

Crime prevention in urban development – A societal challenge

Paul Ekblom

Design Against Crime Research Centre
University of the Arts London



What's coming up

- The present and future challenge of crime and crime prevention in the built environment
- Defining solutions, and conditions for success
- Is CPTED fit for facing the challenge and delivering the solutions? Some problems and limitations
- Updating CPTED to make it fitter for purpose
 - A specification
 - Towards realisation
 - Definitions, discourses and concepts
- Technology
- Futures

A challenging future for the built environment

- Societies throughout the world are faced with ever more problems to resolve:
 - Climate change – agriculture and sea level
 - Water shortage
 - Peak oil
 - Ageing population in regions like Europe
 - Fast-growing youthful population in Africa & Middle East
 - Inequalities
 - Crime and terrorism
- And these against a background of
 - Economic difficulties
 - In many places, poor governance

Both the problems, and attempted resolutions, impact on the built environment

And the built environment in turn impacts on the rest of the world



Crime and terrorism

- Crime and terrorism in particular often result from diverse societal failures and conflicts
 - Ranging from clashes over habitable land to fights over residential car parking spaces
- The problems of climate change etc are likely to exacerbate these conflicts and limit the resources available to address them

Wherever crime and terrorism occur they make things significantly worse

- Amplifying and sustaining the conflicts
- Introducing new layers of fear and violence which further reduce quality of life
- Demanding resources of their own (human, financial, political) which could be better used elsewhere

Solutions to crime problems may make matters worse too

- Imposing enormous costs (Criminal Justice)
- Restricting choices and legitimate opportunities
- Conflicting or competing for resources with other goods, values or policies
 - Aesthetics and fear
 - Accessibility and amenity
 - Inclusion
 - Sustainability

**Defining the right kind of solutions
and the conditions for success**

Solutions to crime and terrorism – the ultimate requirements

- Solutions must not interfere with the so-called ‘triple bottom line’ of development
 - sustainability of **‘people, planet and profit’**
- Solutions must themselves be sustainable, resilient and adaptable to diverse geographical and social contexts in the contemporary world & the range of possible worlds to come
- These requirements apply whether we are dealing with street lighting in housing estates in Europe, fencing in the townships of S Africa or water outlets in the favelas of Brazil
- Thinking on this broader scale may help us in Europe to better understand what we are doing in CPTED and why

From problem to solution

- Given these pressures to create solutions and these constraints on what can be done, the only approach to sustainably improving quality of urban living (and not making things worse) is through (good quality)
 - Planning
 - Design and engineering
 - Good management including self-management
- And supporting these processes
 - Good governance
 - Good quality, ample quantity, of research
 - Good horizon-scanning (every plan or design is a bet on the future, and getting it wrong may leave a legacy of crime and other problems for decades)

Articulating conflicting requirements

- Planning, design and management all seek to identify and resolve competing and conflicting requirements, 'hosted' by diverse stakeholders and dutyholders
- They do this better through innovation than compromise
- The more clearly (but dispassionately) the conflicts are articulated, the better the prospects for resolution

