

Design Against Crime as Socially Responsive Design “Theory and Practice”

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Design Against Crime Research Centre



Arts & Humanities
Research Council

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1. Introducing DACRC



University of the
Arts London
Central
Saint Martins

**DESIGN
AGAINST CRIME**
Research Centre

1. Introducing DACRC: Aims

- 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.
- To equip design practitioners with the cognitive and practical tools and resources to design out crime.
- 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.
- To address environmental complicity with crime in the built environment and to improve well being.

2. DAC Philosophy

‘Things’ as well as people cause problems.

DAC draws upon design thinking (is the problem really “the” problem?);

also 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.

But, how and why you do this is the crux.

2. DAC Philosophy

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

National / Regional / Local - “Context is everything”.

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

Our socially responsive design focus is currently looking at furniture, graffiti and shoplifting.

3. DAC Drivers

- Economic
- Ecological
- Emotional
- Environmental



3. DAC Drivers: Economic

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).

Table 2.1: Estimated average costs of crimes against individuals and households in 2003/04 by crime type and by cost category

Offence category	Costs in anticipation of			Costs as a consequence of crime					Costs in 2003 prices		
	Defensive Expenditure	Insurance Administration	Physical and Emotional Impact on Direct Victims	Value of Property Stolen	Property Damaged/ Destroyed	Property Recovered	Victim Services	Lost Output	Health Services	Criminal Justice System	Average Cost (£)
Violence against the person	1	1	5,472	-	-	-	9	1,648	1,347	1,928	10,407
Homicide	145	229	860,380	-	-	-	2,102	451,110	770	144,239	1,458,975
Wounding	1	1	4,554	-	-	-	7	1,166	1,348	1,775	8,852
Serious wounding	1	1	4,554	-	-	-	7	1,166	1,348	14,345	21,422
Other wounding	1	1	4,554	-	-	-	7	1,166	1,348	978	8,056
Sexual offences	3	5	22,754	-	-	-	32	4,430	916	3,298	31,438
Robbery	0	0	788	-	-	-	6	269	123	255	1,440
Burglary in a dwelling	0	21	£3046	9	12	- 19	16	1,048	£483	£2601	2,882
Theft	221	177	846	846	187	- 22	11	6	-	217	2,268
Theft - not vehicle	59	52	192	281	69	- 36	1	10	-	301	844
Theft of vehicle	-	33	118	175	17	- 13	1	3	-	199	634
Theft from vehicle	546	370	800	2,367	349	- 542	1	47	-	50	4,138
Attempted vehicle theft	116	50	266	240	126	- 11	1	20	-	65	858
Criminal damage	65	21	194	-	154	-	1	11	-	126	510
	13	36	472	-	212	-	2	6	-		866

Criminal Justice System

3. DAC Drivers: Ecological

Theft and insurance replacement / upgrade drives consumption and contributes to premature obsolescence.



3. DAC Drivers: Emotional

Fear produces fortress architecture.



