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**Think Crime! Using Evidence, Theory and Crime Prevention Through Environmental Design for Planning Safer Cities**



**Think Crime!**  
 Using Evidence, Theory and Crime Prevention Through Environmental Design (CPTED) for Planning Safer Cities  
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Proxis Education

## Introduction

- **Why did I write the book?**
- **What research underpins it?**
- **What is in the book?**
- **Selected elements from the book**



### Why did I write the book?



My thinking has developed and refined over time in the areas of CPTED research, policy and practice

### Why did I write the book?

- 1997 UG essay against Defensible Space
- 1997-2000 PhD on DS was initially highly critical, research and findings challenged my thinking
- CPTED training 2000 – **‘think again’** (Draper / Crowe)
- Research fellowship – crime and the railways 2000 – 2004
- Working as a policy officer in the Department of Premier and Cabinet influenced my thinking (2004-2006)

### Why did I write the book?

- The 10<sup>th</sup> ECCA Conference and evidence on crime patterns (2010) – challenged thinking again
- Curtin University - assumptions of planners, architects and urban designers often dismissed CPTED as just ‘promoting surveillance and eyes on the street’
- CPTED often seen and used as an **OUTCOME** – where guidelines show you how to do it all in a **‘COOKIE-CUTTER’** approach – without looking at local context or local risks.

### Why did I write the book?

- The book is an attempt to provide theories, evidence, tools, audits and frameworks to help in the **THINKING** needed in the **CPTED PROCESS**

### What research underpins the book?

- Re-read seminal texts, including;  
Jacobs' **The Death and Life of Great American Cities** (1961)  
Jeffery's **Crime Prevention through Environmental Design** (1971)  
Newman's **Defensible Space** (1972)
- **A review of the criminological theories** about place and urban space – particularly opportunity theories

### What research underpins the book?

- **Reviewed the criminological evidence** related to permeability, mixed-use development and high densities (e.g. grid versus cul-de-sac and pedestrian access ways).
- **Examined evidence** on crime and fear of crime at different environmental settings (e.g. generators, attractors, detractors).
- Examined developments in the domains of **public health and sustainability**.

### What is in the book?

- An introductory chapter plus 12 further chapters
2. CPTED basics and information and data requirements
  3. Measuring crime and fear of crime
  4. Environmental criminology – where + when of crime and opportunity theories
  5. Fear of crime (info and mapping)
  6. CPTED and people – the social dimension
  7. Crime risk assessment – data, tools and audits

### What is in the book?

8. Surveillance – lighting and CCTV
9. International CPTED policies
10. Public health and sustainability (EIA, SIA, HIA)
11. Product design and crime
12. Assumptions about CPTED
13. The future

### Misleading Media Reports and Crime!

**Recorded crime - 90%  
property crime 10% violent  
crime**

**Media report – 90% violent  
crime – 10% property crime**

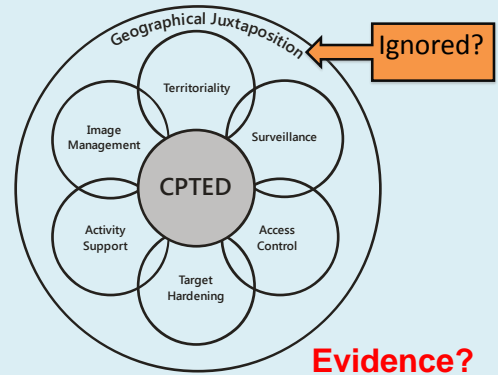
Reiner, R. (1997). Media Made Criminality: The Representation of Crime in the Mass Media. In M. Maguire, R. Moran & R. Reiner (Eds.), *The Oxford Handbook of Criminology* (pp. 189-232). Oxford: Clarendon Press.

## What does the book try to do?

Provide theories and evidence to help CPTED practitioners to **THINK** about crime problems **BEFORE** developing potential solutions.

Provide frameworks, tools and audits to help CPTED practitioners to **THINK** about crime problems and potential solutions.

## CPTED – the basics



## What evidence?

Poyner, B. (1993). "What works in crime prevention: an overview of evaluations", in Clarke, R.V. (Ed.), *Crime Prevention Studies*, Vol. 1, Criminal Justice Press, Monsey, NY.

