Designing products and places against crime

The promise and the challenge

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Arts & Humanities Research Council

DESIGN AGAINST CRIME

DaC

What is Design Against Crime?

DAC uses the tools, processes & products of design to work in partnership with agencies, companies, individuals and communities to

- Prevent all kinds of **crime** – including antisocial behaviour, drug abuse/ dealing and terrorism
- Promote quality of life & sustainable living through enhanced **community safety**

It does this through designs that are 'fit for purpose' and contextually appropriate in all other respects. This sounds serious…

…but it can be fun

Most design follows a user-centred approach

But people abuse the designs!

Mistreatment (damage)

Misappropriation (theft)

Mishandling (eg fraud)

Misuse (eg as tool)

Misbehaviour (nuisance, conflict)

Mistake (false alarm)

So to the user we add the abuser

The scope of Design Against Crime

Secure…

- Products
- Components
- Systems
- Information
- Communication/ art
- Places/ environments
- Communities

Inherently secure product… in the old days…

…and now –
Vexed Generation/ Puma bike

Evolution of a secure product – Preventing the clipping of coins

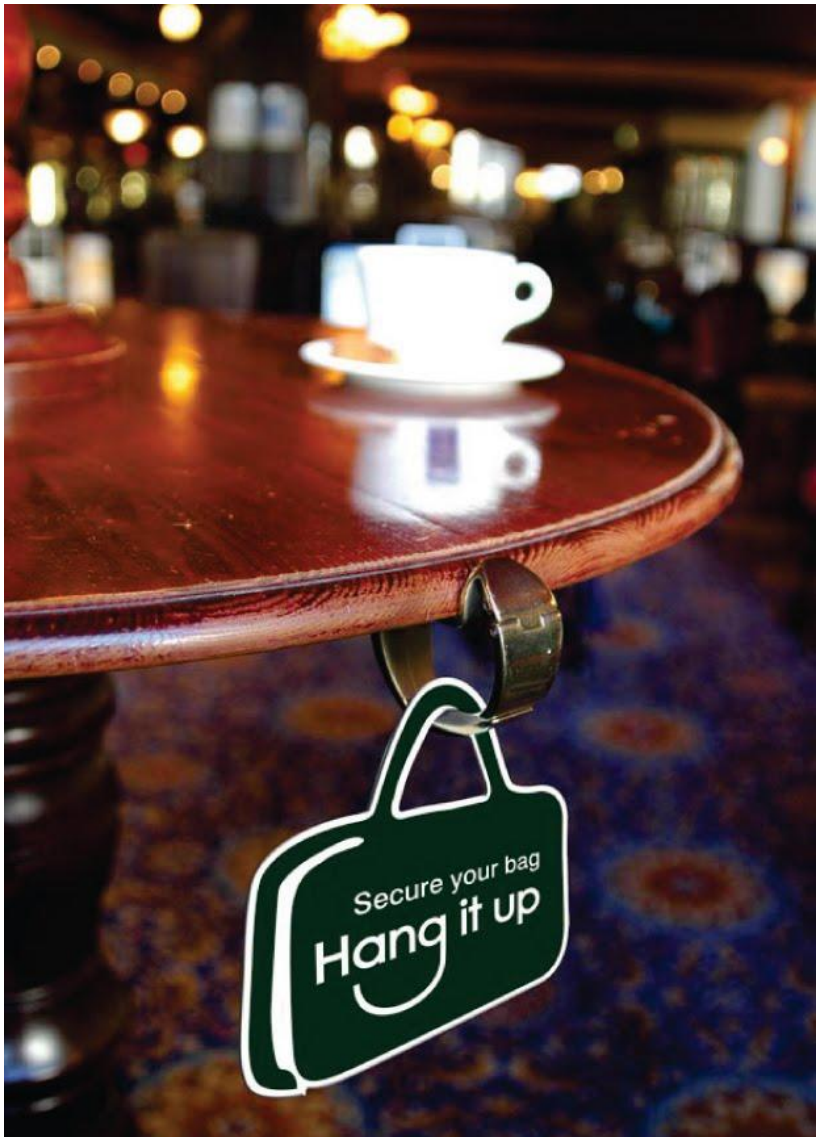
Hammered

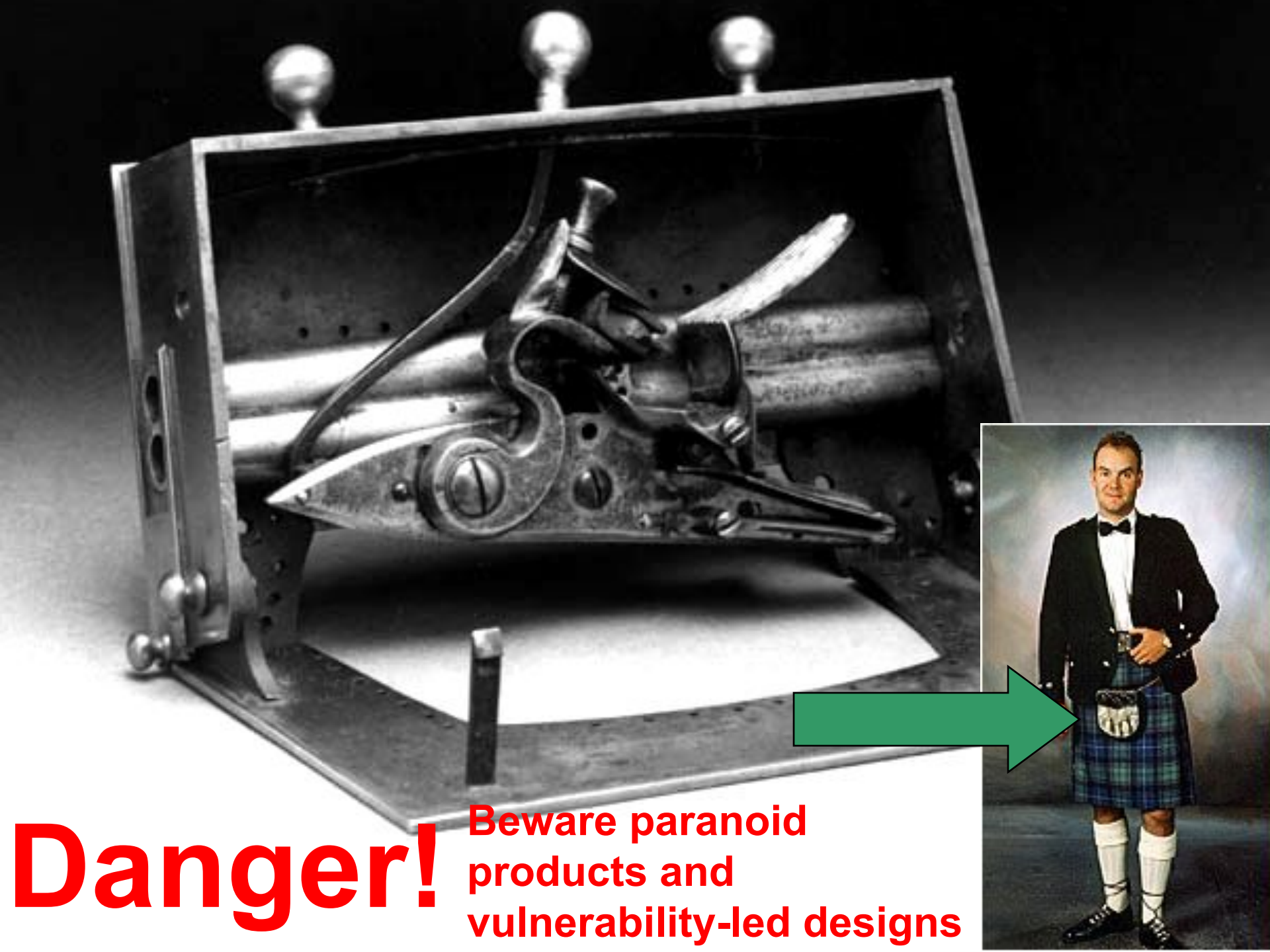
Milled

Security product – dedicated to crime prevention

Clothes tagging device

Security Product/ Security Communication





Danger!

