - lots of people
  - geographically remote
  - but ...
  - one person per machine

increasing multiplicity

- 1980s - personal computers
- late 1980's & 1990s - CSCW
- family use ... ?

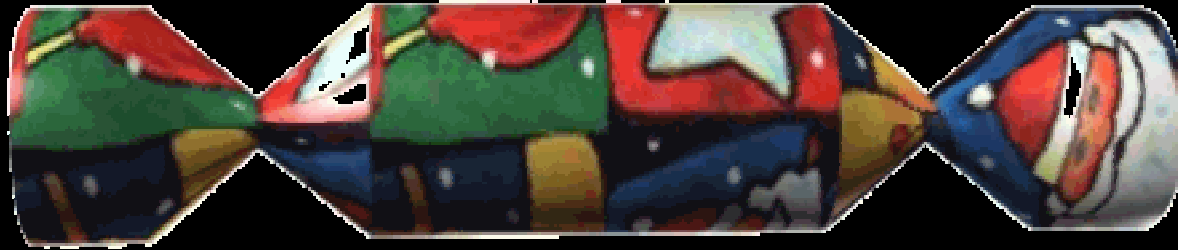# families and friends
lots of people, together and remote
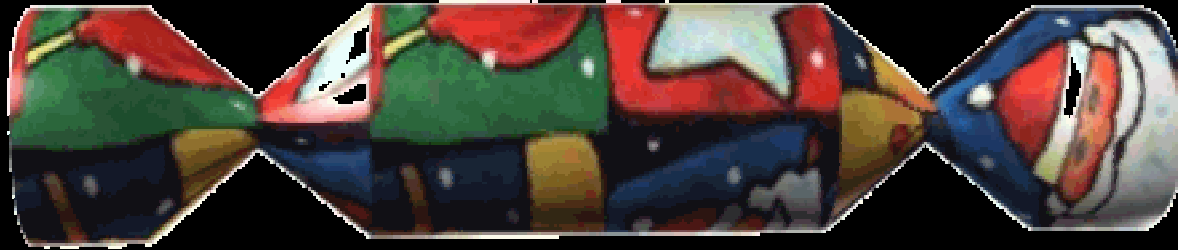
work and fun

- traditional HCI methods
  - tasks, goals, work, work, work
  - and the odd game
- now
  - e-shopping
  - communities
  - experience

virtual crackers

- real crackers
  - cheap and cheerful!
  - bad joke, plastic toy, paper hat
  - pull and bang

virtual crackers

- virtual crackers
  - cheap and cheerful
  - bad joke, web toy, cut-out mask
  - click and bang

virtual crackers

- virtual crackers
  - cheap and cheerful
  - bad joke, web toy, cut-out mask
  - click and bang

close encounters 2
Mrs Goggins

understanding the e-Market

understanding the e-Market

- ## market ecology
  - interconnections and dynamics

- ## market engineering
  - making the market

- ## market evolution
  - what may happen

market **e**cology

traditional mark**e**t

- isolated market groups

    identify market group

    identify need

    identify channels

- product

    (possibly) redesign for need

Intern**e**t market

- interconnected
    web pages, email, news groups, ICQ

- space on a web page in China
    customers in Brazil

- the **e**Butterfly effect

market **e**ngineering

- understand the market
    groups and interconn**e**ctions
    model and parameters

- design products to
    exploit the dynamics of the market
    chang**e** the dynamics of the market