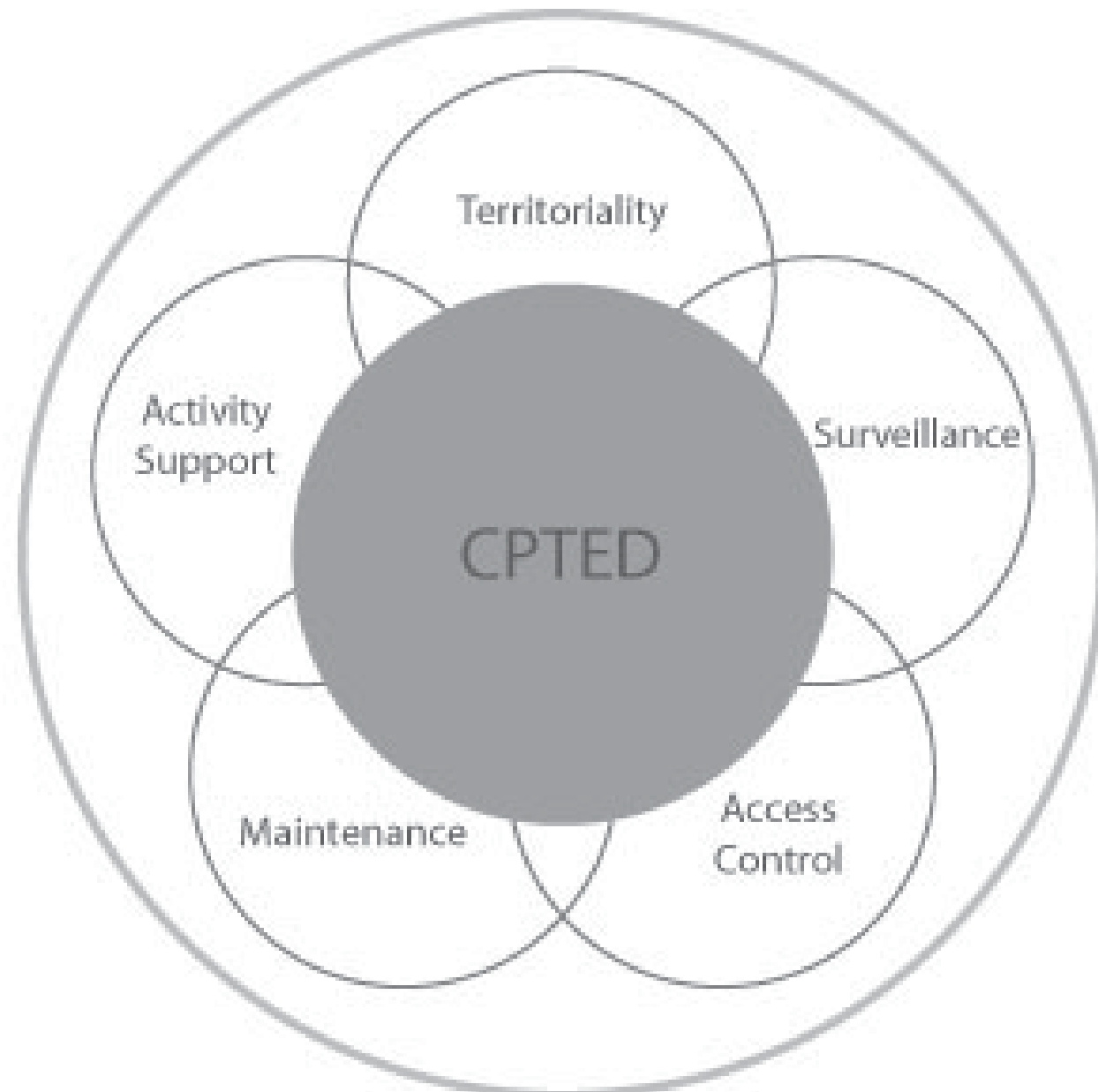
3. DAC Drivers: Emotional

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. DAC Drivers: Environmental

The wider environment



4. DAC Methodology

DACRC takes user-centred design model (IDEO 1991) and extends it to cover mis-use and abuse.

4. DAC Methodology

We look at

the user experience

and

the abuser experience



4. DAC Methodology

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.

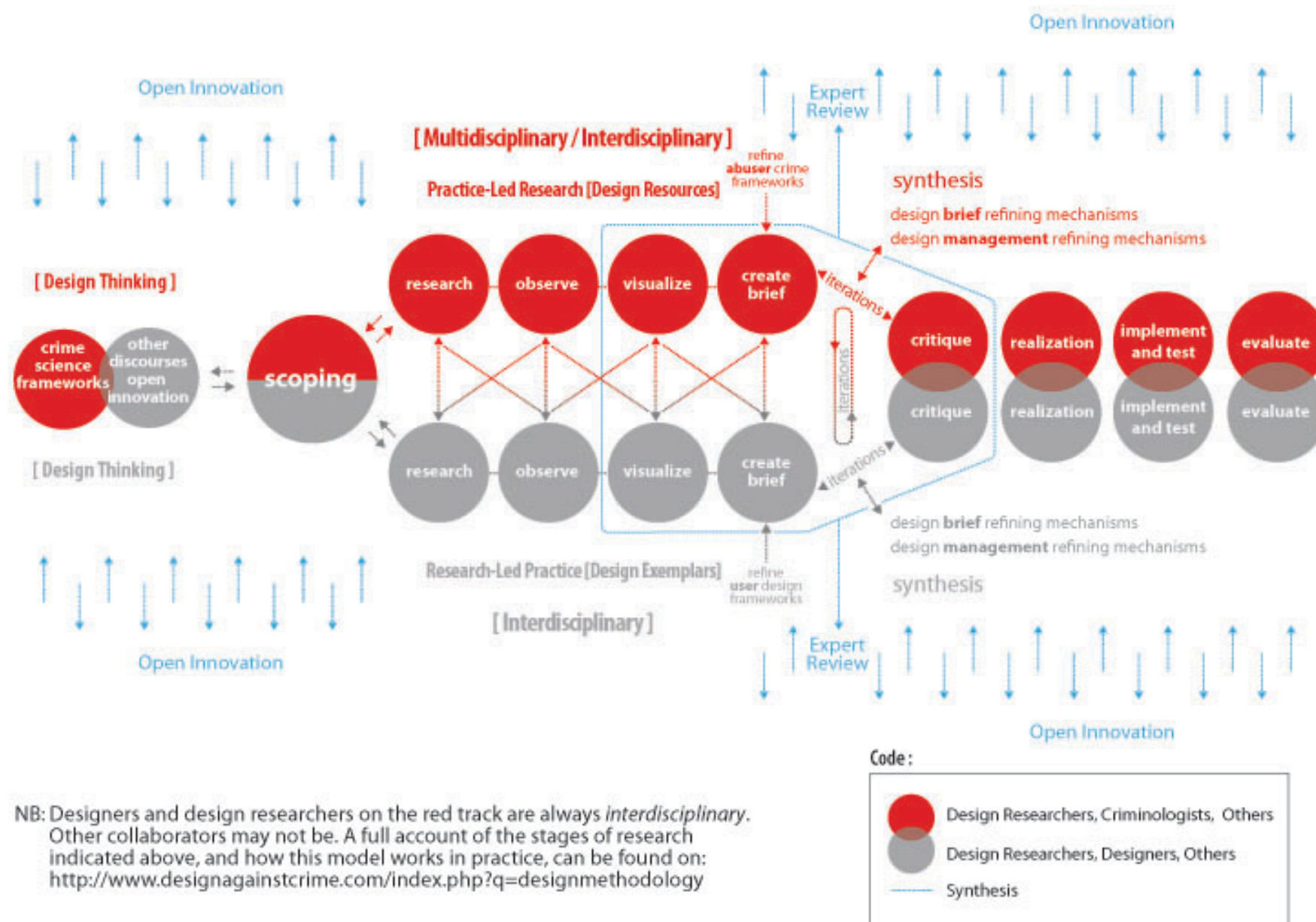
4. DAC Methodology

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

Design Against Crime

Evolved Twin Track Model of the Iterative Design Process

[Gamman & Thorpe 2007, revised 2009 for Bikeoff]