Beware paranoid products and vulnerability-led designs

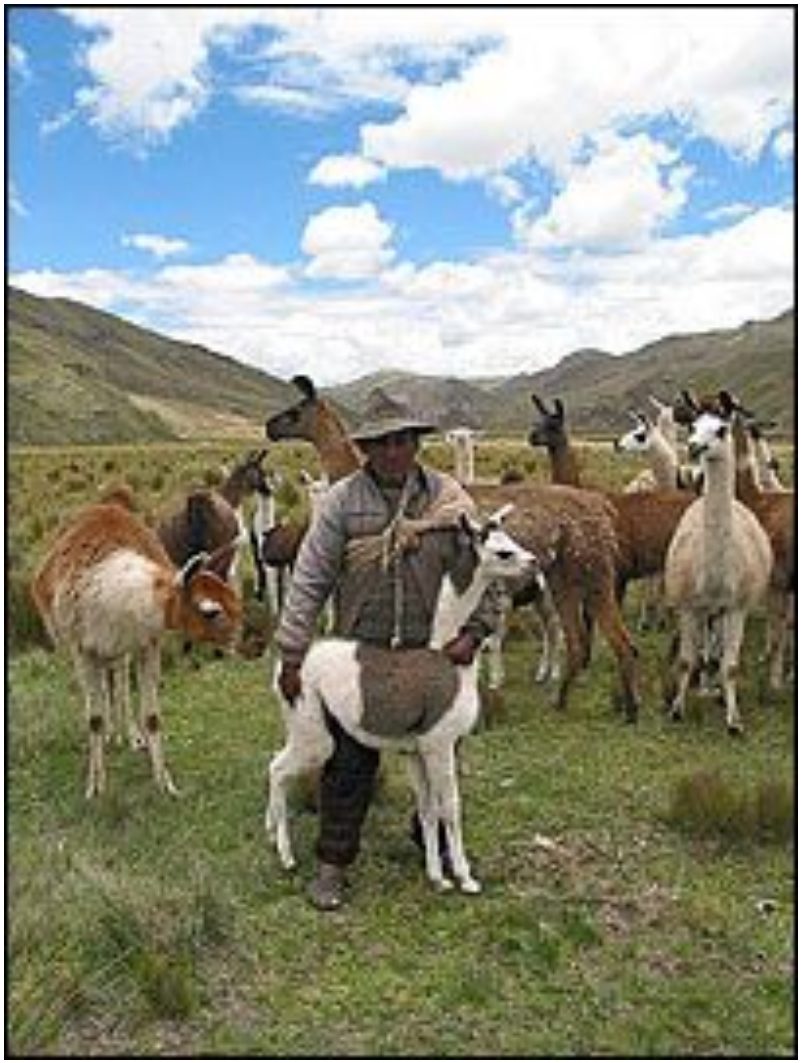
Security component

- Protecting brand
- Protecting consumers

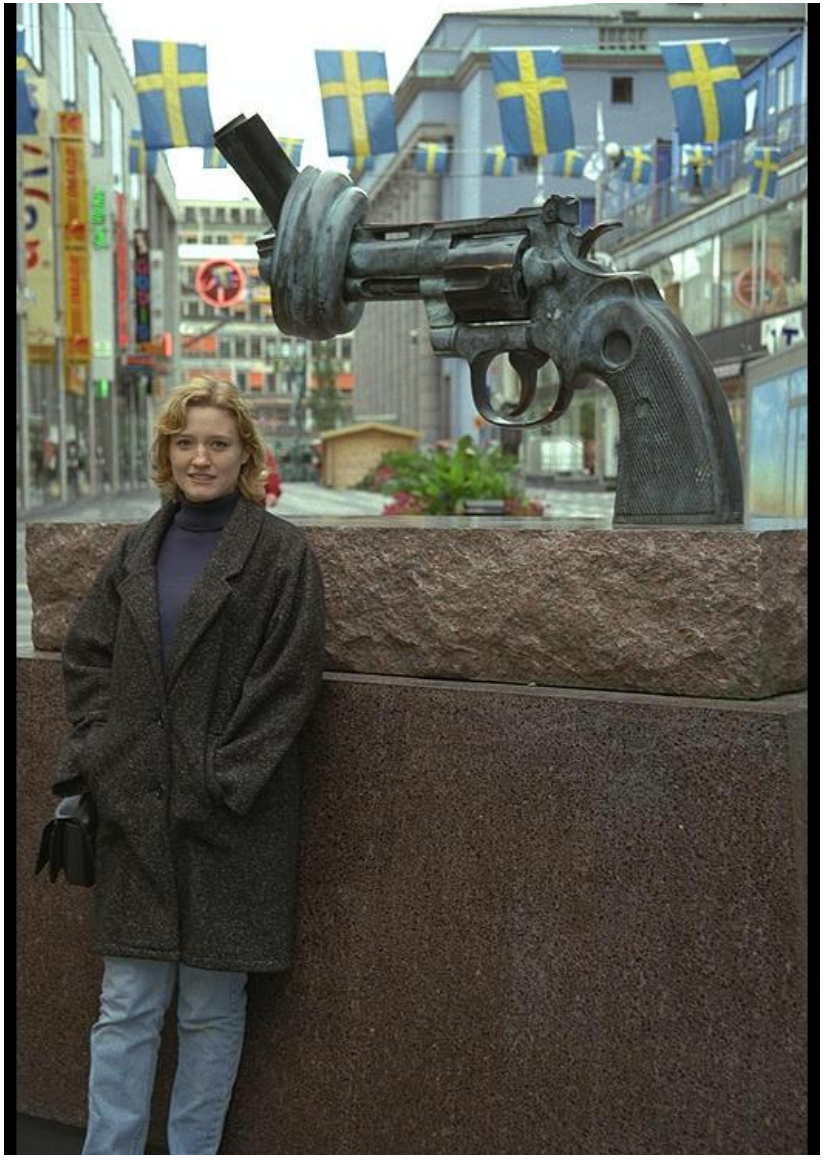
Securing products – crime prevention plus other main purpose

Securing products – bike stands that encourage secure locking

Security System – Chips protect high-value alpacas



Security Communication/Art