Planning, Design, Management & Maintenance

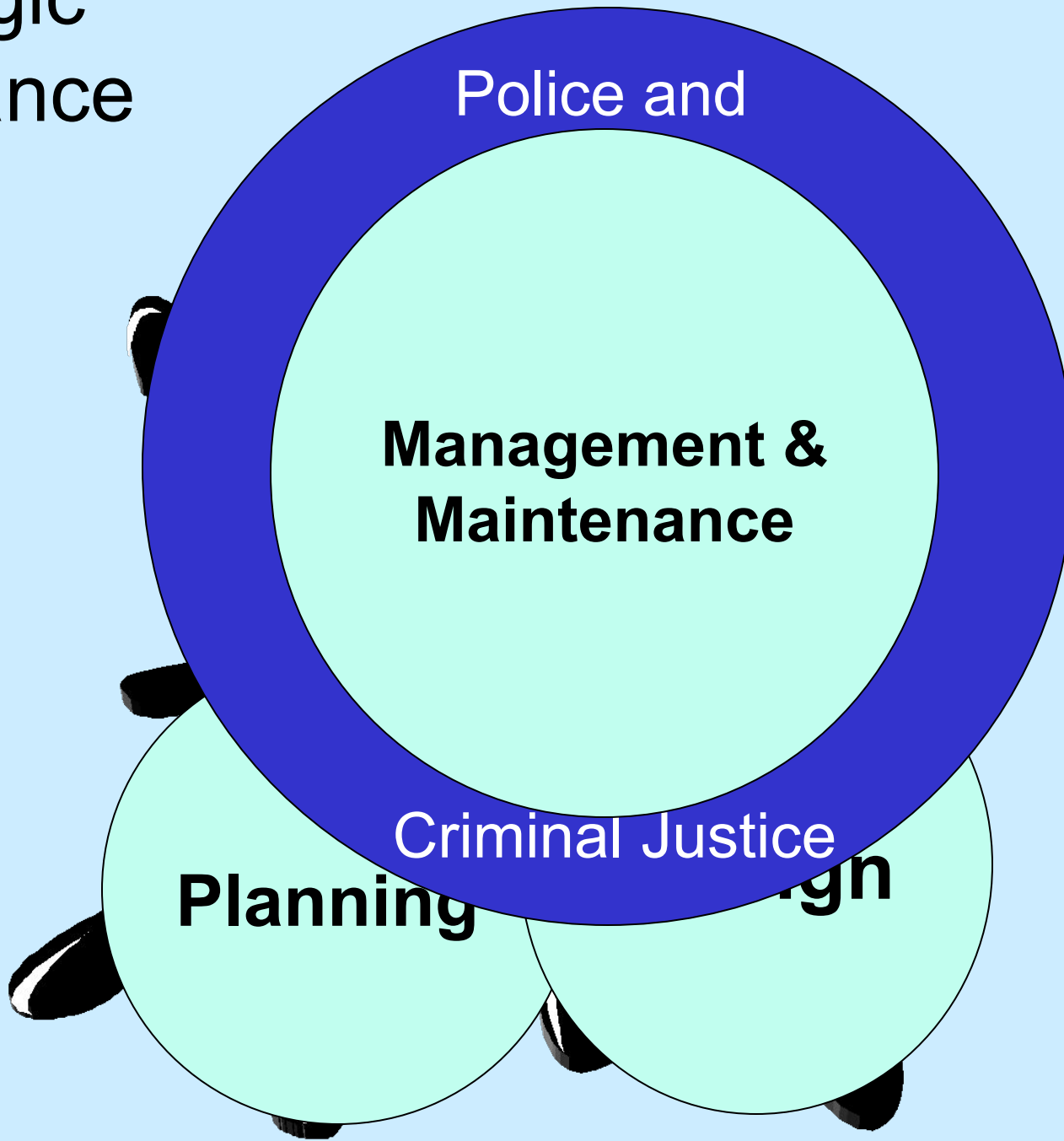
Management & maintenance

Design

Planning



Strategic
imbalance



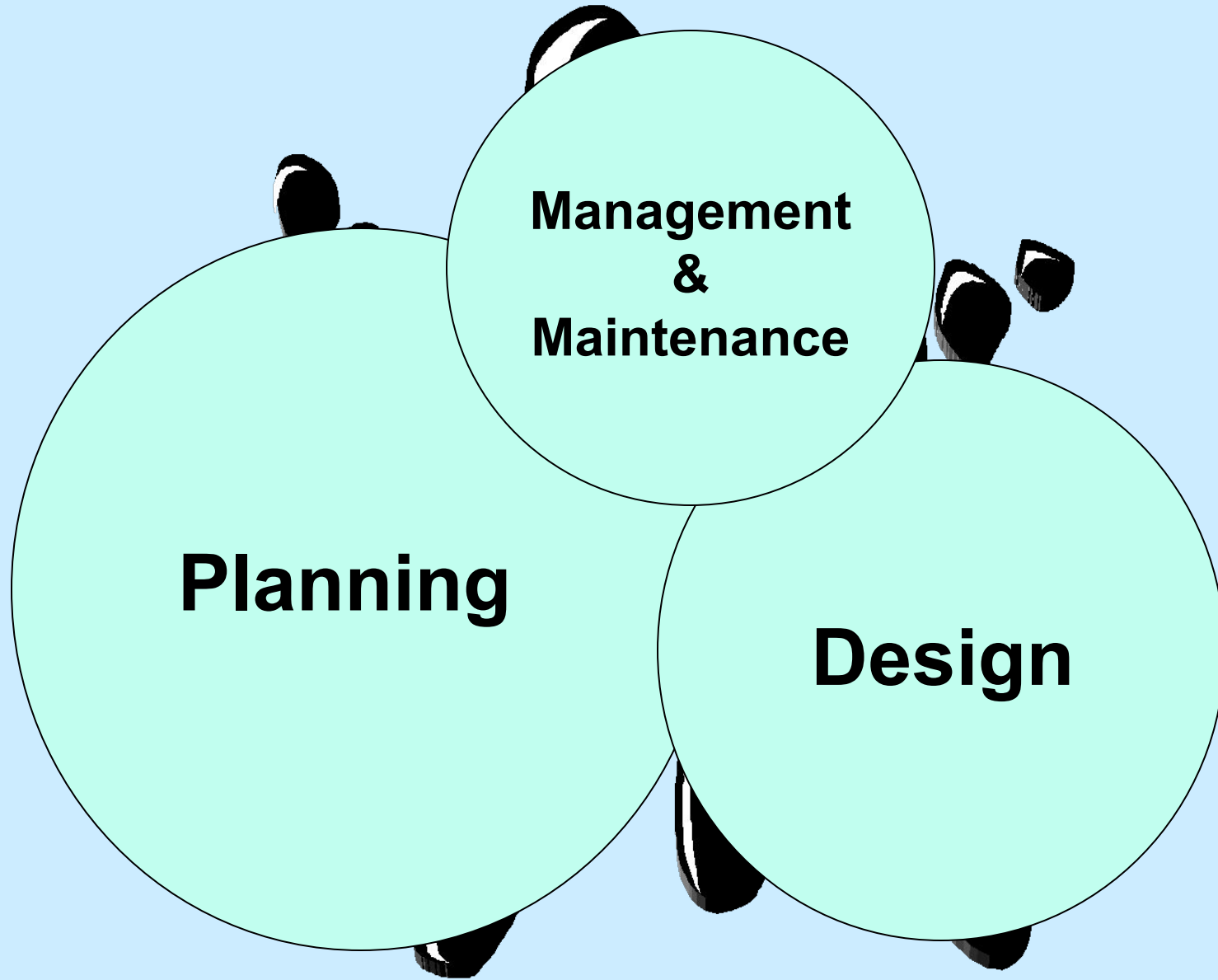
**Management &
Maintenance**

Criminal Justice

Planning

Design

Strategic balance – Make most effort upstream but leave human & physical flexibility downstream



Effective application of these processes is by no means guaranteed

- A number of **conditions external to CPTED** are **necessary for success**:
 - Good **data and analysis** on patterns and trends in crime at different geographical and temporal scales
 - Adequate **powers, incentives and resources** to lead people and organisations towards solutions
 - Adequate **involvement** of residents and other stakeholders
 - A **political climate and culture** that is **receptive** and **durable**, low in **corruption**
 - A valid, reliable and wide-ranging **evidence base** of fundamental crime and crime prevention research

**Is CPTED fit for facing the challenge
and delivering the solutions?
Some problems and limitations**

Is CPTED fit for purpose?