NB: Designers and design researchers on the red track are always *interdisciplinary*. Other collaborators may not be. A full account of the stages of research indicated above, and how this model works in practice, can be found on: <http://www.designagainstcrime.com/index.php?q=designmethodology>

4. DAC Methodology

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.

5. DAC Dissemination

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.

5. DAC Dissemination

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



5. DAC Dissemination



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

5. DAC Dissemination

A photograph of a wooden chair with a broken backrest. The backrest is split into two pieces, with a gap between them. A black bag is sitting on the seat of the chair. The chair has a metal frame. The background is white.

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

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6. How DACRC Research Leads to Open Innovation

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The DACRC Research and Design Methodology delivers 7 stages of focus:

1. Scoping
2. Research
3. Observe
4. Visualisation and Expert Review
5. Realisation
6. Implement and Test
7. Evaluate

These are all outlined in detail on <http://www.designagainstcrime.com/index.php?q=designmethodology#DacMethod>

6. How DACRC Research Leads to Open Innovation

These stages help us structure and deliver:

- (i) Design-led research (Co-design briefs linked to expert review)
- (ii) Research-led practice (Leading to testing and evaluation of design outputs)

DACRC adopts a 'twin track' approach which enables us to take an 'emergent' and 'Open Innovation' approach.

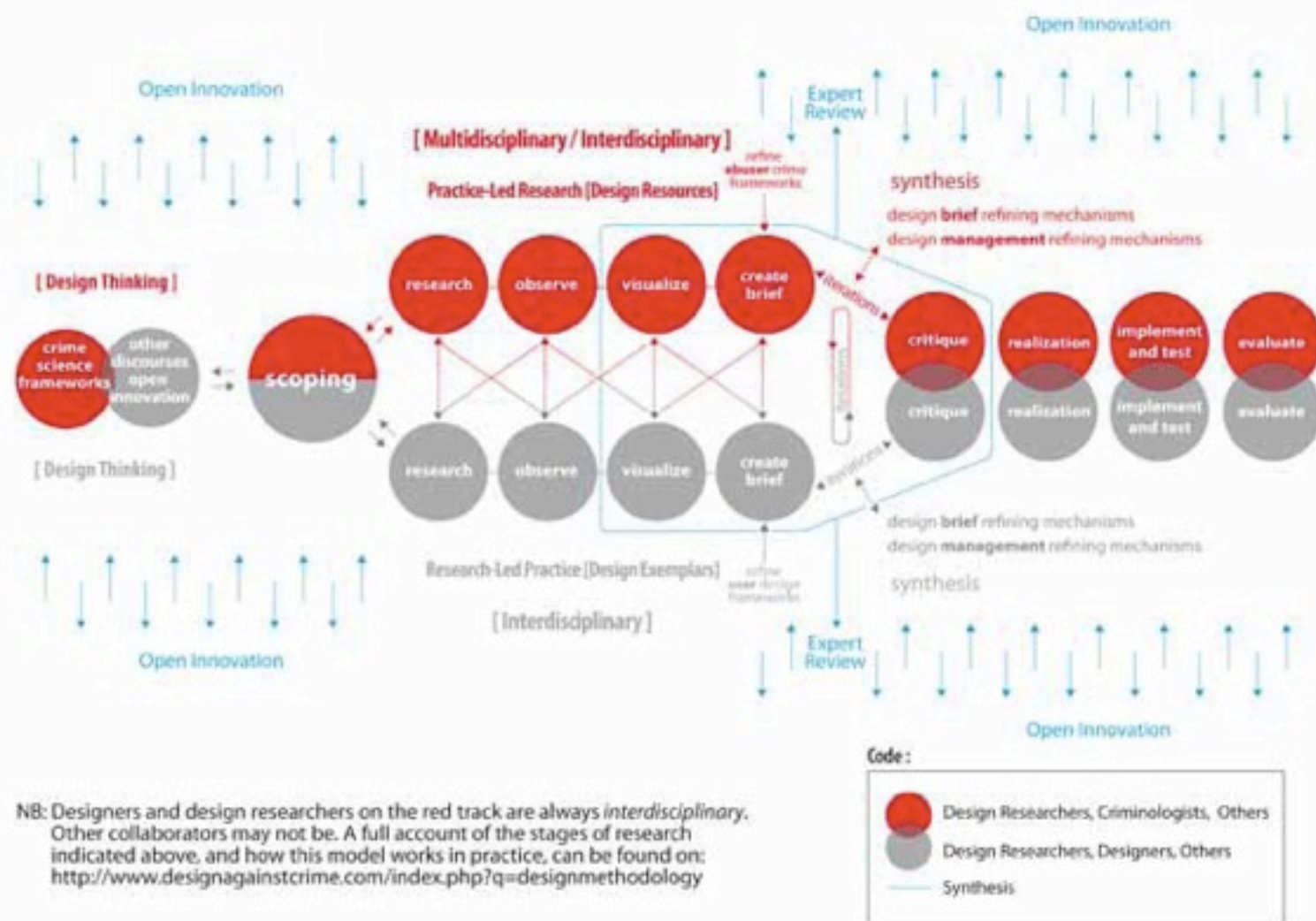
6. How DACRC Research Leads to Open Innovation

Emergent process - described by 'open' research innovation model.