Feins, J.D., Epstein, J.C. and Widom, R. (1997). *Solving Crime Problems in Residential Neighborhoods: Comprehensive Changes in Design, Management and Use*, US Department of Justice, National Institute of Justice, Washington, DC.

Scott, M.S. (2000). *Problem-Oriented Policing: Reflections on the first 20 Years*, US Department of Justice, Office of Community Oriented Policing Services, Washington, DC.

Casteel, C. and Peek-Asa, C. (2000) "Effectiveness of crime prevention through environmental design (CPTED) in reducing robberies", *American Journal of Preventative Medicine*, Vol. 18 No. 5, pp. 99-115.

Cozens, P. M., Hillier, D. and Prescott, G. (2001). *Crime and the Design of Residential Property. Exploring the Theoretical Background. Property Management*. Volume 19. No.2 pp136-164.

Sherman L, Farrington D, Welsh B and Mackenzie D. (2002). *Evidence-Based Crime Prevention*. Routledge, London and New York. (90% of placed-based)

SBD in UK (Armitage, 1999; Armitage, 2000; Brown, 1999; Pascoe, 1999) – reviewed in Cozens, P., Pascoe, T., & Hillier, D. (2004). Critically reviewing the theory and practice of secured-by-design for residential new-build housing in Britain. *Crime Prevention and Community Safety: An International Journal*, 6(1), 13-29.

## What evidence?

Cozens, P.M., Saville, G. and Hillier, D. (2005). *Crime Prevention Through Environmental Design (CPTED): A Review and Modern Bibliography. Journal of Property Management*. Volume 23, Issue 5, pp328-356.

Cozens, P.M. (2005). *Designing Out Crime - From Evidence to Action. Delivering Crime Prevention: Making the Evidence Work*. Australian Institute of Criminology and the Attorney-General's NSW Department. Carlton Crest Hotel Sydney, 21-22 November [http://aic.gov.au/media\\_library/conferences/2005-cp/cozens.pdf](http://aic.gov.au/media_library/conferences/2005-cp/cozens.pdf)

Teedon, P., Reid, T., Griffiths, P., & McFadyen, A. (2010). Evaluating Secured by Design door and window installations: Effects on residential crime. *Crime Prevention & Community Safety*, 12(4), 246-262.

Johnson, S., & Bowers, K. (2010). Permeability and burglary risk: Are Cul- de-Sacs Safer? *Quantitative Journal of Criminology*, 26(1), 89-111.

Armitage, R., & Monchuk, L. (2011). Sustaining the crime reduction impact of designing out crime: Re-evaluating the Secured by Design scheme 10 years on. *Security Journal*, 24(320-343).

Jongejan, A & Woldendorp, T (2013). 'A successful CPTED approach: The Dutch "Police Label Secure Housing"', in R Armitage, & L Monchuk (eds), 'Planning for Crime Prevention: An International Perspective' (Special Issue), *Built Environment*, vol. 39, no. 1, pp.31-8. <http://www.veilig-ontwerp-beheer.nl/publicaties/a-successful-cpted-approach-the-dutch-2013police-label-secure-housing2019>

## Selected elements from the book

**CPTED as a process – not an outcome**

**Environmental criminology**

**2<sup>nd</sup> Generation CPTED – a Model**

**CPTED Assumptions**

**'Cradle to the Grave'**

**The Future**

## Environmental Criminology

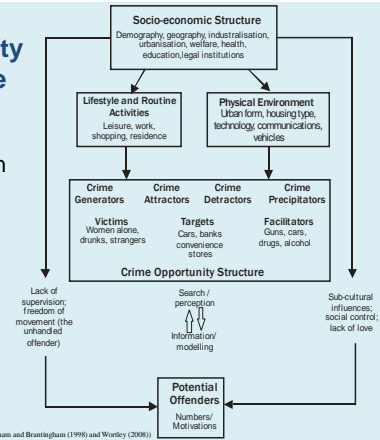
“is the study of crime, criminality, and victimisation as they relate first, to particular **places**, and secondly, to the way that **individuals** and **organisations** shape their **activities** by placed-based or spatial factors” (Bottoms and Wiles, 1997, p305)

## Environmental Criminology

“most **planning** proceeds with little knowledge of crime patterns, crime attractors, crime generators, the importance of edges, paths and nodes or the site specific solutions that facilitate or even encourage crime” (Brantingham and Brantingham, 1998, p53).