Securing Clothing – Wearable solutions

Secure Place: Maiden Castle

Secure Communities

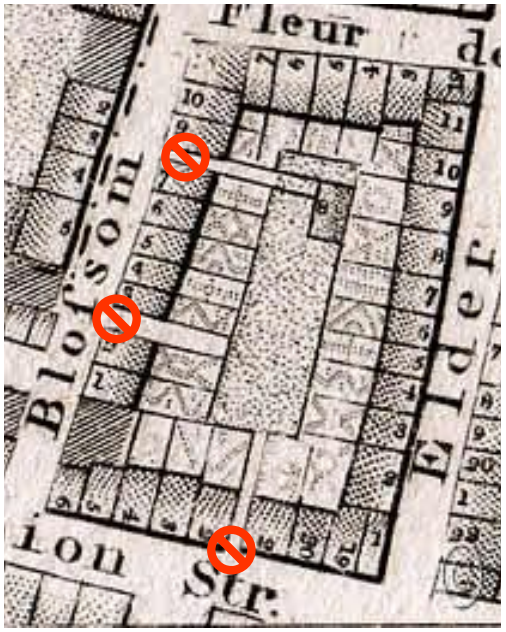
Designing for social cohesion, cooperation and conflict reduction

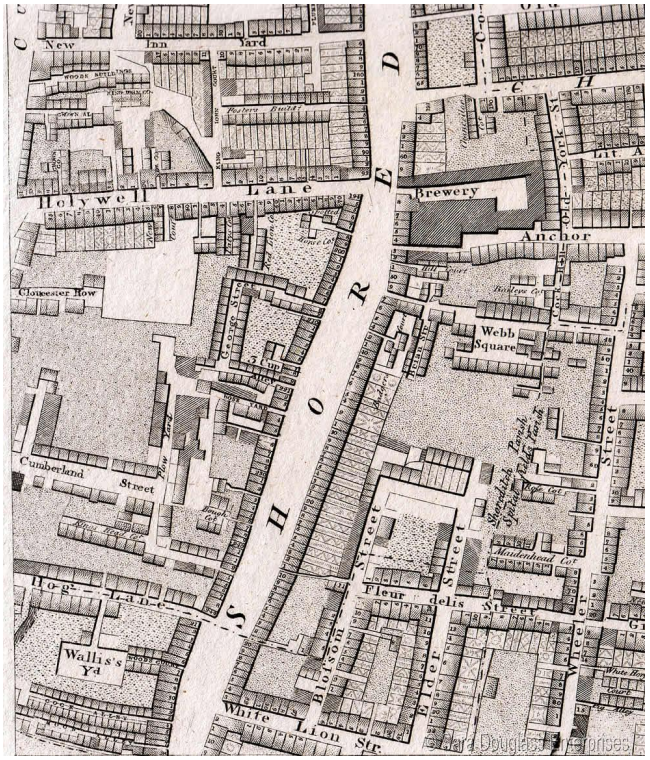
- Physical aspects
- Social innovation approach

Hi-tech solution to laptop theft

Lo-tech solution

Scale of DAC


Fleur
Blossom
Elder
ion Str.