Design Against Crime

Evolved Twin Track Model of the Iterative Design Process

[Gamman & Thorpe 2007, revised 2009 for Bikeoff]



6. How DACRC Research Leads to Open Innovation

We have surveyed other exemplar social design companies :

Engine - Service Design

LivelWork - Service Design

Participle - Service Design

Think Public - Service Design

IDEO - Product / Service Design

Helen Hamlyn Centre – Product / Service Design

Design Against Crime Research Centre – Product / Service Design

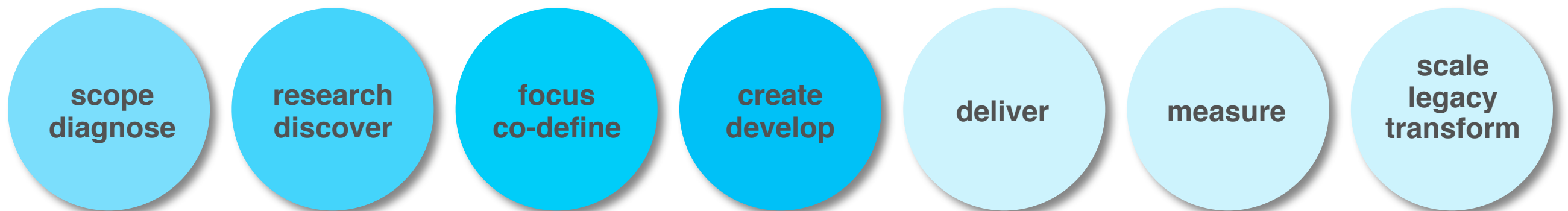
We find they say they go through a similar process, but call their stages by different names.

5. Exemplar organisations with a social design focus: PROCESSES and stages.

DAC Research Centre	Helen Hamlyn Research Centre	Engine Service Design	Think Public Service Design	Live work Service Design	Participle Design Consultancy	Ideo Design Consultancy	Young Foundation	Sorrell Foundation
Scope	Discover (perceived needs into real needs)	Orientate	Diagnose	Strategy and themes	Scoping	1. INSPIRATION	Ideas	Planning and preparation
Research		Discover	Discover	Insight	Research	Observation	Innovation	Challenge
Observe							Development	
Visualise							Engagement	
Brief development	Translate (understanding into requirements)			Focus	Idea Generation			The Brief
Critique								
Realisation	Create (concepts)	Generate	Co-Design	Refine	Prototyping	2. ITERATION	Action	Conversation
	Develop (leads to solutions)	Synthesise and Model	Develop and Test	Define		Prototyping		
Implement and test		Specify	Deliver and Enterprise	Deliver	Delivery	Building		Concept
						3. STORYTELLING		
Evaluate	Constant evaluation throughout process	Measure (with empathy)	Measure					
		Transfer and transformation						Celebrating Achievement
http://www.designagainster.com/index.php?q=designmethodology	http://www.inclusivedesigntoolkit.com/betterdesign/process/	http://www.enginegroup.co.uk/service_design/our_process/	http://thinkpublic.com/news/2009/05/05/thinkpublic-social-innovation-and-design-film/	http://www.livework.co.uk/what-we-do/service-innovation	http://www.participle.net/about/our_approach/	http://www.ideo.com/thinking/our_approach/	http://www.youngfoundation.org.uk/our-work/research-action-and-development	http://www.thesorrellfoundation.com/pdf/YDP_magazine_008.pdf
http://www.designagainster.com/files/u4/dac_methodology_09_1024_0.gif				http://www.livework.co.uk/what-we-do/service-design-capability		http://www.ideo.com/images/uploads/work/case-studies/pdfs/IDEO_RF_Guide.pdf		
Enough information, I'm linking also the "twin track" diagram. The design process is	Need to talk to them, on their website we cannot find any detailed description of their design	Strong process, well visualised on their website and clear to understand. We should definitely speak to them	Hard to find a schematic visualisation of their design process but the different stages are mentioned in their	This process is found in their Service Innovation section. Unable to find a more detailed explanation.	I am sure they would add some stages to the process if we talk to them. They are very keen in the idea to promote and	They describe this as their Approach or Design Thinking. The process is not linear and they just talk about three key	The young Foundation Research Process is described in four stages. They don't actually talk	Young Design Programme design process: Page 18 of 19 PDF document.