Given the present and future challenges, we must ask whether CPTED as we currently know it is capable of delivering – of making our urban environment significantly better, without making things worse or constraining our ability to address wider problems

CPTED – Problems

- **Definition** imprecise & **scope** unclear – leaving CPTED prone to fashion and drift of meaning, and to meaning different things to different agencies/ disciplines
 - *Shift from public space to ‘hard security’ – do we want this?*
- In a disciplinary **‘No Man’s Land’**:
 - Isolated from criminology, crime prevention, risk management
 - Isolated from design & architecture



CPTED Problems – Isolation from Criminology & Crime Prevention

- Problems with **individual principles** of CPTED
 - territoriality may not be universal – cultural context important
- Contradictions **between** CPTED principles - eg surveillance v territoriality
- Detailed **criminological evidence base** needs developing on specific risks of crime which CPTED seeks to tackle, and what interventions work in what contexts
 - Broken windows theory, while very plausible, only partially supported by research; but uncritically accepted by practitioners
- CPTED also carries **historical baggage**
 - Principles and theories not integrated
 - Bad for Knowledge Management



CPTED Problems – Isolation from Design and Architecture

- CPTED sometimes fails to consider **whole system**, humans and all, not just physical aspect
- **Crime Prevention** often set **against** other design principles eg defensiveness *versus* accessibility, when **design** should be about creative optimisation of *all* relevant values/benefits
 - Designs should be simultaneously **user-friendly** whilst **abuser-unfriendly**
- Many police users of CPTED in *practice* see ‘design’ as a set of physical **products/buildings**. It should also be seen as a **process** – a way of doing and thinking - which applies to all kinds of crime prevention, imparting a design perspective and design approach

CPTED Limitations – Rigidity

CPTED can be used rigidly or flexibly

- Practitioners with elementary training risk rigidity and over-emphasis on crime, which can be costly or likely to discredit the approach in eyes of architects
- Failure to fit design requirements to context
- Cookbook copying doesn't work

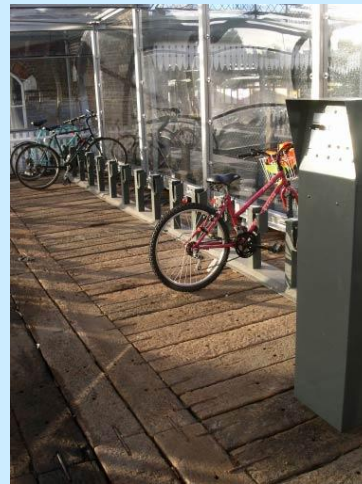
Beware cookbook copying – Importance of context for replication

ELECTRONICALLY SECURED CYCLE PARKING

GHENT, BELGIUM



WALTHAMSTOW CENTRAL STATION, LONDON



CPTED Limitations – Rigidity

- Adaptable criminals – countermoves, new tools and techniques to exploit environment, even shape it in their favour
 - Ironically, drug dealers and criminals use CPTED principles to create “offensible” space for own criminal activities
 - Failure of designers to anticipate



False security from rigid prescription + adaptable criminals?

'Helpful' entrance porch



CPTED Limitations – Neglects Wider Social Context

- Efficacy of CPTED can be reduced (or increased) by **demographic** factors (eg high densities of young people) and **socio-economic** factors. Social conditions may nurture fear, reduce inclination to intervene and result in withdrawal of people into home, which becomes heavily fortified
- Realisation of this was one of reasons behind creation of **Second Generation CPTED** in late 1990s



Updating CPTED

Redesign – a specification to improve CPTED's fitness for purpose

- Clearer **definition and scope** of CPTED
- **Clear, rigorous and communicable concepts** for how to intervene through environmental planning & design
- Clear **social** dimension
- **Scientific** – building up its own evidence and theory base and connecting these with source disciplines
- Good understanding of **causes of crime & terrorism** and how these interact with **development-related factors** & wider local **context**
- Sensitive and adaptive to different **scales** and **contexts**
- Creative balance of **values and priorities** within security field, and between security and other values
- Sufficient **capacity** to **innovate, anticipate** and plan for change
- **Professionalism** – expertise, quality assurance, ethics – but avoid *professional defensible space*
- Importance of **co-design** with **users** of buildings, streets, malls
- **Futures-oriented** – world out there, & using new technology
- Good **process model** for applying know-how

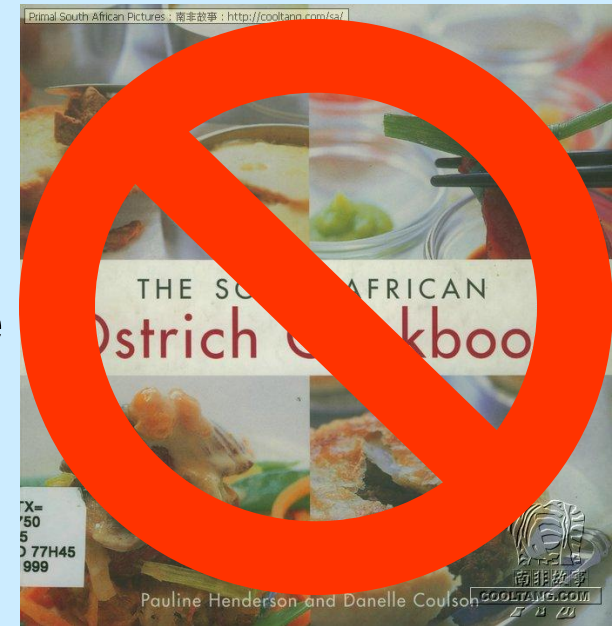
Design – product or process?



