

Less is More: What Can Design Against Crime Contribute to Sustainability?

Professor Lorraine Gamman
and Adam Thorpe

Changing The Change Conference, Turin July 2008

Design Against Crime Research Centre



Arts & Humanities
Research Council

The Grippa research programme, mainly funded by AHRC, is a collaboration between the Design Against Crime Research Centre, Central Saint Martins College of Art & Design, University of the Arts London, and the UCL Jill Dando Institute of Security and Crime Science. Papers and other materials from the programme are at www.grippaclip.com and wider practical and research material on preventing bag theft at www.inthebag.org.uk



Contents

1. What is Design Against Crime (DAC) ?
2. DAC and Sustainability
3. DACRC at UAL: Socially Responsive Design
4. Theory into practice: Bikeoff.org
5. Conclusion

1. What is DAC?

‘Things’ as well as people cause problems. DAC builds on the theory of Situational Crime Prevention (SCP) which considers ‘opportunities’ (linked to objects/ environments and services as well as users and abusers) to be the ‘root causes’ of crime.

Design out criminal opportunities and you can design out crime.

Based on Felson & Clarke ‘Opportunity Theory’, 1998, Rutgers University, New Jersey

Less is More: What can design against crime contribute to sustainability?, Changing The Change, Torino, July 2008

2. DAC and Sustainability

A widely used and accepted international definition of sustainable development is:

‘development which meets the needs of the present without compromising the ability of future generations to meet their own needs’

<http://www.sustainable-development.gov.uk/what/priority/consumption-production/index.htm>

2. DAC and Sustainability

Crime is a barrier to sustainable development as acknowledged by the UN and most domestic governments and impacts on public well being in the following ways:

- i. Economic
- ii. Environmental
- iii. Ecological
- iv. Emotional



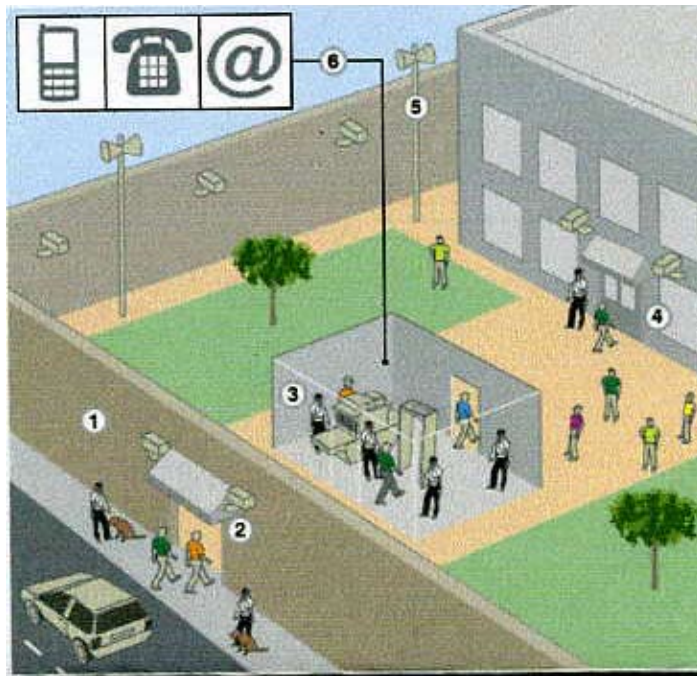
2. DAC and Sustainability: Economic impact

Money spent on policing crime and dealing with the consequences of crime and vandalism could be better spent on essential infrastructure (health, education, transport and culture).



2. DAC and Sustainability: Environmental impact

Actual crime, as well as fear of it, can operate to determine the aesthetics of, and our interactions with, the environments we live in.



2. DAC and Sustainability: Environmental impact

Vulnerability-led design responses, or too much emphasis on security can promote fear of crime (and each other) making people paranoid. The link between designed environment and human impact is evidenced in terms of design for well being. *Roger Ulrich, 1986*



2. DAC and Sustainability: Ecological impact

Crime trends often follow consumer trends. Crime is a voracious form of premature obsolescence (linked to insurance replacement). It has the potential to rival the impact of fashion trends.



2. DAC and Sustainability: Emotional impact

Crime militates against well being. Prof. Layard (LSE) argues if we don't feel safe we are unlikely to feel happy despite economic prosperity.