## Crime Opportunity Structure

Theories can help us understand **crime, design, place, movement and change**



Clarke (1995) with concepts from Brantingham and Brantingham (1998) and Wortley (2008)

## Opportunity theories

### Crime Pattern Theory

(Brantingham & Brantingham, 1981)

### Routine Activities Theory

(Cohen & Felson, 1979)

### Rational Choice Theory

(Cornish & Clarke, 1986)

### Situational Crime Prevention Theory

(Clarke, 1980)

### Broken Windows Theory

(Wilson & Kelling, 1982)

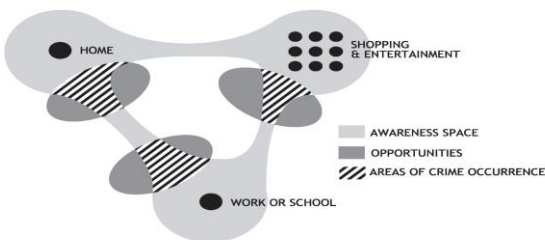
## Crime Pattern Theory

Brantingham and Brantingham (1981) highlight how **specific crimes occur in specific locations and at specific times.**

Crime Pattern theory examines differing scales, from patterns of crime at the meso level (city) to the macro level (neighbourhood) to the micro level (building envelope). It focuses on the **offender and target as they converge in space and time** with a particular emphasis on the place of the criminal event.

Activity **nodes, paths and edges** are also important in the patterning of different types of crimes.

## Routine Activities Theory (Cohen and Felson, 1979)



..... argues that like most citizens, **offenders have routine daily activities** (work, visiting friends, shopping and entertainment) during which they may discover or search for potential targets.

## Rational Choice Theory (Cornish and Clarke, 1986)

..... asserts that most opportunistic offenders are rational in their decision-making and **recognize, evaluate and respond to environmental cues.**

These relate to the **perceived risk, reward and effort** associated with the offence and environmental factors within the built / natural environment are an integral part of the decision-making process.

## Situational Crime Prevention

Increase the effort	Increase the risk	Reduce the rewards	Reduce provocations	Remove excuses
Target Harden	Extend guardianship	Conceal target	Reduce frustration and stress	Set rules
Control access to facilities	Assist natural surveillance	Remove targets	Avoid disputes	Post instructions
Screen exits	Reduce anonymity	Identify property	Reduce emotional arousal	Alert conscience
Deflect offenders	Utilise place managers	Disrupt markets	Neutralise peer pressure	Assist compliance
Control tools / weapons	Strengthen formal surveillance	Deny benefits	Discourage imitation	Control drugs and alcohol

Clarke (1992, 1997)

## Broken Windows Theory (Wilson and Kelling, 1982)

- Identified the **appearance and maintenance** of the built environment as an indicator of social cohesion and informal social control.
- Poorly-maintained spaces (*broken windows*) indicate **no-one cares**, and encourage offending and can act as *crime magnets*.
- The **rapid repair of vandalism** and the maintenance of urban spaces can discourage further opportunities and prevent these problems from escalating.

(see also Newman, 1972; Perglut, 1982)



## Land-Use and Crime - Mind DEGAP!

**Detractors** (push away citizens)

**Enablers** (no regulation)

**Generators** (produce crime)

**Attractors** (others attracted)

**Precipitators** (provoke crime)

(From Brantingham and Brantingham, 1995; Felson and Clarke, 1998)

## 2<sup>nd</sup> Generation CPTED

Defensible space initially criticised for **ignoring socio-economic factors**

- Merry – **undefended space** (1981)
- Atlas – **offensible space** (1991)

From this critique emerged the notion of **2<sup>nd</sup> Generation CPTED**

## 2<sup>nd</sup> Generation

2<sup>nd</sup> Generation CPTED emphasises four key concepts (Saville & Cleveland, 1997);

- Social cohesion**
- Community connectivity**
- Community culture**
- Threshold capacity.**

Also about inclusion and identity.

