

Richard Harper

Driving to Trafficking

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What's the problem?

Doing science?

Doing sociology?

Human factors?

HCI?

It's inventing the future –
or at least shaping it

How does one start?

With evidence?

With data?

With user studies?

With technical innovation?

You need ways of looking;
you need tools that let you see
the world in different ways....

You need tools that let you
invent by letting you see
new possibilities.....

Metaphors

Similes

Synonyms

Contrasts

Imaginings

(and you use all kinds of evidence to enable
this)

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It's about language (of course)

It's about understanding (of course)

It's about evidence too (of course)

It's not about the use of a

specific tool or set of tools:

in my trade with have tool boxes
(and we make tools as we
go along too!)

My example.....

From machine-like behaviours
to gatherers and users of stuff

From drivers of cars to carriers of bags
from steering wheels to mobiles

From users to givers

From driving to trafficking

Let me start when
designing the future was different...

My Father-in-Law's science.....



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Driving

When inventing the future,
it makes sense to understand
ourselves as machines

Sometimes we endeavour to
be machine-like

How is this science applied?
(so as to shape the future)

The Post Hoc Confirmation



Artificial horizon, altimeter, airspeed, compass

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Traffic and road signage?



No

Mouchel TSC ACCIDENT INVESTIGATION SHEET ANALYSIS by TIME FILE REF: CONS/245/144/0051

HOOR: [Circular clock diagram showing 24 hours]

DAY: [Calendar grid showing days of the week]

MONTH: [Calendar grid showing months]

Set Name: NON-TO

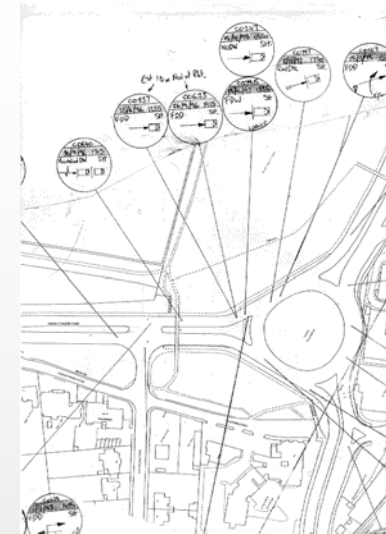
Accident Period: (1/1/06 to 1/1/06)

Selective Criteria: ROAD: NON, CRUISE: X,
SCHEDULE: CRUISE, C: SUSTO, WASHING: X,
PHASE: WASHING, C: PHASE

Total: 4 2 6 7 5 6 5 2 5 5 6 2 51

Schema: Non-chargeable road, Richmond Hill, (see Form 15. App. 10. Station 2451000)

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It's through an amalgam of rendering techniques
Techniques that render human action in different ways

Mouchel TSC ACCIDENT INVESTIGATION SHEET ACCIDENT FACT

ACCIDENT No: []

SEVERITY: FATAL, SERIOUS, SLIGHT

DATE: []

TIME: []

WEATHER / ROAD SURFACE: []

LIGHT OR DARK: []

VEHICLES: []

PEDESTRIANS: []

CONFLICT: []

UNJUDGED SPEED/DISTANCE: []

DECEASED SUBSTANCE: []

TIPPING OVER WITHOUT CARE: []

GOING TOO FAST (NOT EXCEEDING SPEED LIMIT): []

SWIFTLY ROAD (WEATHER): []

CHANGING THE VEHICLE: []

PERMISSIVE TOO SLOW: []

VIOLATING SIGNAL / POSITION: []

STOPPING WITHOUT CARE: []

EXCESSIVE SPEED: []

EXCEEDING SPEED LIMIT: []

EMERGING FROM VIEW WITHOUT CARE: []

EXCESSIVE TRAFFIC: []

OTHER FACTORS: []

Set Name: NON-TO

Accident Period: (1/1/06 to 1/1/06)

Schema: Non-chargeable road, Richmond Hill, (see Form 15. App. 10. Station 2451000)

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There is a distance between
the metaphorical rendering of the human
and imaginative solutions

There is a fitting and constructing
of other 'knowledges' and
other viewpoints on the problem

And there is the problem of discovering
the problem- i.e., what one is designing for

Above all, there is the
task of imagining new possibilities

The machine metaphor
can help and hinder

Sometimes the boundary between machine-like and non-machine-like is tricky

Editing- sometimes we try to make some of the things we do machine-like (e.g. Cutting and pasting).

But **why do we edit?**

Is it to make our writing machine-like?

What kind of written argument would be mechanical?

Soldiering

sometimes we fail to
make things machine-like



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What about mobile TV?



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Viewing Machines

Watching TV as if we
were machines.....

It's a matter of image quality
(we're visual processors).....

We are broadcast to
(we're information processors).....



Yet most mobile TV HCI research says otherwise....