3. DACRC at UAL



Less is More: What can design against crime contribute to sustainability?, Changing The Change, Torino, July 2008

3. DACRC at UAL: Aims

1. To reduce the incidence and adverse consequences of crime through design of products, services, communications and environments that are 'fit for purpose' and contextually appropriate.
2. To equip design practitioners with the cognitive and practical tools and resources to design out crime.
3. To prove and promote the social and commercial benefits of designing out crime to manufacturing and service industries, as well as to local and national government, and society at large.
4. To address environmental complicity with crime in the built environment and improve well being.

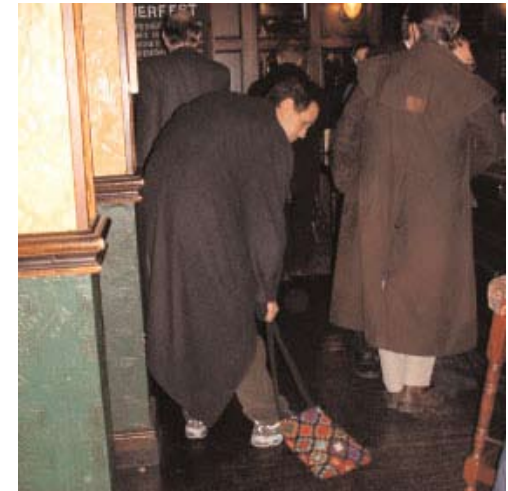
3. DACRC at UAL: Socially Responsive

We target crime problems that stand as a barrier to the progress of social and ethical agendas.

Our current focus is on **bag theft** (mobile property theft) that **detracts from enjoyment of public spaces/public transport**, and **bike theft** that detracts from cycle use.



3. DACRC at UAL: User and Abuser Centred



3. DACRC at UAL: Multi-disciplinary

We bring together researchers, designers, architects, planners, criminologists, engineers, manufacturers, anthropologists, the police and others whose lives our designs impact upon. They help develop design questions and review design proposals/design tools to ensure they are effective and appropriate.



wetherspoon



Transport
for London



3. DACRC at UAL: Practice-led

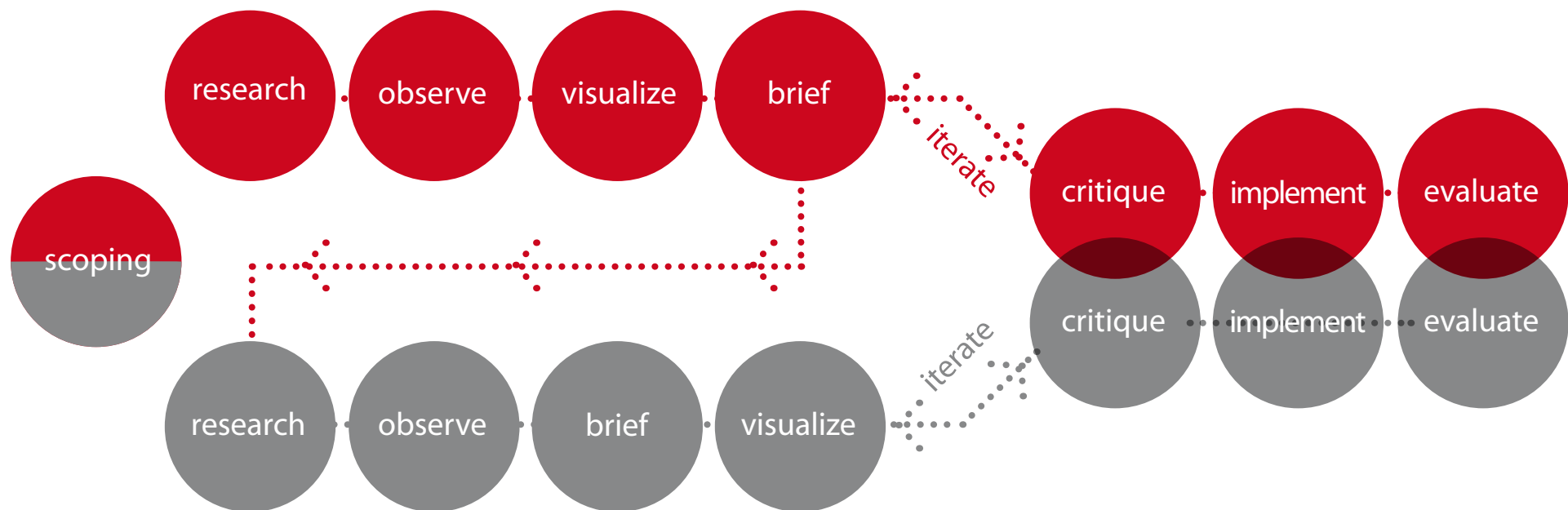
We try to show as well as tell what designing against crime can deliver.