New Inn Yard
Holywell Lane
Brewery
Anchor
Clarendon Row
Webb Square
Cumberland Street
Hog Lane
Fleur de lis Street
Wallis's Yd
White Lion Str.
SHORE DITCH

The challenge of DAC

Troublesome Tradeoffs

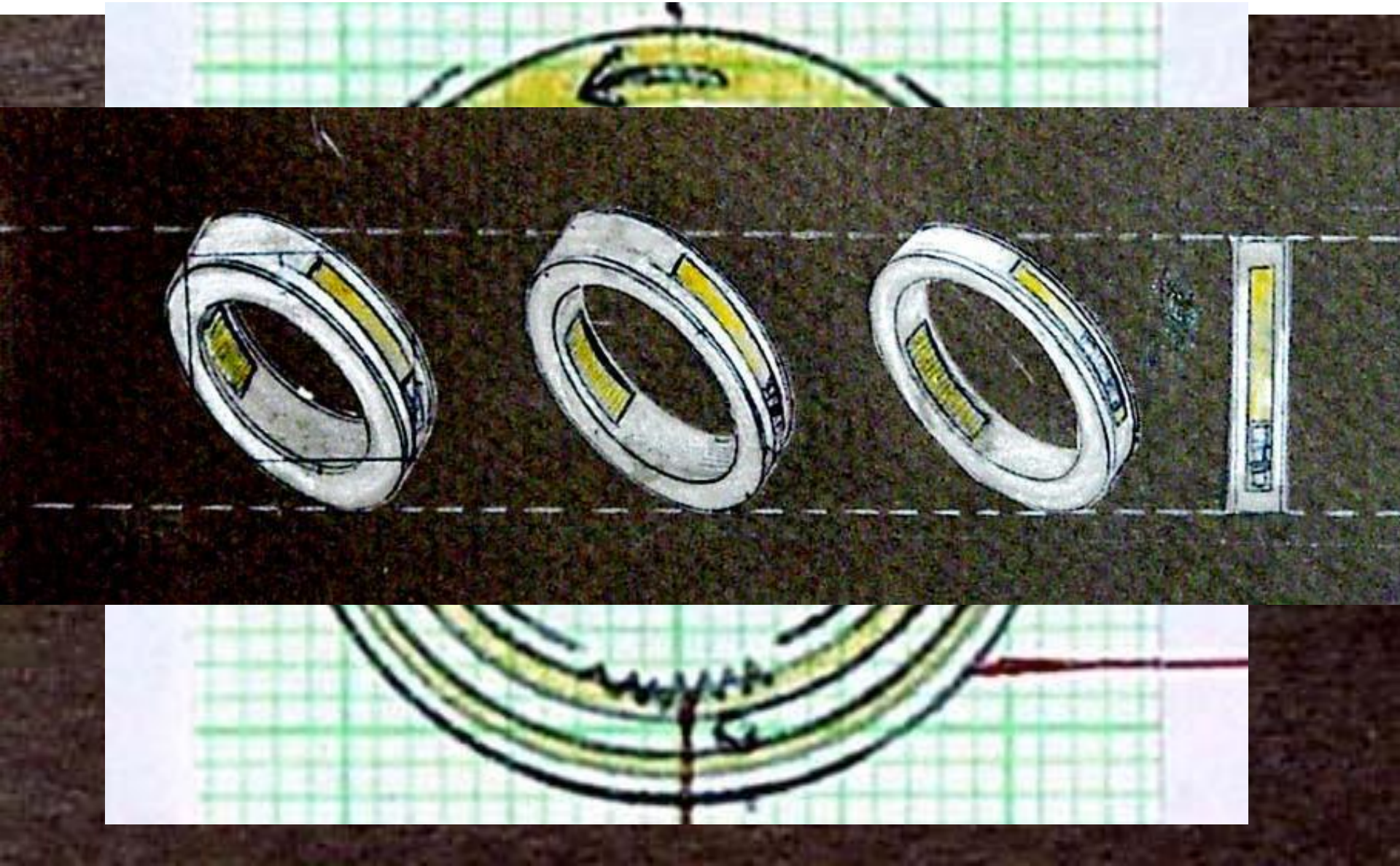
Can we design secure products *without* jeopardising their main purpose and *without* their being

- Inconvenient?
- User-unfriendly?
- Ugly? Effective but hideous & clunky engineering solutions
- A threat to privacy?
- Environmentally unfriendly?
- Unsafe?
- Too expensive?