- Is design what we make, how we make it, or both?

Importance of process knowledge – throwing away the cookbook

- Crime prevention requires practitioners to
 - Be adaptable, subtle, alert to tradeoffs – customising the response to context, and creating and configuring plausible proposals for new circumstances
 - Replication is innovation
 - Handle uncertainty and lack of complete knowledge of what works
 - Anticipate and allow for change
- This needs practitioners more like expert consultants than technicians



A Definition of CPTED

- **CP** Reducing the possibility and probability of **crime, disorder and terrorist events**, and their consequent harm, and enhancing the quality of life through **community safety**
- **ED** By using processes of planning and design of environment
- On a range of scales and types of place from individual buildings and interiors to wider landscapes, neighbourhoods and cities
- To produce designs that are 'fit for purpose', and contextually appropriate in all other respects
- Whilst achieving a balance between
 - the efficiency of avoiding crime problems *before* construction
 - and the *adaptability* of tackling them through subsequent management and maintenance

Re-defining CPTED concepts – e.g. Territoriality



Territoriality is central to CPTED...

But **poorly defined**, so we can't

- Readily spot **weaknesses** in design relating to territoriality
- Positively design **for** territoriality
- Monitor & adjust **mechanisms** of prevention (how they work)
- Clarify **values** embedded in design
- Undertake innovative tradeoffs with values **outside** security eg between permeability & defensible space
- Handle tradeoffs and conflicts **within** security eg territoriality v surveillance (walls keep people out but block vision)
- Understand the subtle **sociological, cultural & subcultural** interpretations and dynamics at different **ecological levels** (individual, household, community) that influence how CPTED is implemented and accepted, and how it might go wrong

Territoriality is central to CPTED...

We don't even have a clear understanding of the **discourses** through which Territoriality and the other core CPTED concepts are expressed