4. Theory into practice

Our working process has 2 strands. Each strand has 7 stages.

Practice Led Research (Design Resources)



Research Led Practice (DAC exemplars)

4. Theory into practice

Our model can be summarised as:

- * scope and consult
- * research and create
- * create and consult
- * create and test

We iterate at every stage drawing on expert advice of stakeholders to seek to ensure the efficacy of our outputs.

4. Theory into practice

‘Twin track’ approach generates:

- * Tested ‘design resources’ that are freely disseminated to stakeholders within design education and design practice with the aim of “equipping design practitioners with the cognitive and practical tools and resources to design out crime”.
- * Tested ‘design exemplars’ that address industry and ‘the market’, providing the case for DAC as a tool for socially responsive innovation and “promoting the social and commercial benefits of designing against crime to manufacturing and service industries”. These exemplars are applied to afford social impact and create social change.

4. Theory into practice

Our address to multiple agendas and design drivers aims to deliver both product innovation and social innovation.

Our Bikeoff initiative aims to design products, services and environments that increase cycle use by reducing bike theft.



4. Theory into practice

Cycle theft is one of the greatest detractors from bike use and the benefits that cycling has to offer the public:

- * Quick (journeys under 5 miles)
- * Healthy (obesity/heart disease)
- * Affordable (inclusive)
- * Non-polluting
(zero CO2 emissions)
- * Low Hazzard
(less harmful than motor vehicles)
- * Low consumption
- * Quiet



4. Theory into practice: Scoping

UK: aims to increase cycle usage fourfold by 2012.

DTR National Cycle Strategy 1996

London: aims for 80% increase by 2012 and 200% increase by 2020.

Mayors Office

17% of cyclists' experience bicycle theft. Of these 24% stop cycling and 66% cycle less often.

Transport Research Laboratory 1997



4. Theory into practice: Research

UK: 1 bike stolen every minute (439,000 bikes stolen a year).

British Crime Survey 2004-5

London: 80,000 bikes stolen; < 5% returned to owners.

Transport for London 2005-6

Cycle theft is the second greatest deterrent to cycle use after road safety. Secure cycle parking is quoted as second greatest incentive to cycle after more bike lanes.



4. Theory into practice: Research

Not just a UK problem. Bike owners more likely to have their bikes stolen than car owners their car or motorcyclists their motorbike.

Bike stolen (4.7%)

Motorbike stolen (1.9%)

Car Stolen (1.2%)

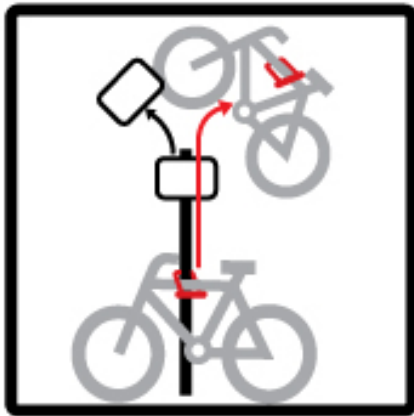
International Crime Victim Survey (2000)