Yes! Tradeoffs can be resolved…

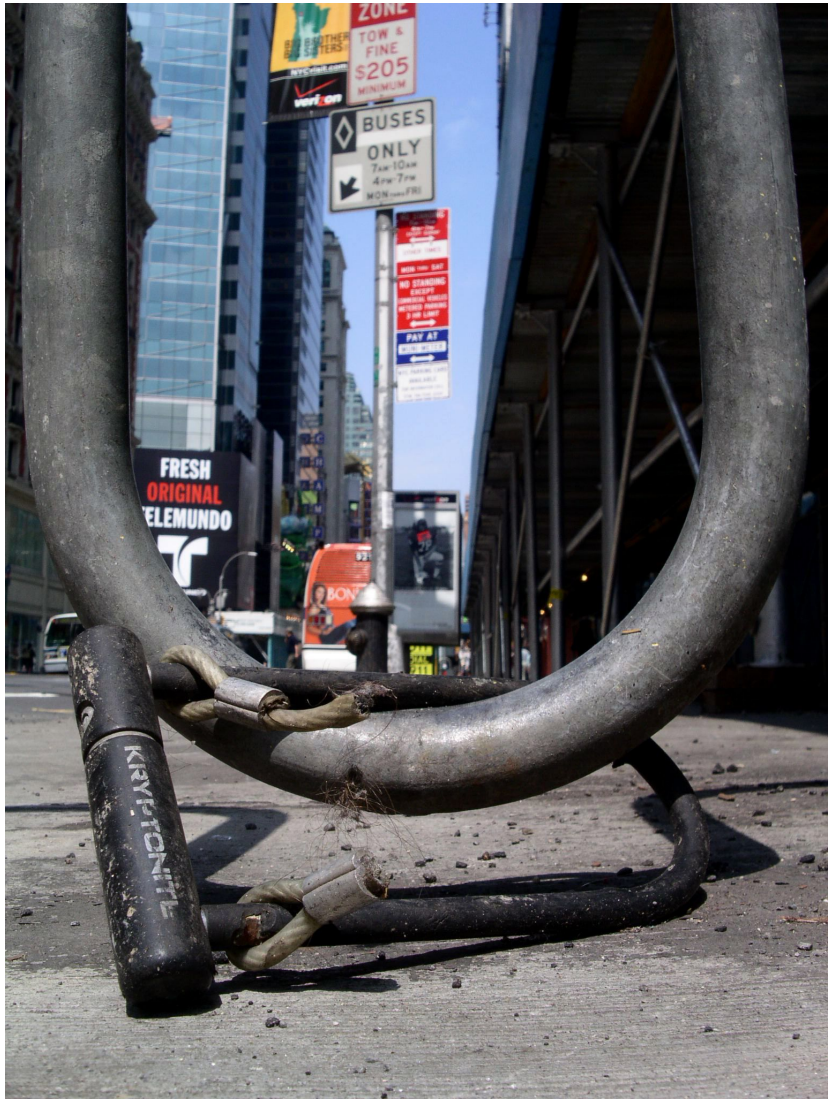
- Where Design Expertise is fully engaged, early in the Design Process
- And all these considerations are incorporated in the Requirements Capture with sufficient priority

Subtle and dynamic – the ultimate tradeoff?



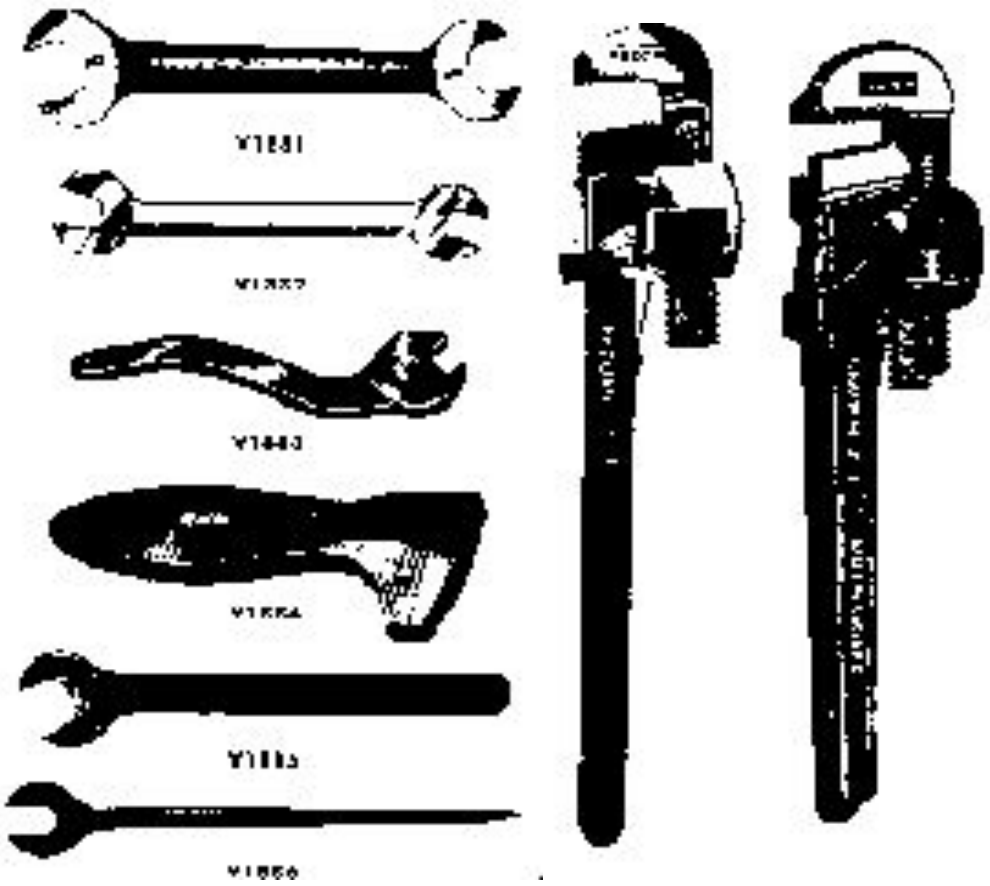
When is design not design?
1. The technofix

- Shallow, single, exposed line of defence
- Bolt-on, drop-off



When is design not design?
2. Heavy engineering

- Does the basic job well enough, but…
  - Clumsy, not user-friendly
  - Ugly, maybe fear-inspiring



Security need not be ugly…

…But it often is

Problem…

‘Engineering’ solution

‘Engineering’ solutions

More aesthetic solution

More Aesthetic Solution

Problem…

More aesthetic solution
Camden
…but where do the drinkers go?