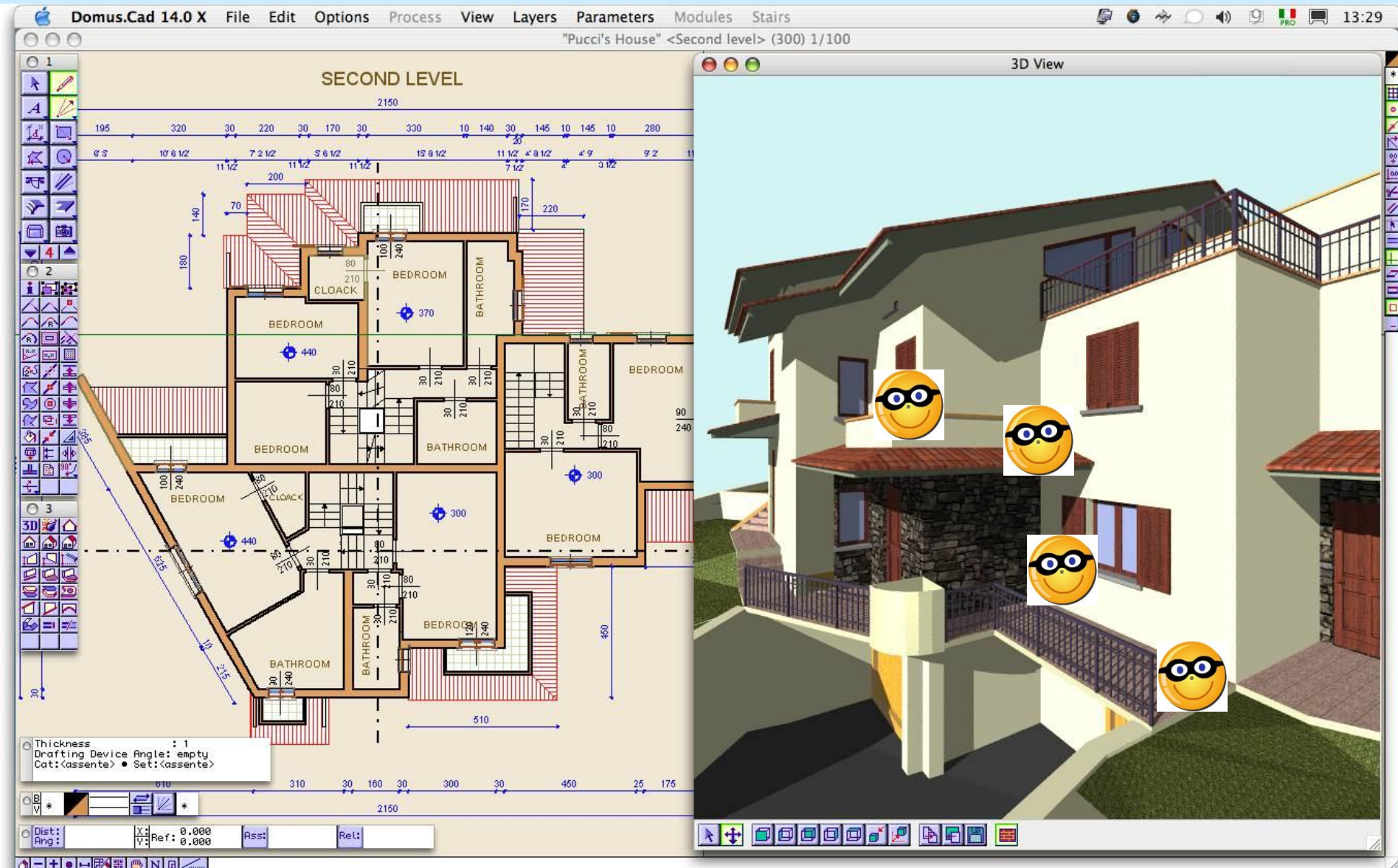
Territoriality

- Territoriality is both a **value** in itself (an Englishman's home is his castle) and an **instrumental means** to crime prevention ends
- As used in CPTED practice and literature, it is unclear whether it is a **human attribute**, or a socially-ascribed and physical **property of space**
- Best to consider it as both (**territoriality** and **territory**), subsumed under an **ecological** framework which includes human **agents** in relation to their **environment**
- **Read more in EJ CPR Vol 17**

Increasingly, we have the technology



Computer aided design



Virtual Reality for lighting design

- Enables designers to visualise lighting before implementation
- Provides a means of communicating design ideas to different interest groups



millets

Going Places

Thornlovs

GIRO CITTERI

Going Places



millets
THE GROCERY STORE

Going Places

Thorntons

CIRO CITTERIO

Going Places



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Going Places

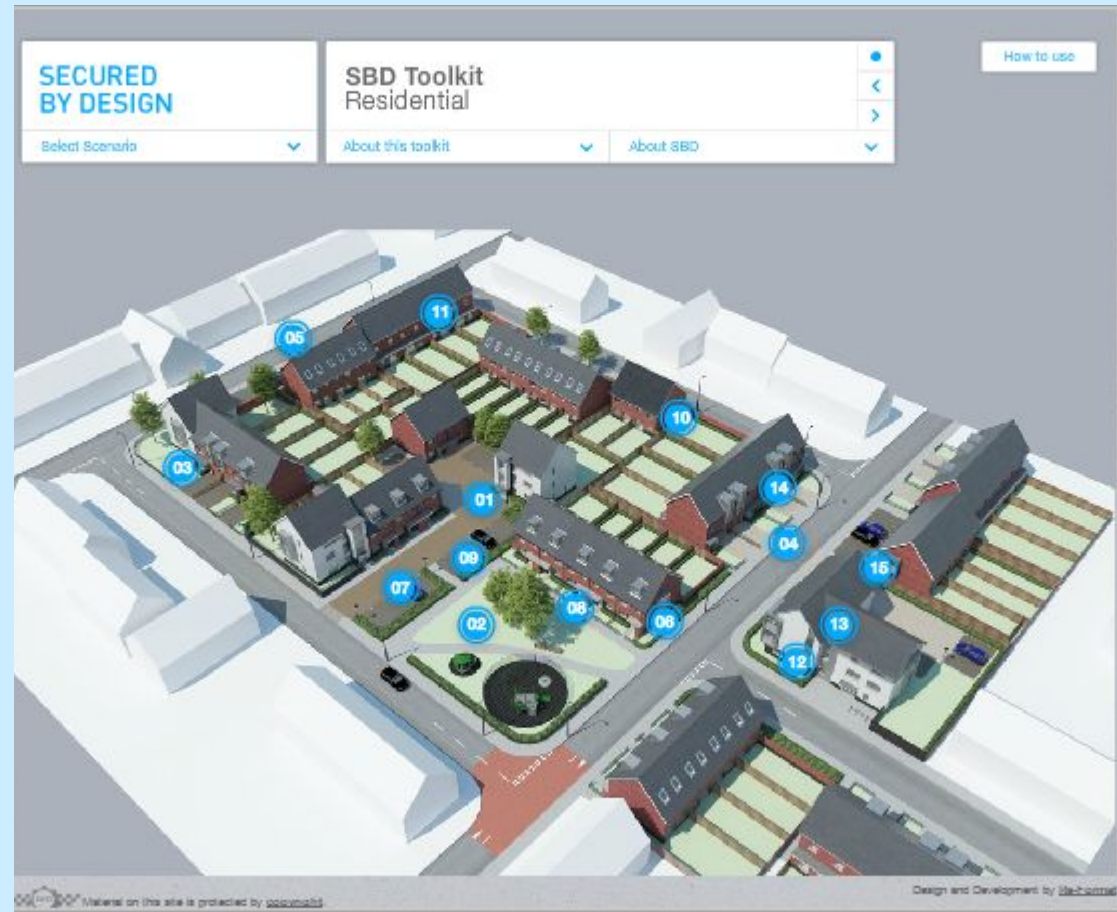
The Newsstand

GIRO CITTERI

Going Places

3D toolkit for teaching CPTED – UK Secured By Design

- Allows practitioners to explore the principles of designing-out crime within a 3D CAD-style housing plan
- A series of scenarios highlight the design decisions that would increase the risk of crime and anti-social behaviour



www.securedbydesign.com/toolkit

Mobilisation and research – local feedback and consultation



London

Explore Show



Quick navigation

- Home
- About Us
- Feedback
- Cycling Routes
- File Parking
- Water Parking Boards
- Current Parking

Welcome to Bikeoff.org

Please let us know your recommendations for improving bicycle parking facilities, such as street lighting, bollards, etc. Below you will find a list of bicycle parking facilities in London. You can click on the icons to see more details.