6. How DACRC Research Leads to Open Innovation

Common stages in the social design processes



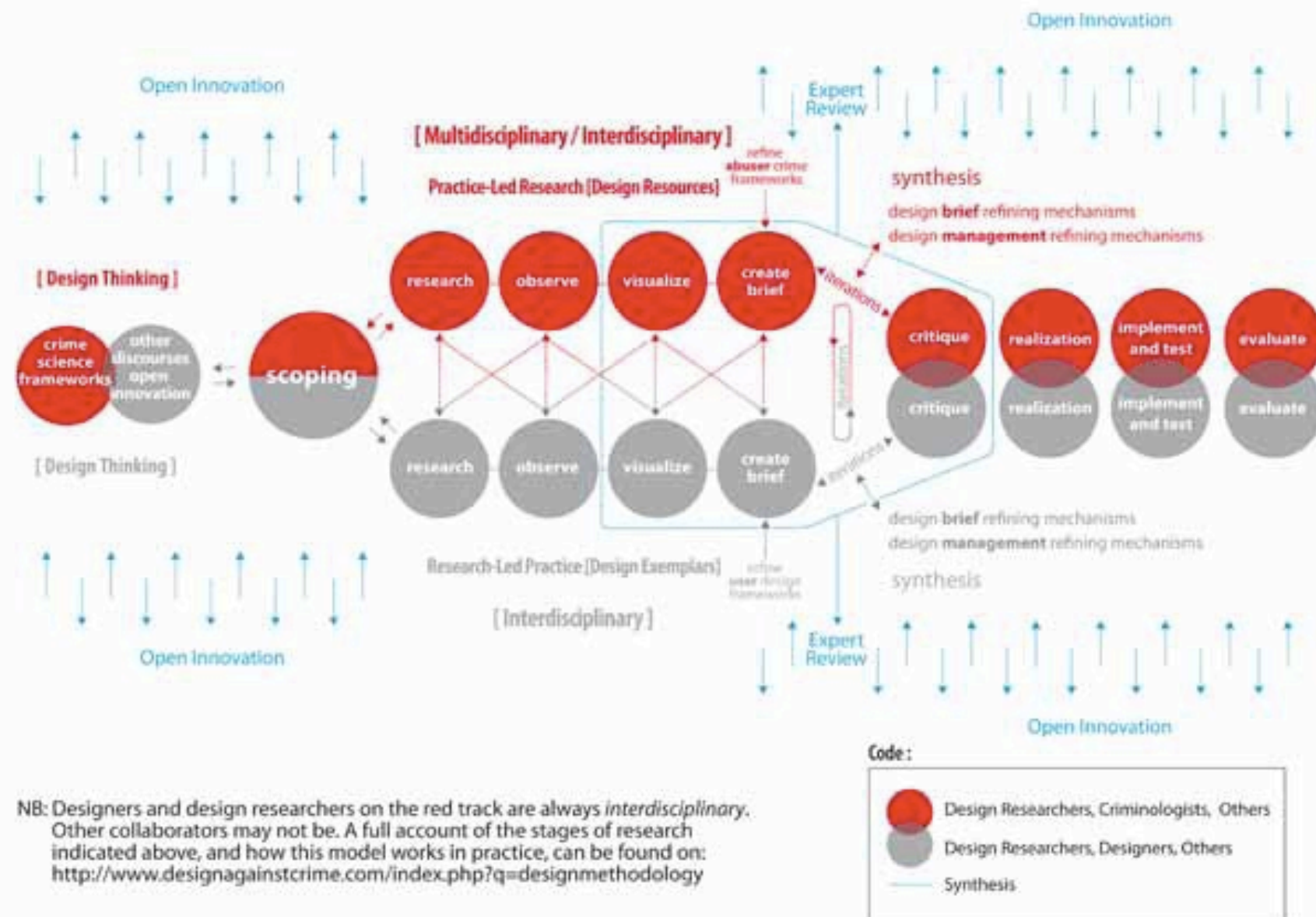
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Emergent process - described by 'open' research innovation model.