Users will watch some things
(whatever the quality)

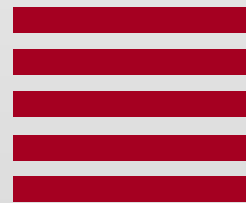
Users like to fill up dead time with TV
(whatever the quality)

And users do other strange things...

So, we joined forces with a content provider

A technology company

To explore shaping the future



T T P

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Is this a technology-lead question?

A user-lead one?

It's not possible to tell.

It doesn't matter.

(It's where you get to that matters).

Interviewed users in Cambridge and London
We were startled by what and why....

Boredom
Fun
Planning
Identity
Being cool

All this can be related to content types,
content interaction and location

An impossible to read taxonomy....

	Impressing others	Trafficking	Exploring identity	Laughing with mates	Shared experiences	Making plans
Refresh cycle	High	High	Low	Low	High	High
Branding	Low	Medium ?	Low	High	High	Medium/High
Length	High	Medium	High	High	High	High
Fast Fwd	Low	Low	?	High	Low	Low
Variable value of content	Low	Low	?	Low	High	?
Mobile specific	Medium	Medium	Low	Low	High	Low
Location specific	Low	Low	Low	Low	Low	High
Access to content	High	High	High	Low	Low	High
Expected continuum in navigation	Medium	?	?	High	?	?
Time of day when content is watched	?	?	?	?	?	?
Context	High	High	High	High	Medium	Low

One interesting practice was users taking bits of multimedia ...

Stuffing it into their phones

Showing and sharing it

And then trading it via Bluetooth

We came to call this **'Trafficking'**

We wondered whether

we could exploit this ‘trafficking’?

Could we invent a new experience?

Could we exploit some convergence technologies?

Some blurring of ‘UGC’ and Broadcast?

Some novel design?

Could we shape a future?

We built Grab and Share



Trafficking segments of TV content

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What was the experience it provided?

Grabbing content in real time

Sharing content with people face to face

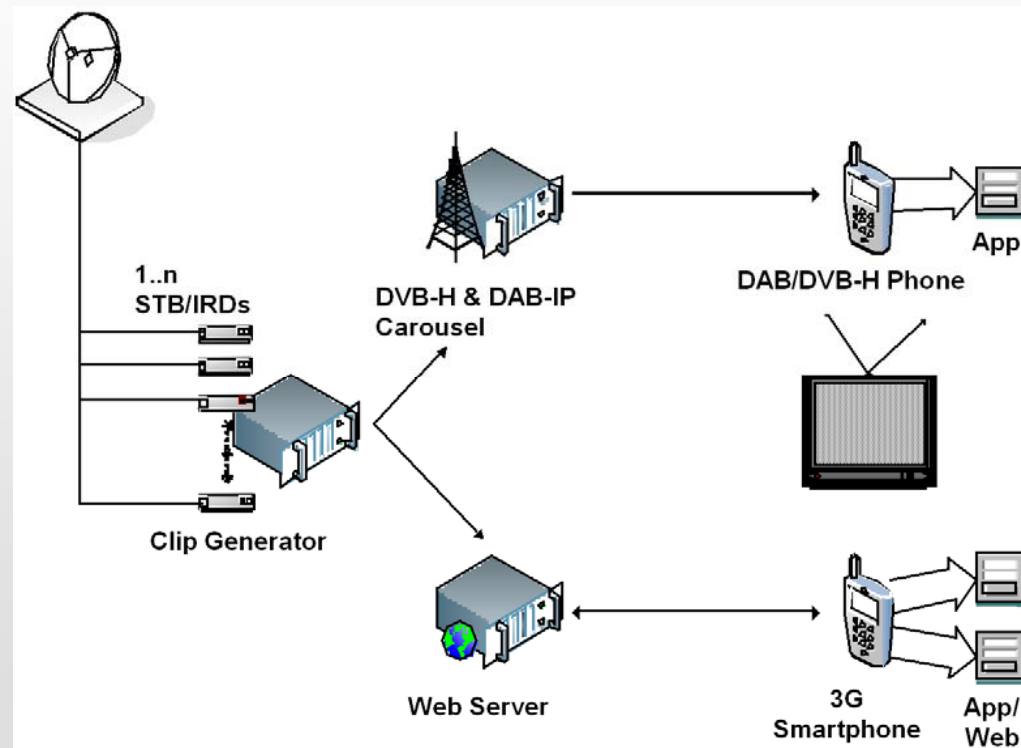
Deepening the bonds of friendship by giving it material foundations

Or put in technical terms.....