File parking Street parking Covered parking City bike schemes

Due to new site reconstruction work and other reasons, the bike parking standards consultation documents will not be available until 1st November, 2008. Alan Thomas and PHF London Division, 15 October 2008

- [Improving the Bike Shed Survey](#)
- [Revamping the bike shed survey](#)
- [Cycling Action List](#)
- [New Bike Theft List](#)

How to take parking images

Upload images of your facility (or a photograph of the area you are interested in) to the site and send your feedback to the site. You can also send your feedback to the site via email.

Useful Links

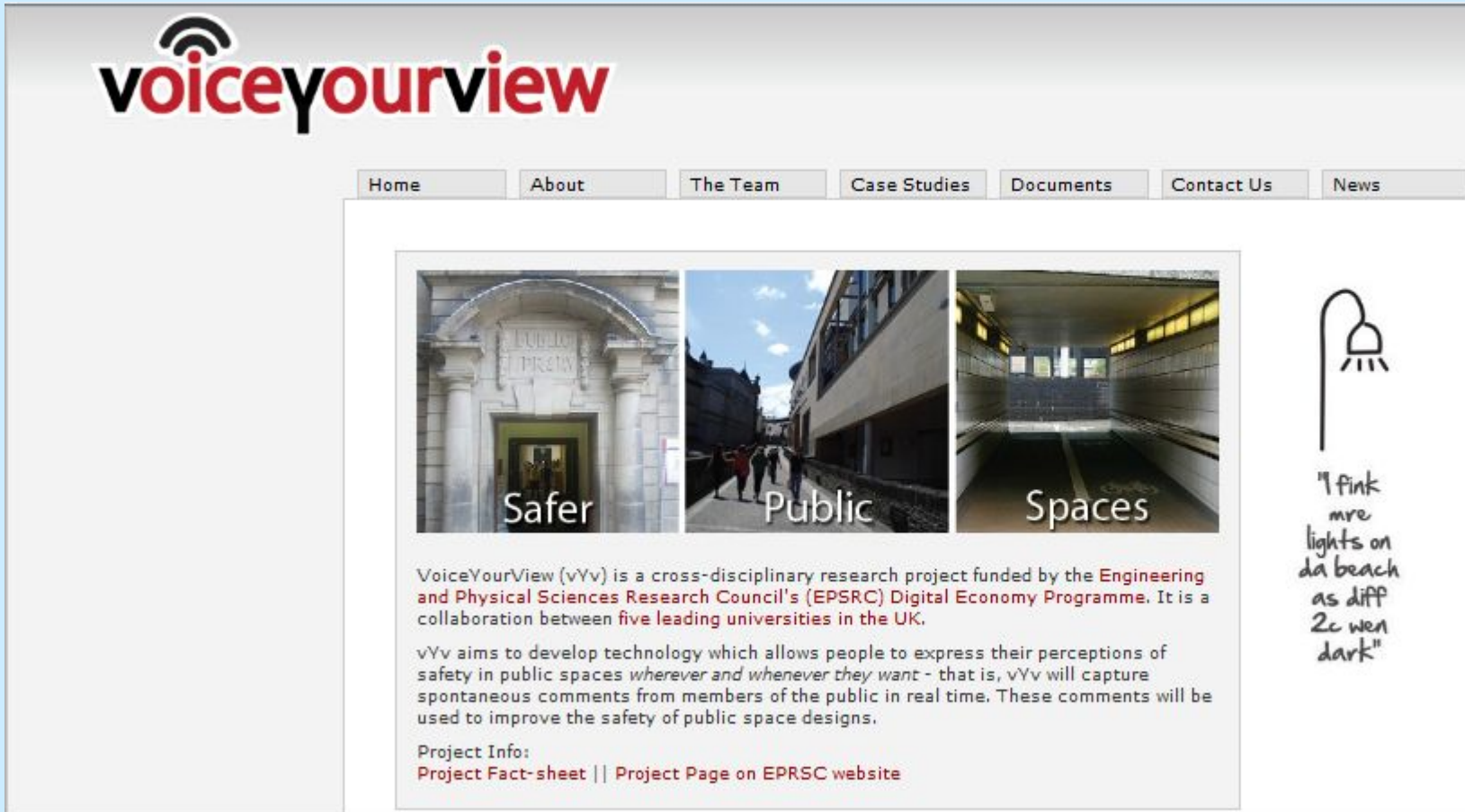
- [London Cycling Campaign](#)
- [Cycling Action List](#)
- [Cycling Routes](#)
- [Cycling Routes](#)
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Post-development user feedback

vYv aims to develop technology which allows people to express their perceptions of safety in public spaces *wherever and whenever they want* - that is, vYv will capture spontaneous comments from members of the public in real time. These comments will be used to improve the safety of public space designs.