the market
is the m*e*dium

vfridge and crack**e**rs

market **e**volution

eShopping

or

eBuying

everyone's talking about

dis-intermediation

look out for

re-intermediation

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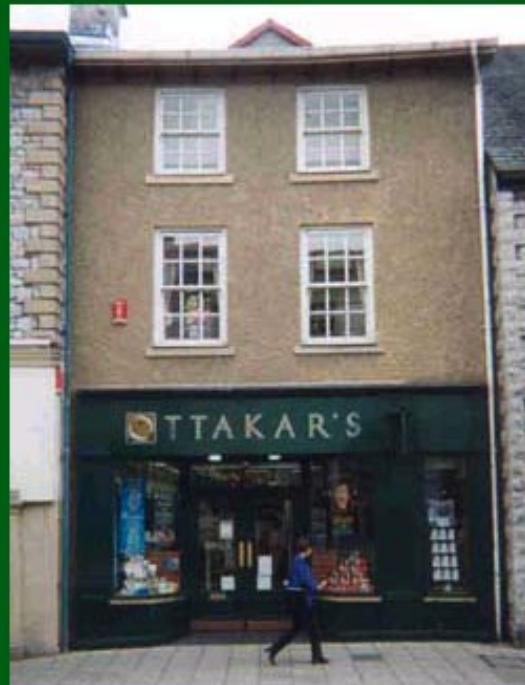Bestsellers
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Literary Birthdays
1/3: J.R.R. Tolkien (top). 1/6: Carl Sandburg. 1/7: Zora Neale Hurston (bottom). 1/10: Robinson Jeffers.

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a dream

the electronic villag**e** shop

- short in-store stocks
- large available range
- just-in-time ordering
- delivery point
- personal service