This would be a mobile device that can download and store TV segments

That transformed a phone into a trafficking device

The technical bit



The experience bit

TV CLIPPINGS



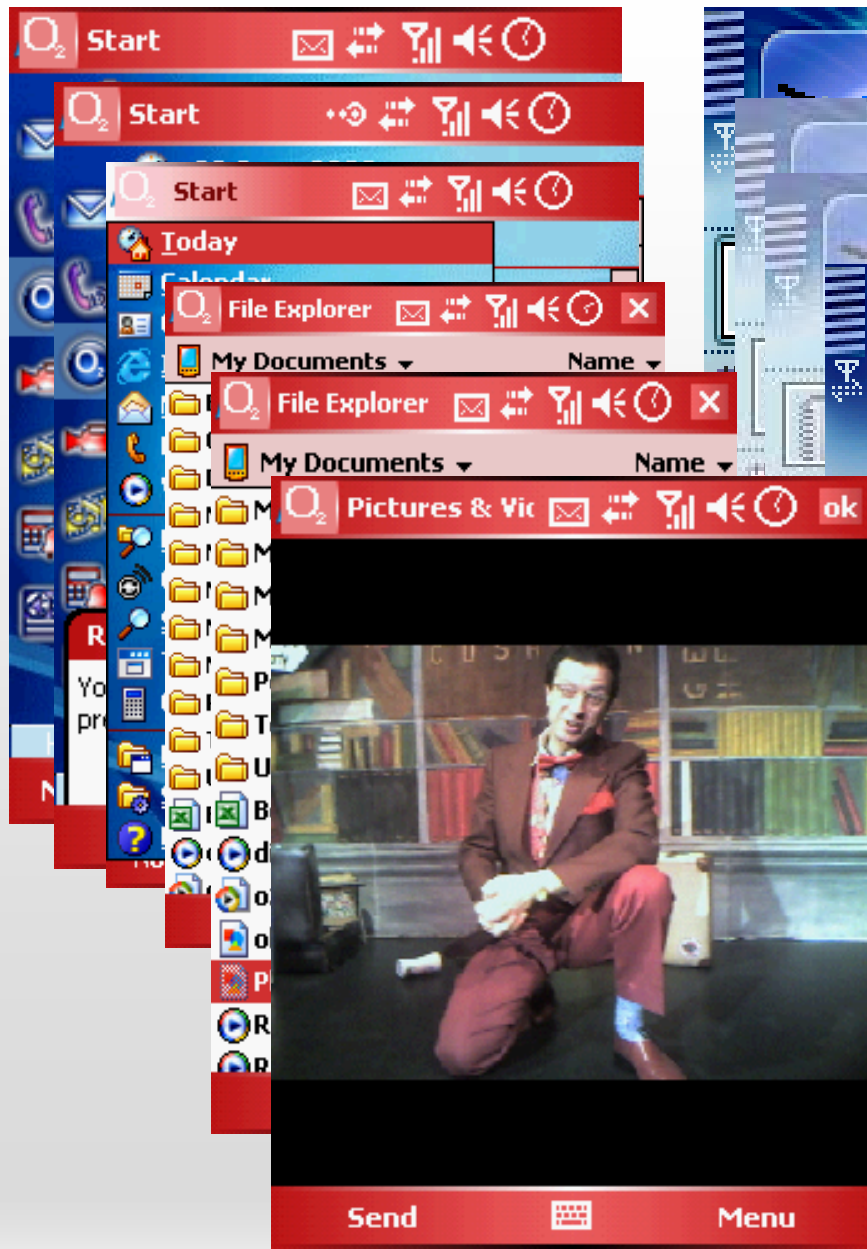
Who's Watching
Extras?

Microsoft

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But when we built an application
(‘grab and share’) on CE
it didn’t work

Or rather.....
users’ insisted it wouldn’t work



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One treated file sharing like a computer ought to

The other as a human exchange

One like a machine

The other like giving and taking

Wrong and right?

CE - here the user model emphasises
the mobile professional;
one who is tidy;
one who likes the
machine to put files away

Symbian - here the emphasis is
on the consumer, a communicating soul;
one that wants things-in-the-hand

CE has fewer clicks than Symbian for the total task
It's really a question of what you want to
achieve....

And what happened next?

The content provider loved it

The users said they would like it if we fixed it

But the lawyers were spooked:

It might look like a form of
viral brand marketing,
but there is no legal model.

So, don't do it!

(Besides, Sky doesn't do research!)

So?

You need ways of looking

You need tools that let you see the world

But you have to make judgements

Watching mobile TV has moral components

Or, if you prefer, social components

Or, even better, systems of value

From driving to trafficking

We started with machine-like
constructs of human endeavours
and ended up with economic
action which turned out to be about
social bonds and illegality.

Imagining the future so as to shape that future:
it's more complex than one might think.

It's always about the appropriate ways of
looking that let you imagine what might be.

You need **many ways** of looking

The skill is knowing which way, when, why
and what that will gain you

Is it hard? (It looks easy)

That's what I do

Papers and research cited here done with:

John Senders, Mark Rouncefield, Rob Proctor, Dave Randall,
Simon Rubens, Tim Regan, Kaz Al Masawi, Richard Banks,
Dounia Soufane and the rest in SDS

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