The screenshot shows the homepage of the voiceyourview website. At the top left is the logo, which consists of a stylized Wi-Fi symbol above the text "voiceyourview" in a red and black font. Below the logo is a horizontal navigation menu with buttons for "Home", "About", "The Team", "Case Studies", "Documents", "Contact Us", and "News". The main content area features three images: a classical stone archway labeled "Safer", a modern city street with pedestrians labeled "Public", and an underground subway station labeled "Spaces". To the right of these images is a hand-drawn sketch of a street lamp with the handwritten text: "I fink mre lights on da beach as diff 2c wen dark". Below the images is a paragraph of text describing the project as a cross-disciplinary research project funded by the Engineering and Physical Sciences Research Council's (EPSRC) Digital Economy Programme, a collaboration between five leading universities in the UK. It reiterates the project's goal of capturing real-time public feedback to improve public space safety. At the bottom of the page are links for "Project Info:", "Project Fact-sheet", and "Project Page on EPSRC website".

voiceyourview

Home About The Team Case Studies Documents Contact Us News

Safer Public Spaces

I fink mre lights on da beach as diff 2c wen dark"

VoiceYourView (vYv) is a cross-disciplinary research project funded by the **Engineering and Physical Sciences Research Council's (EPSRC) Digital Economy Programme**. It is a collaboration between **five leading universities in the UK**.

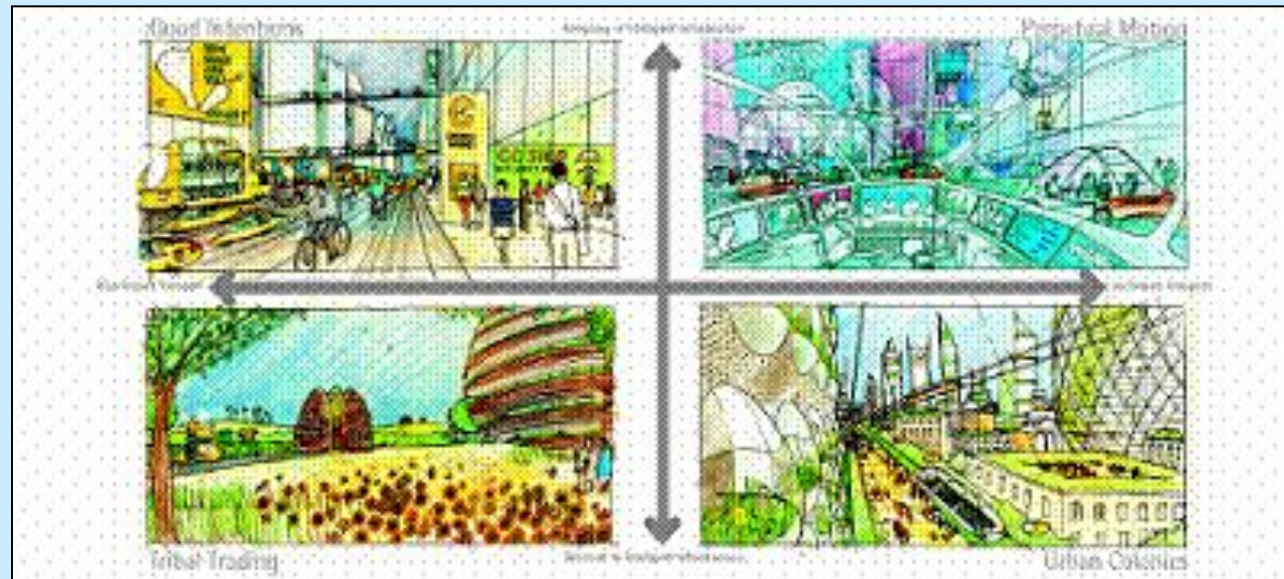
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www.voiceyourview.com

CPTED – futures

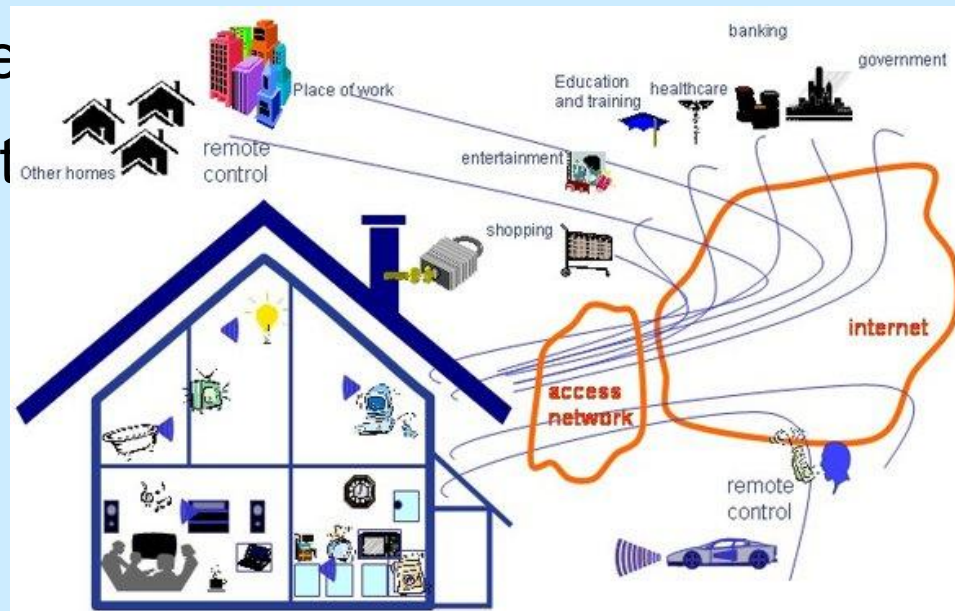
- Changing crime – new tools, new targets
- Changing priorities
 - Sustainability
 - Low energy
 - Resilience to climate shift, terrorism
 - Privacy/freedom v security



CPTED – futures

Changing context on all scales –
crime threats and CP opportunities

- New land uses
- Blur between products, places, systems
- Intelligent homes linked to inte
- Automobiles v public transport
- Cameraphones – changing nature of ‘eyes on street’
- Intelligent CCTV, multimodal alarm systems
- New building materials – sensitive, resilient, anti-graffiti?