## 2<sup>nd</sup> Generation

Saville and Cleveland (1997, p1) observed;

***'What is significant about Jacobs' 'eyes on the street' are not the sightlines or even the streets, but the eyes'.***

Social factors affect the quality of 'eyes on the street'

## 2<sup>nd</sup> Generation CPTED

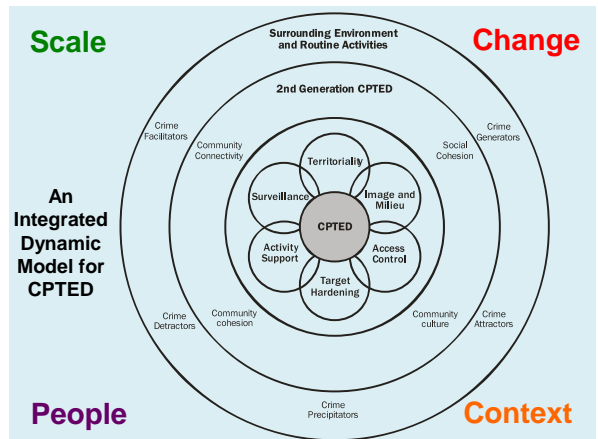
In his review of 25 years of the use of defensible space in CPTED, Newman identified four practical **social factors** that clearly resonate with 2nd Generation CPTED (Newman, 1996)

- Resident participation
- Good quality local schools
- Effective links with local organisations.
- Design appropriate places for people to play recreate or simply sit.

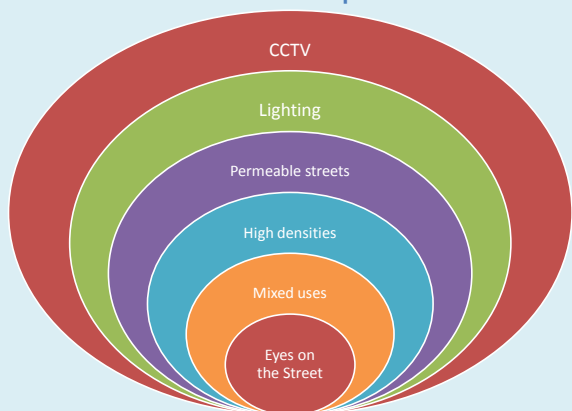
## 2<sup>nd</sup> Generation CPTED

Other strategies for improving the effectiveness of 2nd Generation CPTED by considering social factors. These include:

- Human-scale development
- Local meeting places
- Youth work and youth centres
- SafeGrowth planning



## CPTED Assumptions



## Jacobs' Warning

In *The Death and Life of Great American Cities* (1961, p26) Jacobs stated;

***'I hope no reader will try to transfer my observations into guides as to what goes on in towns, or little cities, or in suburbs which are still suburban'.***

## CPTED Assumptions

Eyes on the Street

### THE BYSTANDER EFFECT

More people = less likelihood of intervention

See - <http://youtu.be/OSsPfbup0ac>

## CPTED Assumptions Permeability



## CPTED and Permeability Theory and Evidence

This recent assumption in CPTED is encouraged by planning's enthusiasm in the direction of New Urbanism and Transit Oriented Development.

Their advocacy of the grid street layout does not consider Crowe's comments in *Crime Prevention Through Environmental Design* (2000, p. 219), '*residential development after World War II replaced grid-pattern streets with the curvilinear street, which has improved safety, security, neighbourhood identity, and property value*'.

## CPTED and Permeability Theory and Evidence

The idea that permeable built environment layouts must reduce crime is contradicted by the criminological evidence.

40 studies show permeability can be associated with increased crime (see Cozens, 2011; 2014).

As Paulsen (2013, p21) has pointed out 'the overprovision of permeability ...without use – is a security hazard'.

Johnson, S., & Bowers, K. (2010). Permeability and burglary risk: are Cul-de-Sacs Safer? *Quantitative Journal of Criminology*, 26(1), 89-111.  
Cozens, P. (2011) *Urban Planning and Environmental Criminology: Towards a New Perspective for Safer Cities*. *Planning Practice and Research*, 26(4), pp. 481-508.

## Crime, the Grid and the Cul-de-sac?

Fashion cycles!



## CPTED Assumptions Mixed-use development



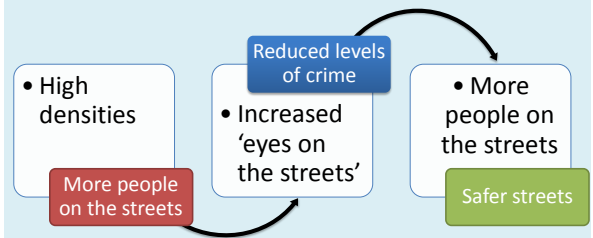
## CPTED and Mixed-use development Theory and Evidence

The idea that mixed-use developments must reduce crime is contradicted by the criminological evidence. **30 or so studies show mixed-use can be associated with increased crime** (see Cozens, 2011; 2014).