4. Theory into practice: Research: Behaviour

Abusers - Theft perpetrator techniques

Lifting



Levering

4. Theory into practice: Research: Behaviour

Abusers - Theft perpetrator techniques

Striking



Cutting



4. Theory into practice: Research: Behaviour

Abusers - Theft perpetrator techniques

Unbolting



Picking

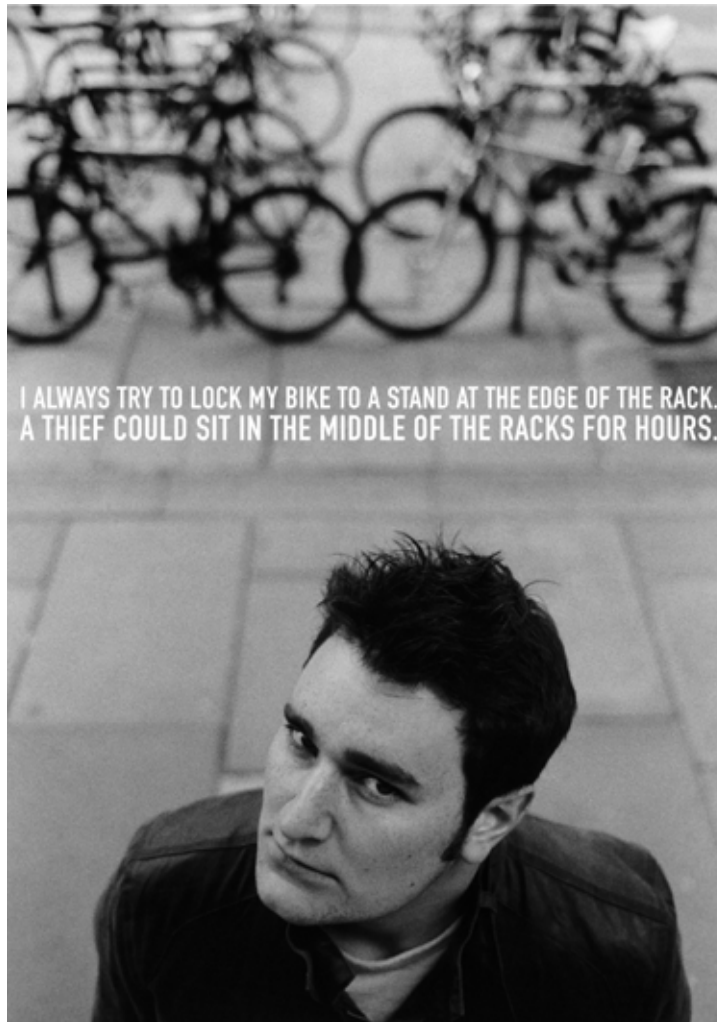
4. Theory into practice: Research: Consultation