Mrs Goggins becomes an information scientist

buying shoes of different sizes

business organisation

ordering, distribution, information

reforming for the Internet

⇘ transformation of the high street

diversity density

kitchen
    cupboard

high diversity
    density

diversity density

supermarket
  shelf

lower diversity
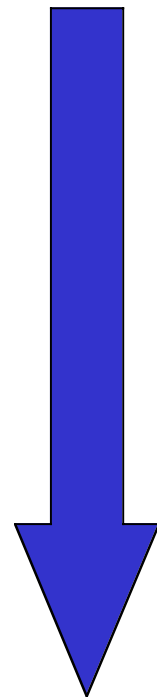 density

traditional markets
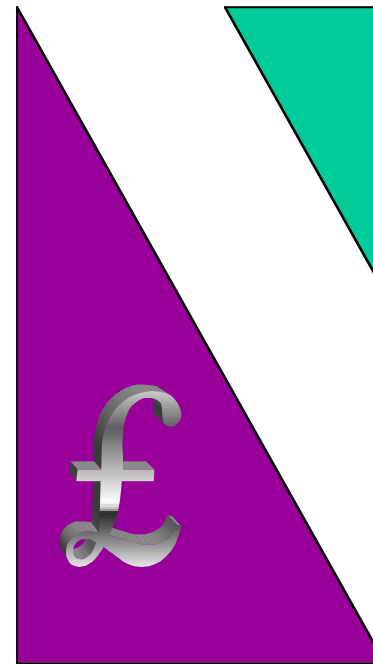
producer

    factory

    warehouse

    lorry

    supermarket
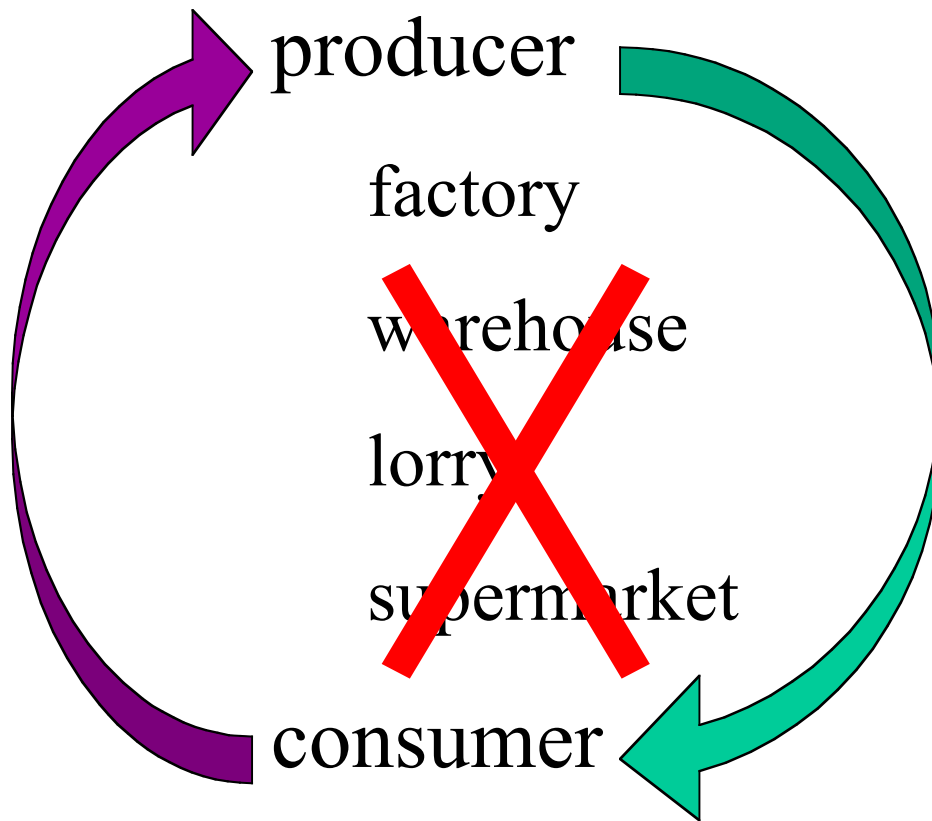
consumer

diversity
density

information   volume

internet market

producer

factory

warehouse

lorry

supermarket

consumer

@

information   volume

close encounters 3

a Birmingham prostitute

- little things do matter
- but ...
  - one woman ... one night ... one trick

- what else is there to offer?
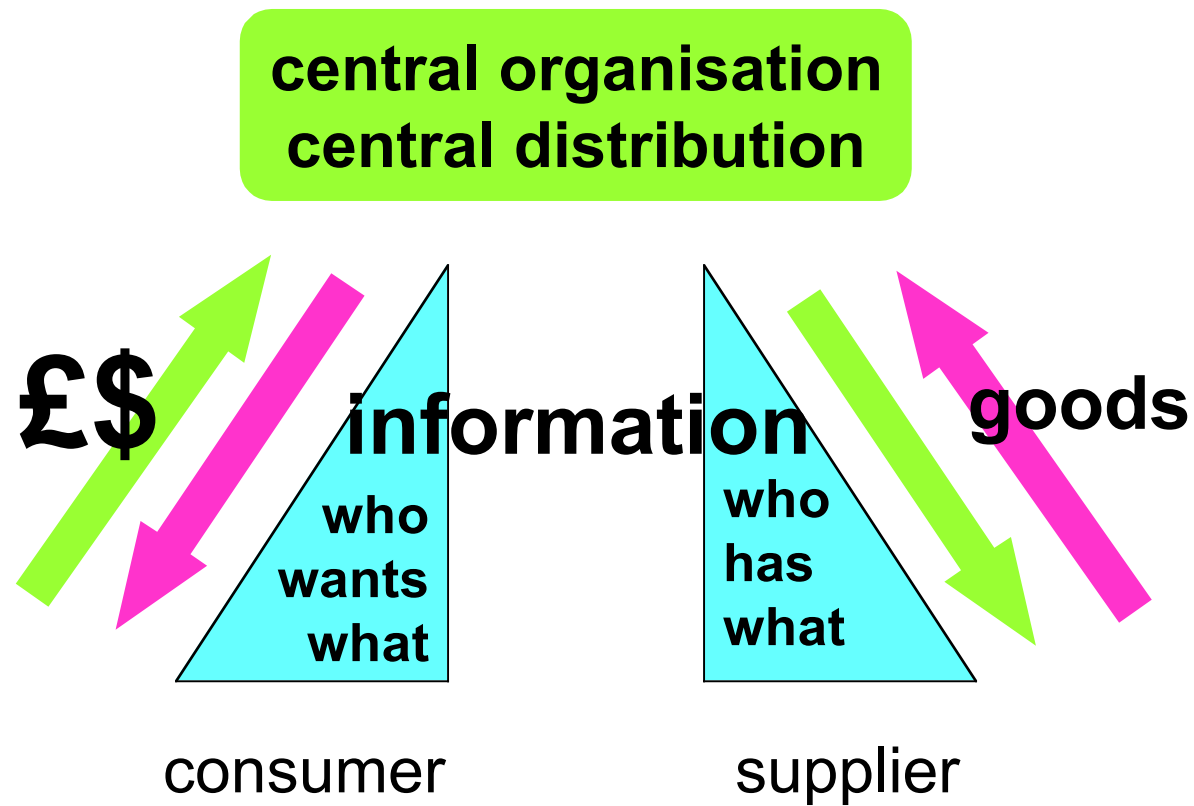
unskilled/semi-skilled work?