More aesthetic solution

- Traditional style
- With backup

Anti-terror aesthetics

The challenge of DAC – **Caught unaware – failure to anticipate**

- Product designed naïve to crime
- Crime harvest
- Retrofit solutions
  - Constrained
  - Rushed
  - Legacy of crime and/or inconvenience

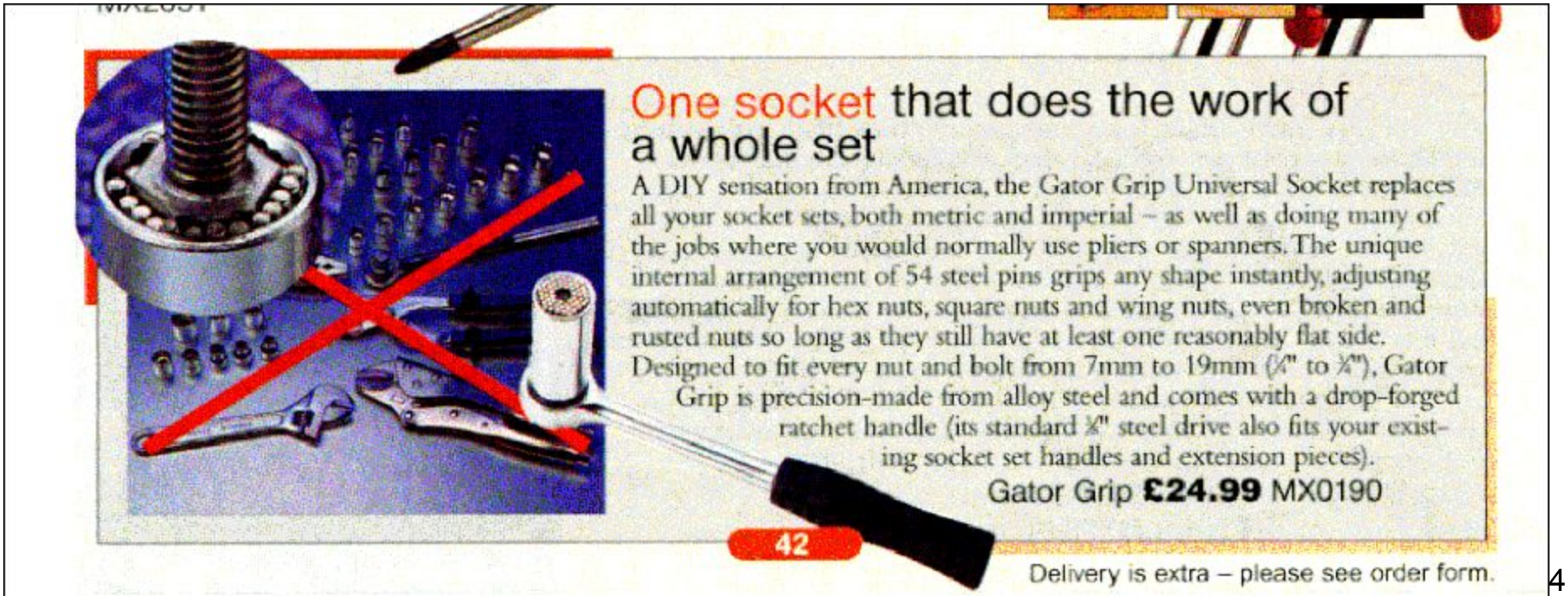
What made Queen Victoria go red?

The challenge of DAC – **Offenders fight back**

- Tactical countermoves
- Counter-exploitation
- Strategic counter-design
- Reverse engineering

The challenge of DAC – **Obsolescence**

- Adaptive offenders' countermoves
- Changing social conditions
- New tools/ skills for crime



One socket that does the work of a whole set

A DIY sensation from America, the Gator Grip Universal Socket replaces all your socket sets, both metric and imperial – as well as doing many of the jobs where you would normally use pliers or spanners. The unique internal arrangement of 54 steel pins grips any shape instantly, adjusting automatically for hex nuts, square nuts and wing nuts, even broken and rusted nuts so long as they still have at least one reasonably flat side. Designed to fit every nut and bolt from 7mm to 19mm (¼" to ¾"), Gator Grip is precision-made from alloy steel and comes with a drop-forged ratchet handle (its standard ½" steel drive also fits your existing socket set handles and extension pieces).