Design Against Crime

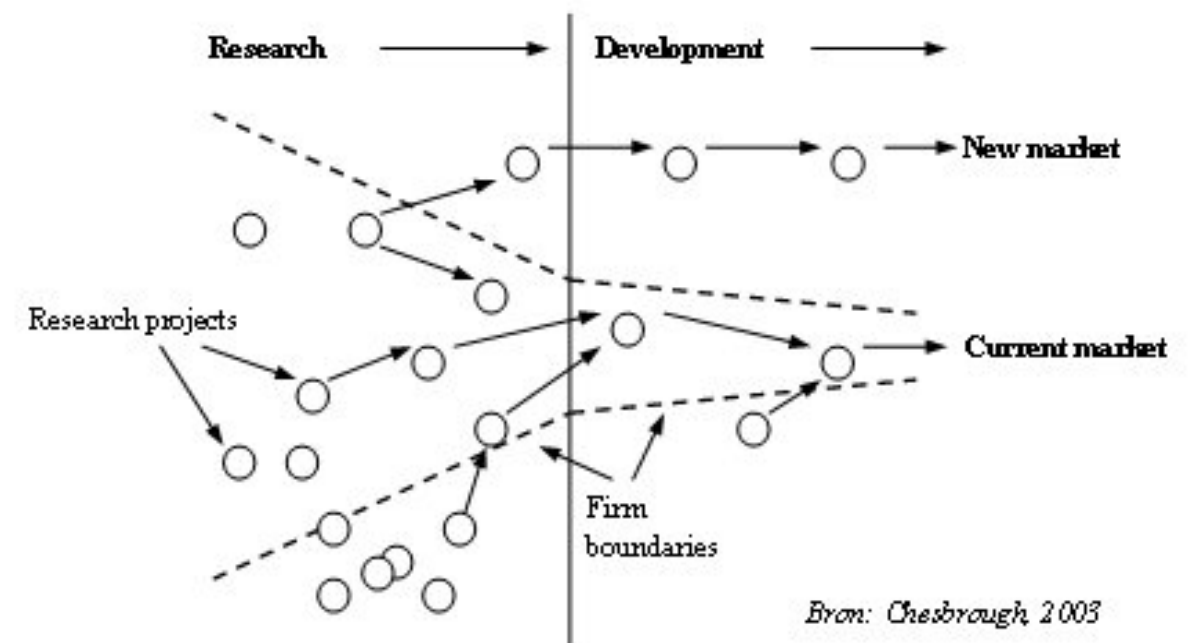
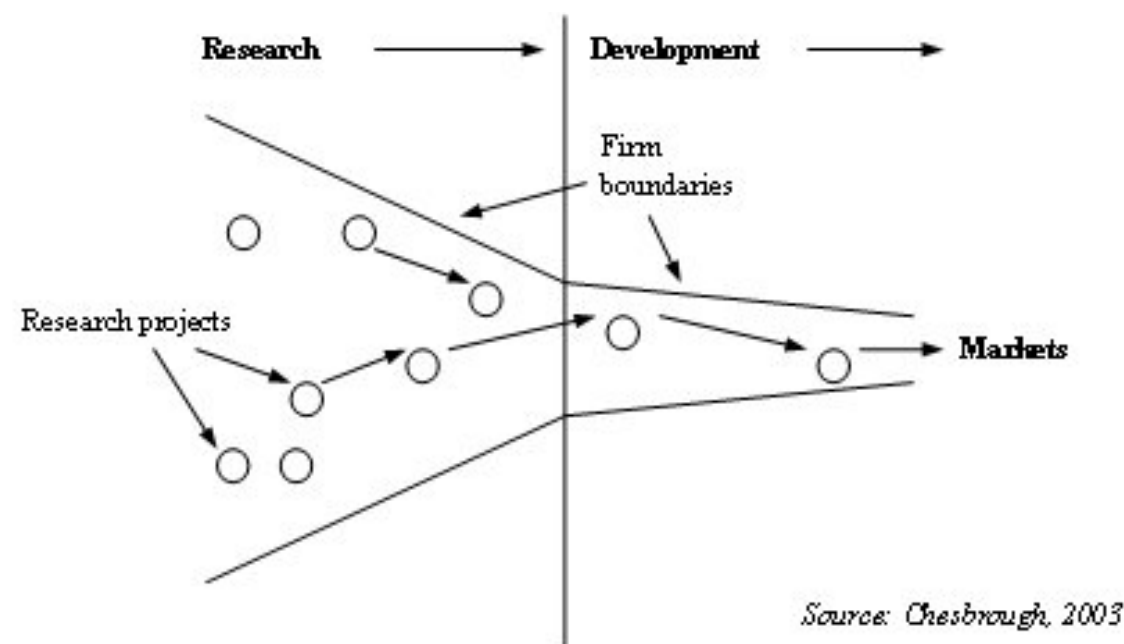
Evolved Twin Track Model of the Iterative Design Process

[Gamman & Thorpe 2007, revised 2009 for Bikeoff]