- jobs for the boys
  - UK manufacturing - decline 70s and 80s
- jobs for the girls
  - UK texitiles - ditto
  - clerical?
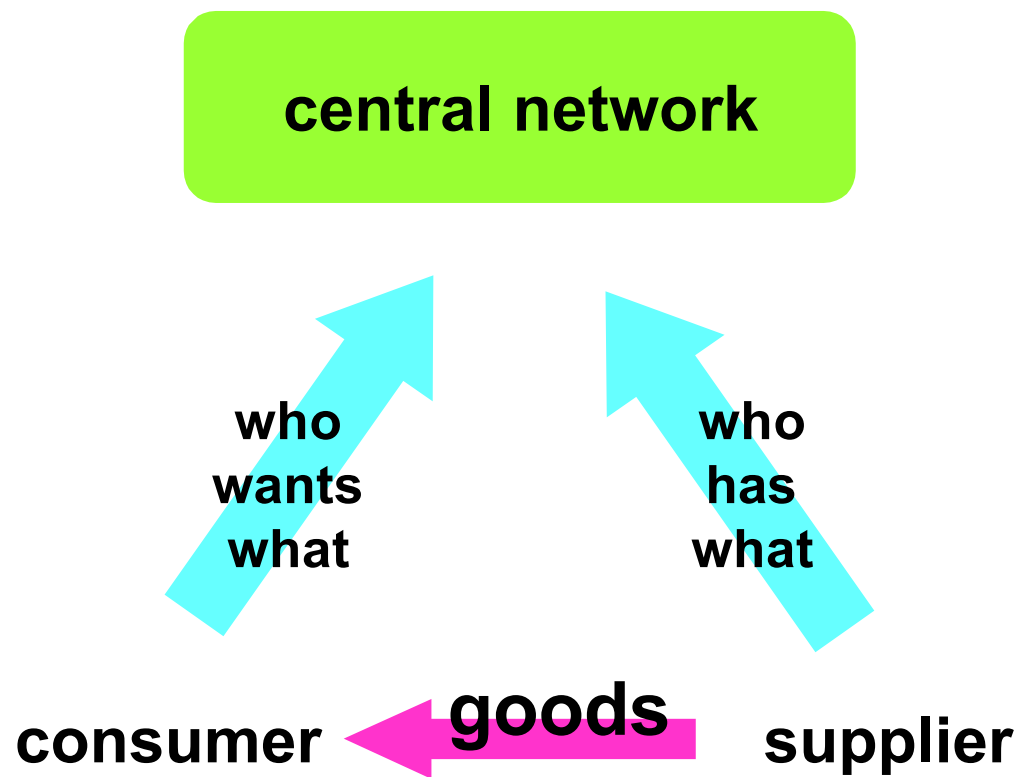   - IT replaces
    - Internet exports

but ...
real economy revolution

- mass market customisation
  - today - cars to order
  - tomorrow - next day fitted clothes
- just-in-time manufacture
  - components imported
  - final assembly locally

diversity density on the supply side

central organisation central distribution

£$ information goods

who wants what

who has what

consumer supplier

recentralisation

central network

who
wants
what

who
has
what

consumer ← **goods** supplier

cyber-economies

- ✦ interconnected groups
- ✦ market ecology
- ✦ designing experience

the real world

- ✦ money is information
- ✦ diversity density
- ✦ real shops, real jobs, real lives

visions

- what will be
- what may be
- what might be if we make it so.