**TO BE CONTINUED...follow
developments and contact us at**

Design Against Crime Research Centre

p.ekblom@csm.arts.ac.uk

www.designagainstcrime.com/web/crimeframeworks

<http://5isframework.wordpress.com>



EXTRAS

Defining professional crime prevention

Crime prevention is ethically-acceptable and evidence-based advance action, intended to **reduce the risk of criminal events**

Reduction of **risk** can be achieved through

- Eliminating the **possibility** of the criminal events
- Reducing the **probability** by intervening in the causes, or alternatively stated by frustrating criminal goals by disrupting activities and organisations directed towards them
- Reducing the **harm** by advance preparation to eliminate, reduce or mitigate it

Defining Community Safety 1 >

- Community safety is an aspect of the **quality of life**, a state of existence where people, individually & collectively:
 - Are sufficiently free from, or reassured about, a range of real and perceived hazards including crime, terrorism and misbehaviour
 - Are able to cope with the hazards which they nevertheless experience, without loss of amenity (e.g. not going out at night)
 - Are otherwise sufficiently protected from their harmful consequences by victim support, family and neighbours
 - Are confident the police, CJS and other agencies will provide a responsive, fair and effective service delivering justice and remedies to the problems, conflicts and risks experienced
 - Enjoy trust – within and across cultural boundaries – in neighbours, colleagues and passers-by to support them both morally and materially in terms of sympathy; existence of collectively-upheld moral order, social control and support

> Defining Community Safety 2

- When all these conditions are sufficiently met, they enable individuals, families & communities to enjoy **wider benefits**:
 - Pursuing the **necessities** of cultural, social and economic life
 - Receiving adequate **services**
 - Exercising **skills**
 - Experiencing **well-being**
 - Engaging in **community life**
 - Creating **wealth** in the widest sense.
- Where **social cohesion and collective efficacy** and an obligation to reciprocate develop, these conditions contribute to the community's **own capacity**
 - To **address crime and disorder** in collaboration with official institutions
 - Without making informal social control **oppressive, invasive or exclusionary**, or
 - Taking the **law** into their own hands
 - And to the development of **sustainable** communities
- This definition is a **positive** one, more akin to **health** as a state of wellbeing rather than merely the absence of sickness

Discourses – what *kinds* of concept and language are used in CPTED?

- All 6 core concepts of CPTED are entangled and overlap, hence to understand Territoriality we have to understand much of the rest – they define each other
- Need to deconstruct them and develop **definitions in depth** so the ‘buried connections’ between the concepts can be exposed to view
- Those definitions all need to be in a common discourse and draw on same set of subsidiary concepts/elements
- Should form a firm basis for exploring the more subtle and complex social aspects of CPTED, so far neglected or handled superficially

Discourses: describing environment

Properties

- Space
- Movement
- Manipulation/force
- Shelter/refuge
- Perception/ prospect
- Understandability/ information
- Motivation/ emotion
- Ownership, competition, conflict
- Each has physical, psychological and social dimensions

Structural Features

- Nodes
- Paths
- Barriers /screens
- Enclosures/containers
- Furniture
- Signage

Content

- People (bodies)
- Furniture
- Mobiles (cars etc)

Expanding the detail of properties, and of features & content that confer them

– Sight

- Light
- Discrimination – camouflage etc
- Sightlines
 - » *features* affecting this property:
Dog-legs, Sight screens, Barriers, Recesses, Enclosures, Containers
 - » *content* affecting this property:
Crowds, Parked cars

All these can be influenced by good or bad design

Territoriality – human side (1)

- A complex **propensity** of perceptual, emotional and motivational tendencies, goals and resources leading to responses of acquisition, preferential enjoyment, ownership, management, control and defence of a tract of space
- These processes may operate individually or collectively at group, community, institutional or national level
- Territoriality is a common human propensity but may be **realised** and **communicated** differently by different individuals and/or (sub)cultures

Territoriality – human side (2)

- Territory is held **relative to other possible owners**, so
 - There have to be relations of either **acceptance/legitimacy or conflict** between private parties, or with the involvement of the community and/or state
 - and **cultural understandings** of concepts of ownership, norms (and laws) of legitimate acquisition, use, defence etc
- Territoriality in particular requires people's **roles** to be understood
- **Sharing** of territory will pose particular issues

Territory – spatial side (1)

- Has to be **extended** in space and **durable** over some time period (brief or lasting)
- May extend into virtual or cyber space
- Will normally have properties relating to **utility to users**
 - Either for **itself** (a private garden to enjoy)
 - Or as an **enclosure** to secure their person and belongings
- Has to have the **properties** of **identifiability** (whose is it?) and **demarkability** (where is it/what are its boundaries?)

Territory – spatial side (2)

- May also have properties of **access control** and **wider defensibility**, both of which may be facilitated by **surveillability** and **hardening of enclosure**
- Will have an **image** to the owner and/or to other parties
- Will usually require **maintenance**, which influences image
- All these properties may be influenced for good or for bad by
 - The **design** of the environment on micro to macro **scales**
 - In interaction with the **social context**