Users/Community
Bikeoff Weblog



4. Theory into practice: Research: Consultation

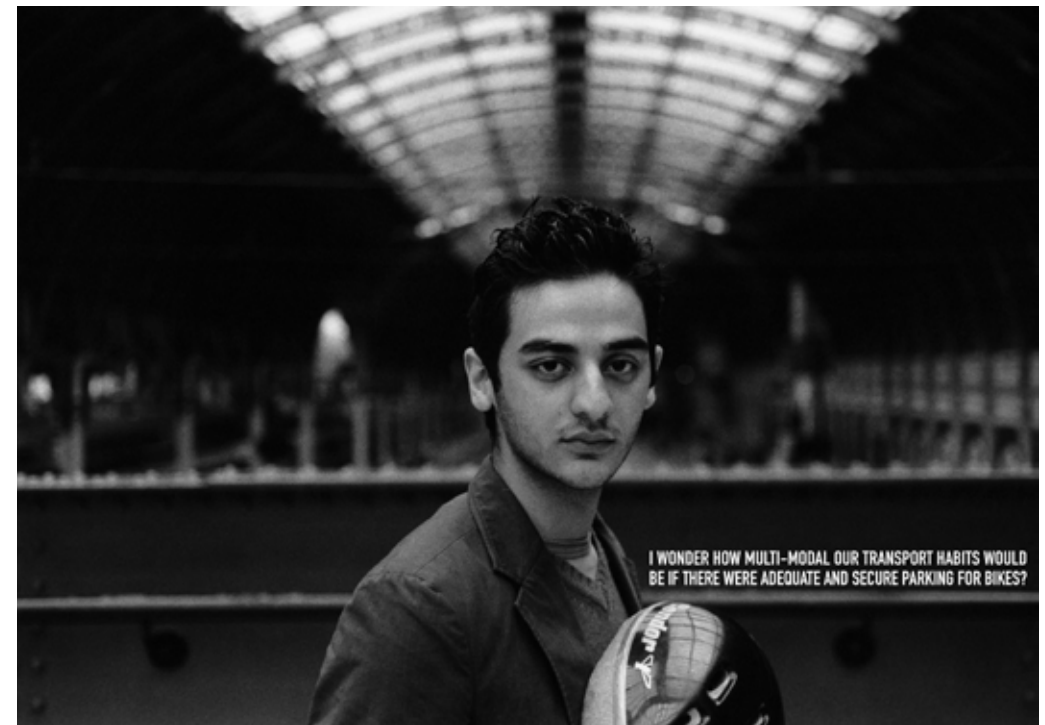
Users
Bikeoff
Weblog



4. Theory into practice: Research: Consultation

Users

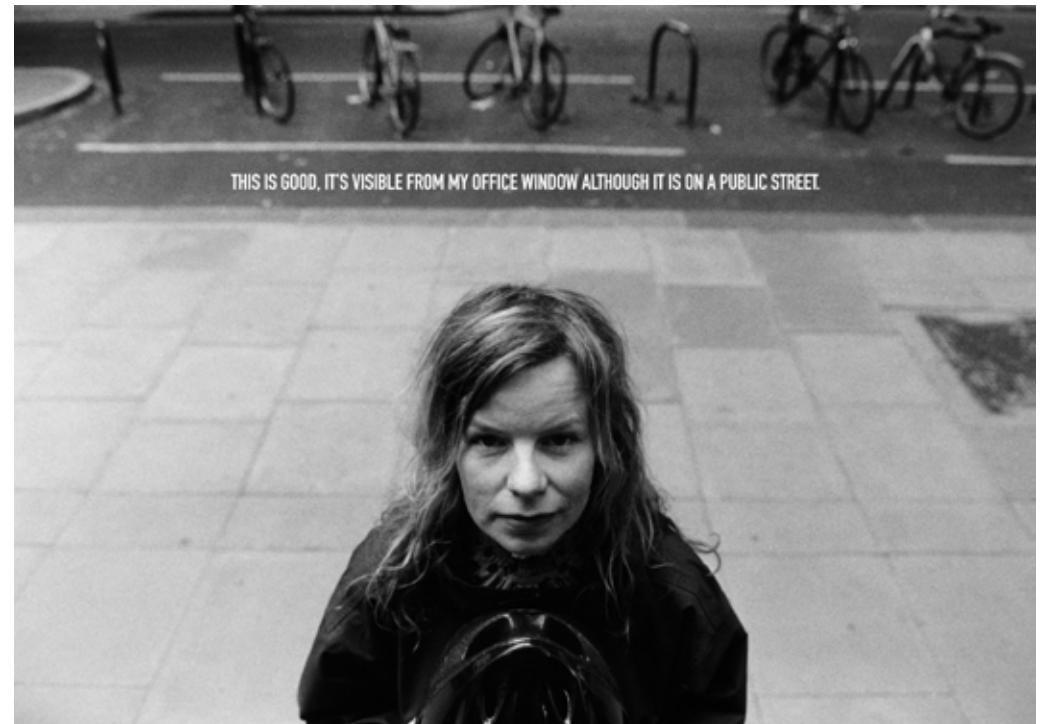
Bikeoff Weblog



4. Theory into practice: Research: Consultation

Users

Bikeoff Weblog



4. Theory into practice: Research: Consultation

Users/Community

LBFF

2005/06/07/08

October 1-5

EIGHTH ANNUAL
BICYCLE FILM FESTIVAL™ 2008
NEW YORK • TORONTO • MINNEAPOLIS • LA • SF • CHICAGO • BOSTON • TOKYO • AUSTIN • LONDON • VIENNA • ZÜRICH • PARIS • SYDNEY • MELBOURNE • MILANO • PORTLAND
HOME | ABOUT | PRESS | DATES | LINKS | SPONSORS | 2007 SITE | CONTACT

BFF News
**MINNEAPOLIS: JULY 9-12, 2008
SEE THE PROGRAM!!!**
The Bicycle Film Festival is a celebration of bicycles through film, art and music.

MINNEAPOLIS PROGRAM HIGHLIGHTS
WEDNESDAY JULY 9
8:00 PM | BIKES ROCK
THURSDAY JULY 10
7:00 PM | PROGRAM 1 - BREAKING AWAY [BUY TICKETS](#)
9:00 PM | PROGRAM 2 - FUN BIKE SHORTS [BUY TICKETS](#)
AFTERPARTY AT P1 BAR
FRIDAY JULY 11
7:00 PM | PROGRAM 3 - WAY BOBBY SEES IT [BUY TICKETS](#)
9:00 PM | PROGRAM 4 - LES NINJA DU JAPON [BUY TICKETS](#)



Etc.
Join our mailing list!
ENTER YOUR EMAIL ADDRESS:

Are you on Myspace? [Become our Friend!!!](#)

Announcements
RECENT LINKS
New York - 16 June 2008
[Dear Velo, Press art show](#)
[Toronto Interviews](#)
[BFF NYC 2008](#)
[DEAR VELO, art show](#)

Buy a Festival Pass!
**BUY A MINNEAPOLIS
FESTIVAL PASS \$36**
Valet bicycle parking provided at all screenings.
Buy \$8 tickets for individual screenings.