The 'increase in opportunities interacts with the lower informal social control to produce more crime' (Paulsen, 2013, p24).

**More important is type of 'mix'? (NTE?)**

## CPTED Assumptions High densities



## CPTED and High Densities Theory and Evidence

The idea that high densities must reduce crime is contradicted by the criminological evidence.

**Numerous studies show mixed-use can be associated with increased crime** (see Cozens, 2011; 2014).

In *Crime Prevention Through Environmental Design*, Crowe stated (2000, p. 57) 'high densities are to be avoided because the problems of crowding are self-evident'.

**What types / rates of 'density' – human scale?**

## Using Evidence, Theory and CPTED

*"The conventional view serves to protect us from the painful job of thinking"*

(J.K. Galbraith)

Jacobs (1961, p50) identified the city as; **"a complex order"** which implies she would support the continued **critical analysis** of the topic of crime and the built environment through use of better criminological evidence and careful thinking.

## Crime and Place

In *Crime and Everyday Life*, Felson and Boba (2010) observe how daily life is divided into different types of settings, which can generate significant levels of crime. Settings with significant crime risks are:

- Public routes (especially footpaths, parking facilities and unsupervised transit areas)
- Recreational settings (especially bars and some parks)
- Public transport (especially stations and their vicinities)
- Retail stores (especially for shoplifting)
- Educational settings (especially at their edges)
- Offices (especially when entered for theft)
- Human support services (especially hospitals with 24-hour activities)
- Industrial locations (especially warehouses with 'attractive' goods).

## Crime and Place

Within each type of setting, **a small number of locations (typically 20%) are commonly found to be accountable for the majority of the crime (80%)**

**Most locations exhibit relatively low levels of crime (80% account for 20% of the crime).**

(Clarke and Eck 2007).



## Cradle to the Grave Life Cycle of Crime

In Western Australia, **DEVELOPMENT** refers to the demolition, erection, construction, alteration of, or addition to, any building or structure and any excavation or other works carried out on the land (Part 1, Section 4, Planning and Development Act, 2005).

**Developments change – and so do crime risks.**



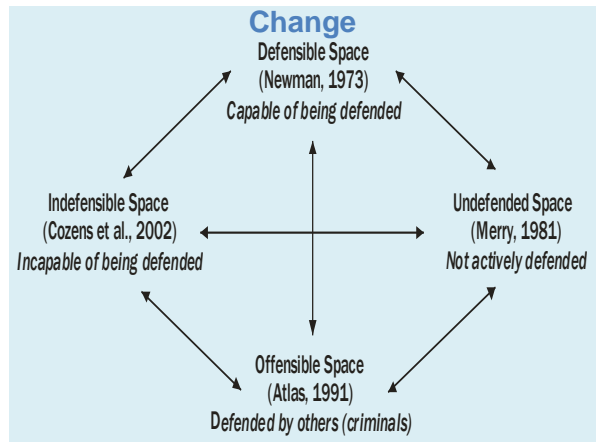
## Cradle to the Grave Life Cycle of Crime



## Cradle to the Grave Life Cycle of Crime



## Cradle to the Grave Life Cycle of Crime



## CPTED – Public Health / Sustainability

One of the eight elements to a healthy city is **“secure neighbourhoods where localities offer security and a sense of community”** (Rydin, 2012).

The 4th recommendation of the Lancet Commission on public health was **the need to conduct a complexity analysis in order to identify unintended consequences of urban health policies** (Rydin, 2012).

## CPTED – Public Health / Sustainability

Evidence and theories from **environmental criminology** are a means of **analysing the complexity of crime** – and this knowledge can help **avoid unintended consequences**

## The Future?

- We need to collect **better crime statistics** for problems and analysis required in the 21<sup>st</sup> Century (e.g. **ambient populations** – and more accurate crime rates per users).
- Need to balance crime prevention with **public health** and **sustainability** agendas / objectives.

## The Future?

- **Crime risk assessment** – who should do it?
  - Police under-resourced
  - Should it be part of other assessment frameworks (e.g. HIA, SIA or EIA?)
- **Places change, criminals adapt** and **CPTED practitioners must also evolve.**

Thank You

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