Gator Grip **£24.99** MX0190

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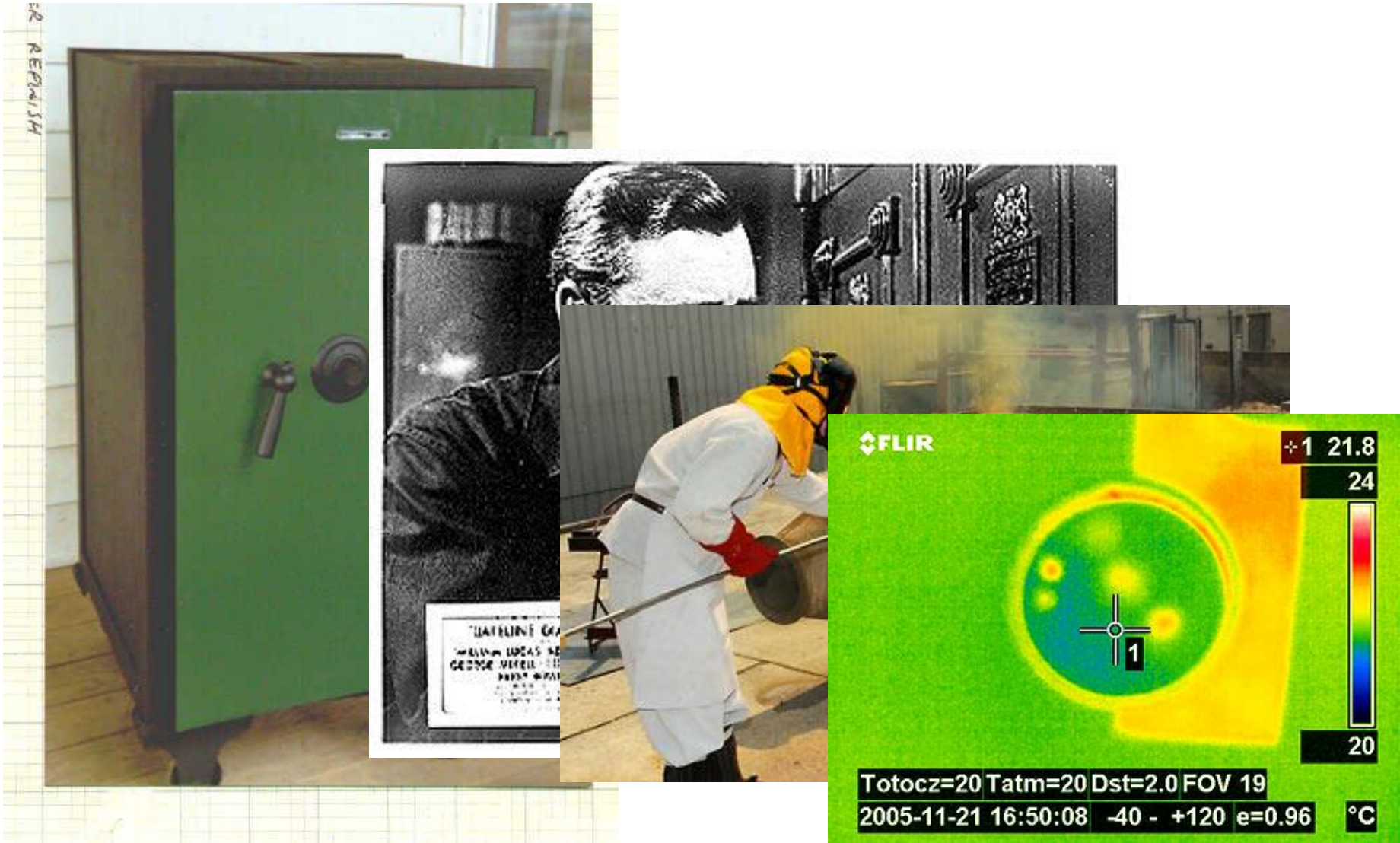
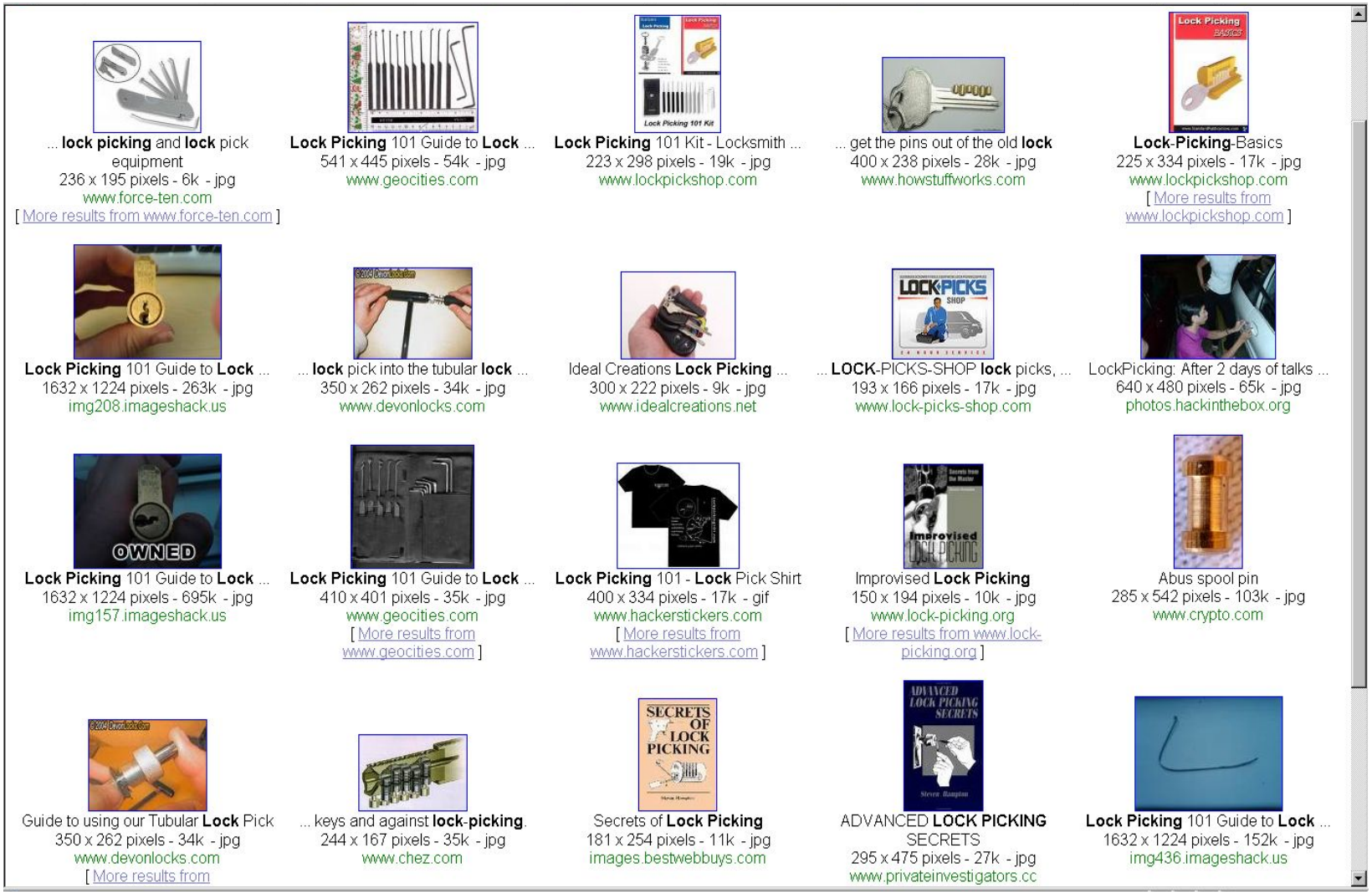
Delivery is extra – please see order form.