Download the Minneapolis Posters!


THE NEW YORK FESTIVAL WAS A SUCCESS
New York - 4 June 2008
Thank you to everyone for coming out to the [New York Bicycle Film Festival](#). Mark your calendars for the BFF in Toronto June 18-21.

BROOKS/BFF VIDEO ON YOUTUBE
Birmingham - 24 May 2008


Less is More: What can design against crime contribute to sustainability?, Changing The Change, Torino, July 2008

4. Theory into practice: Observation: Use and Abuse



4. Theory into practice: Observation: Recording

8500 observations of 'locking' events - practice and context

										<input type="radio"/> Well maintained <input type="radio"/> Fairly Used <input type="radio"/> Battled <input type="radio"/> Abandoned		Colour _____	Make _____	<input type="radio"/> F <input type="radio"/> M
Visit _____		observations stand	<input type="checkbox"/> COVER			<input type="checkbox"/>			Observations lock					
Stand _____			<input type="checkbox"/> COVER											
ID _____			<input type="checkbox"/> COVER											
			<input type="checkbox"/> COVER											
<div><div>a b c d </div><div>e f g h </div><div>i j k m </div><div>n o p q r </div><div>s t u v w </div><div>x y z aa ab </div><div>ac ad ae af </div></div>														
Date _____	Data taken by _____							Observations of site and surrounding area						
Time _____														
Take _____	mon tue wed thu fri sat sun													

4. Theory into practice: Observation : Analysis

Using 2 locks to secure a diamond frame bike to a Sheffield stand there are 180 potential locking combinations.



4. Theory into practice: Visualise

We rated locking practice as good, ok or bad.