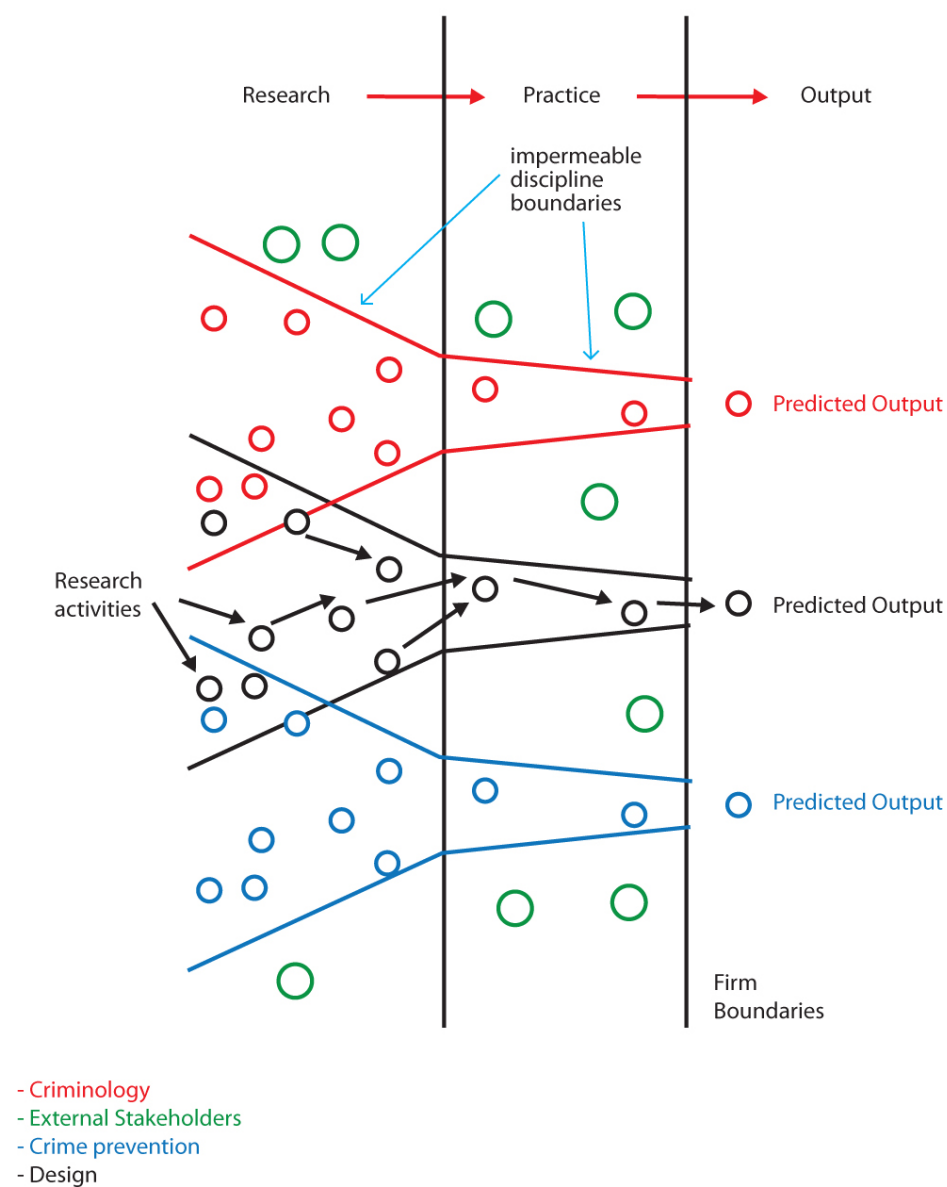
6. How DACRC Research Leads to Open Innovation

Chesbrough 2003, 'open' and 'closed' innovation

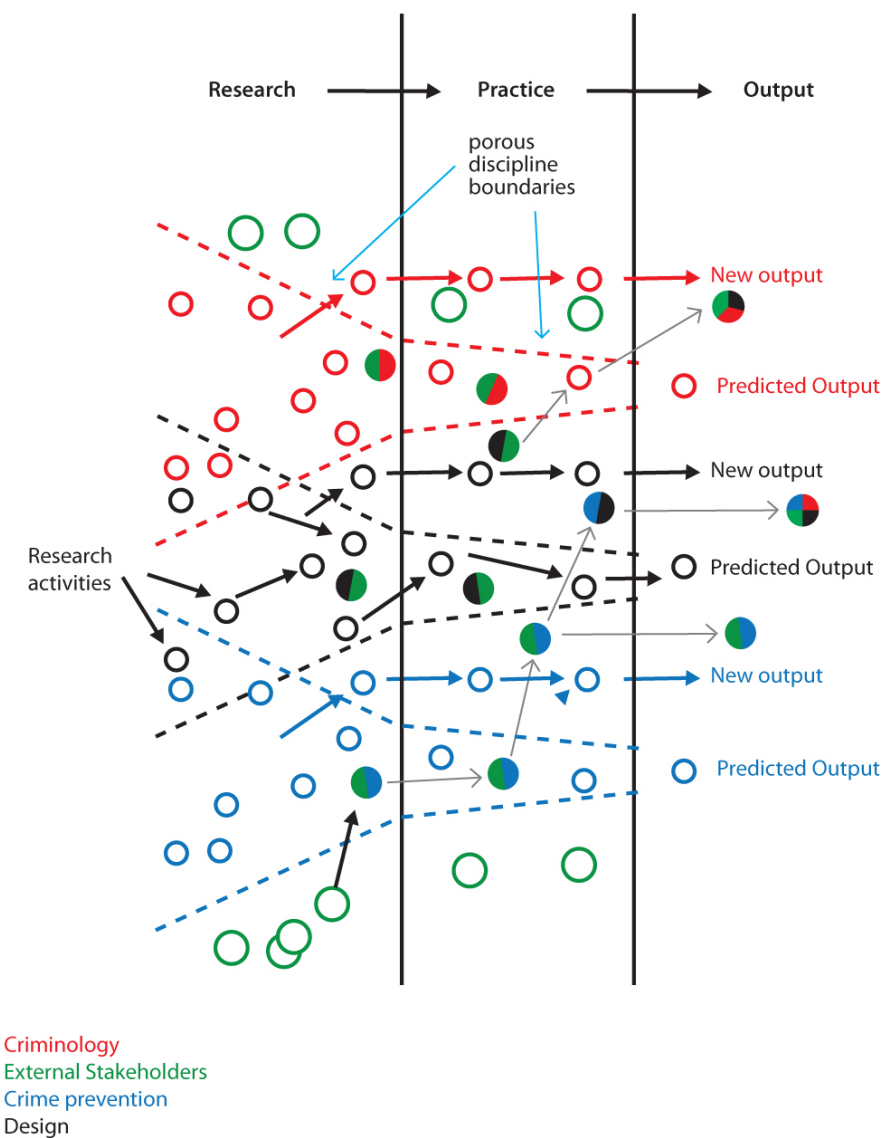


6. How DACRC Research Leads to Open Innovation

Closed Research Innovation



Open Research Innovation (emergent)



7. Conclusion

What can DAC / Bikeoff2 methodology contribute to innovation?