Arms Race –
Safes and Safecrackers



Spread of criminal know-how – from pubs & prisons to the Internet



Beware cookbook copying – Replications must adapt to context

ELECTRONICALLY SECURED CYCLE PARKING

GHENT, BELGIUM

WALTHAMSTOW CENTRAL STATION, LONDON

False security from rigid prescription + adaptable criminals? ‘Helpful’ entrance porch

Meeting the challenge

- We have to innovate faster than offenders whilst adapting to context of users and crimes
- This needs
  - Mindset
  - Motivation
  - Capacity development
  - Collaboration between Preventers and Designers

A receptacle for grime?

Or a tool for crime?

Wrong mindset for design: failure to think thief

Response: The No ClimBIN
Jenny Loqvist
Griffith University Australia 2008

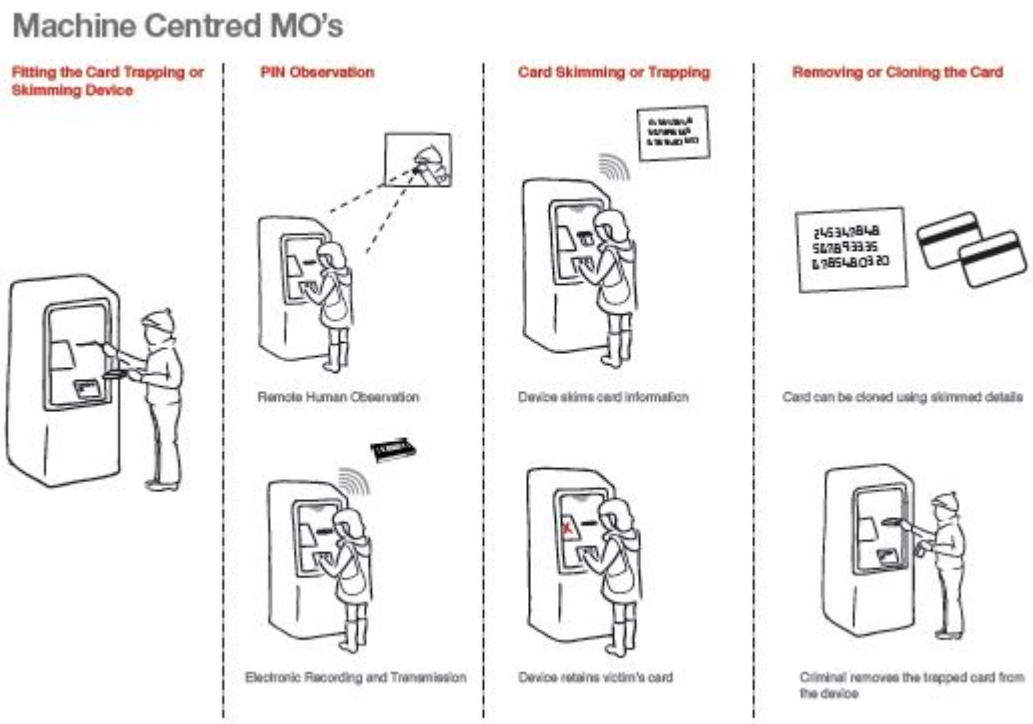
Competition organisers

Design Out Crime Research Group
Curtin University Australia
www.designoutcrime.org

DAC Research Centre – Latest research directions

- Graffiti – art or crime?
- Elderly people, crime and built environment
- Restorative Justice and empathy
- Knowledge management of good practice in crime prevention
- Counter-terrorism toolkit
- Metal theft – collaborators wanted
- ATM crime

ATMs – our very own arms race



5Is framework

Knowledge capture of crime prevention practice, explicitly designed for intelligent, context-sensitive replication

- ***Intelligence***
- ***Intervention***
- ***Implementation***
- ***Involvement***
- ***Impact***

www.5isframework.wordpress.com

www.rikoksentorjunta.fi/uploads/m9i8l0e09.ppt

www.aic.gov.au/events/seminars/2010/ekblom.aspx

And finally, a reminder…

DAC doesn’t have to be expensive!

Contact us at

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www.designagainstcrime.com

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