✓ **Good locking practice**



✓ **OK locking practice**



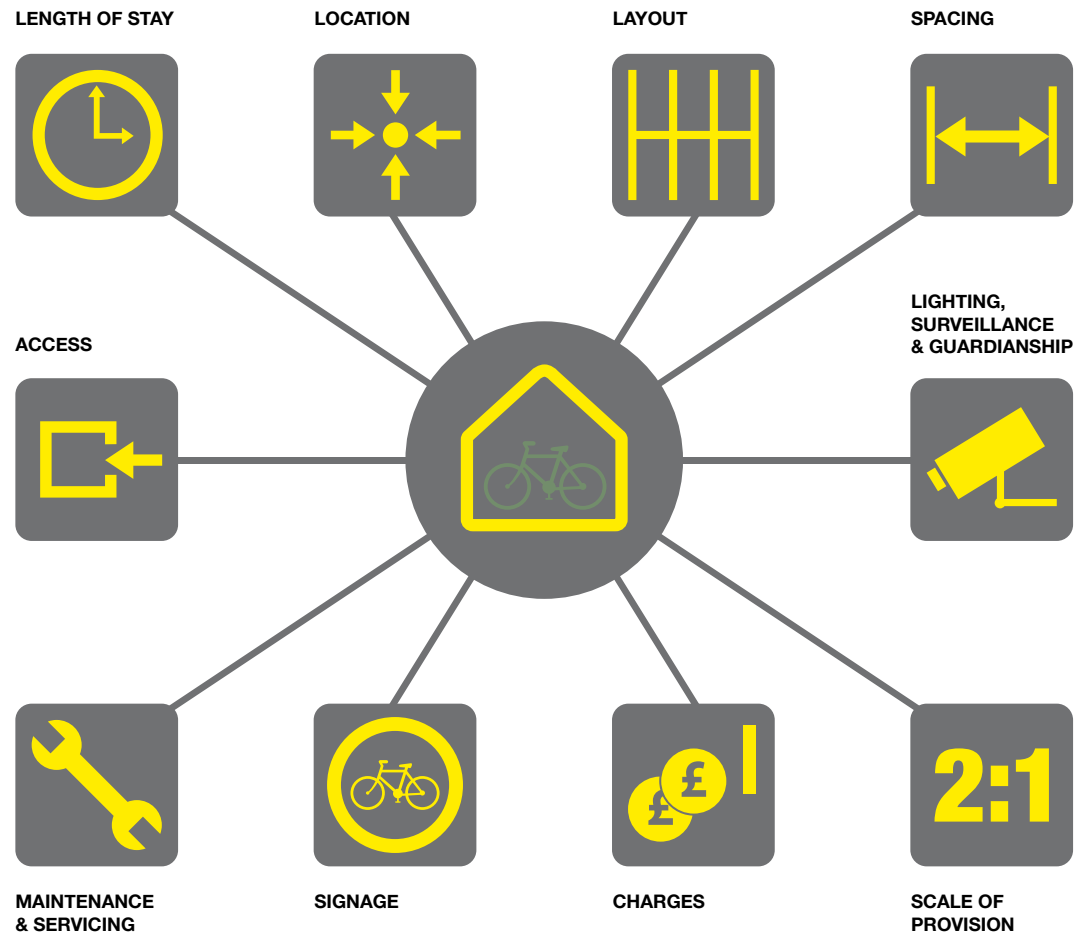
✓ **OK locking practice**



✗ **Bad locking practice**

4. Theory into practice: Visualise

Design Resources: Bikeoff design guidelines



4. Theory into practice: Visualise

Design Resources: Exhibitions



4. Theory into practice: Brief/Critique

Design Resources: Stakeholder seminars



4. Theory into practice: Implement

Design Resources: Studio Projects

MA Industrial Design - Holborn Unlocked.

Unlocking the potential of cycle parking infrastructure to regenerate public space.



4. Theory into practice: Implement

Design Exemplars: Puma bike



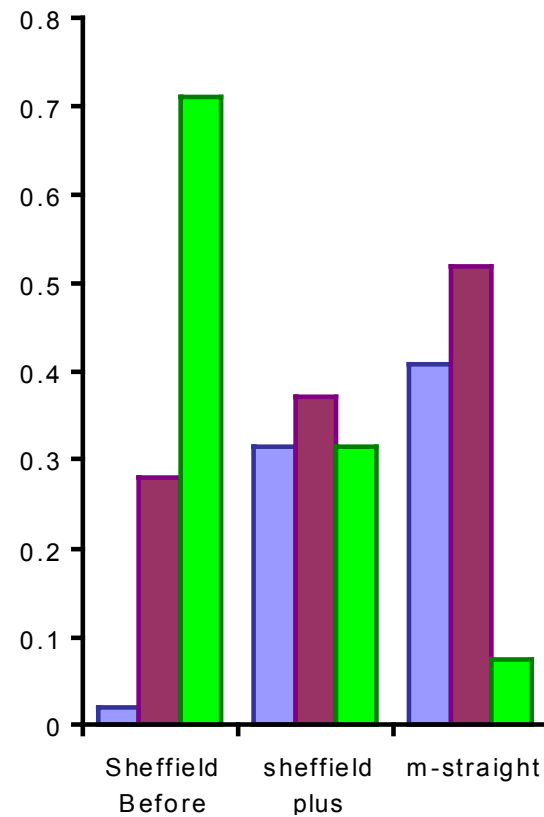
4. Theory into practice: Implement

Design Exemplars: caMden stands



4. Theory into practice: Evaluate

JDI Crime Science, UCL



4. Theory into practice: Implement



5. Conclusion

What can DAC contribute to sustainability?

* < crime = > 'sustainable' society (social context)

* < crime = > 'sustainable' transport (practical context)

More importantly, our socially responsive design approach can be applied to other contexts and consider more multiple design drivers than 'use' and 'abuse'.

5. Conclusion

Socially Responsive Design

“Design which takes as its primary driver social issues, its main consideration social impact and its main objective social change” Gamman & Thorpe, 2006

or simply,

“Design that responds to social issues and context in pursuit of social change”

5. Conclusion

Our work shows that consideration of multiple drivers and a consultative approach can create products, environments and services that are good for:

- *society - less crime and less people criminalised
- *environment - less cars - more cyclists
- *economy - innovative products that add value

We would like to work with others to develop this approach through practice and consideration of different drivers and contexts.

5. Conclusion

Thank you

www.designagainstcrime.com

www.bikeoff.org