- Delivery within 'stakeholder landscape' engages multiple disciplines and multiple stakeholders in tackling complex scenarios via inclusion of diverse knowledge and practice.
- 'Visualisation' facilitates synthesis of multidisciplinary knowledge (interdisciplinary outcomes).
- Ensures research questions stay close to stakeholder needs (demand pull over supply push).
- Research that is collaboratively realised with stakeholders is easily and readily applied by them = exploitation of research = innovation.

7. Conclusion

Addresses common causes of innovation failure (O'Sullivan, 2002);

- Poor goal definition: Iterative, open approach re-defines and focuses goals
- Poor alignment of actions to goals: Iterative practice and evaluation aligns actions and goals
- Poor participation in teams: Dutyholders have a responsibility to participate, Stakeholders (Lead-users/Advocates) agitate and demand participation - open model lets them make their own teams.
- Poor monitoring of results: Iterative critique and evaluation in built and open.
- Poor communication and access to information: Open model facilitates communication by 'visualisation' and iterative seminars, exhibitions and events.

8. Why should design thinking, process and methods be applied to social issues?

Design-aware companies outperformed the FTSE All share by over 200% in both bull and bear markets over a 10 year period.

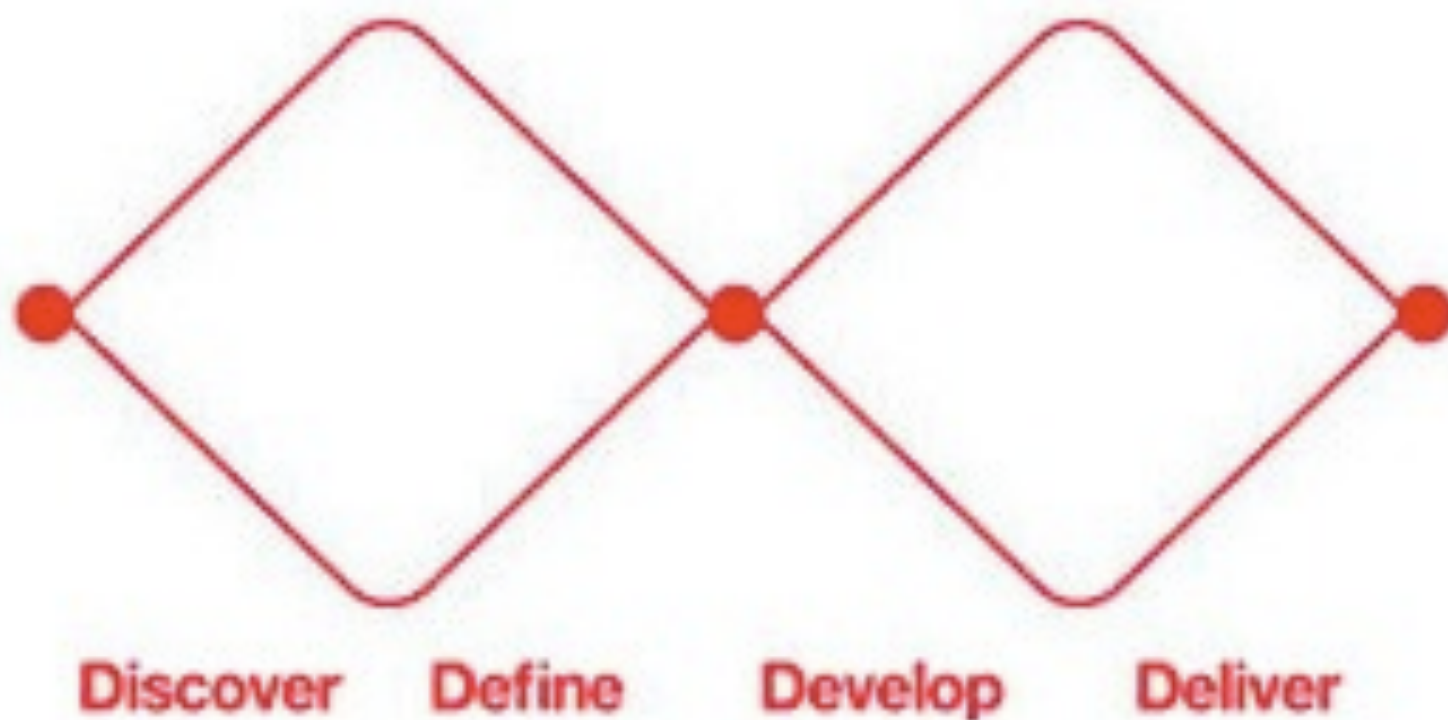


Design Council (2005) Design Index: The impact of design on stock market performance.

If design can do this for the private sector what can it do for the third sector?

9. Design Research Stages

Design Council Double Diamond, 2005.
11 leading design companies, 4 common stages.



How will these stages - from our DACRC process model - help you structure the work of your PhD?

Thank you.

Professor Lorraine Gamman
Adam Thorpe

www.designagainstcrime.com

