



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**APPLYING THE THEORY AND TECHNIQUES OF
SITUATIONAL CRIMINOLOGY TO
COUNTERINSURGENCY OPERATIONS: REDUCING
INSURGENCY THROUGH SITUATIONAL PREVENTION**

by

Stephen Gibbs

June 2010

Thesis Advisor:
Second Reader:

Hy Rothstein
Michael Freeman

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE June 2010	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE Applying the Theory and Techniques of Situational Criminology to Counterinsurgency Operations: Reducing Insurgency Through Situational Prevention			5. FUNDING NUMBERS	
6. AUTHOR(S) Stephen Gibbs				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol number				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited			12b. DISTRIBUTION CODE	
13. ABSTRACT (maximum 200 words) This research introduces and adapts the 25 techniques of Situational Crime Prevention for use in counterinsurgency operations. These techniques are based on a set of powerful theories within the fields of Environmental and Situational Criminology. Situational Prevention is a strategy that addresses specific crimes, or insurgent activity, by managing, designing, and manipulating the environment in a manner that seeks to increase the risk to the insurgent, while reducing the insurgent's potential reward for committing the act. The 25 techniques offer a practical means to apply these theories to the reality of counterinsurgency operations. Use of the 25 techniques would expand the repertoire of preventive countermeasures, and enable a security force to intervene in the causal chain events to prevent or reduce the occurrence of insurgent violence and crime. These techniques originate from five core principles: increasing effort, increasing risk, reducing rewards, removing excuses, and reducing provocations.				
14. SUBJECT TERMS Situational Prevention, Criminology, Environmental Criminology, Counterinsurgency, Counterinsurgency Operations, Deterrence, Crime Prevention Through Environmental Design, CPTED, Security Fence, Israeli Security Fence, Operation Cul-de – Sac, OCDS, Opportunity Theory, Opportunity Structure, Targets, Tools, Weapons, Facilitating conditions			15. NUMBER OF PAGES 77	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU	

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution unlimited

**APPLYING THE THEORY AND TECHNIQUES OF SITUATIONAL
CRIMINOLOGY TO COUNTERINSURGENCY OPERATIONS: REDUCING
INSURGENCY THROUGH SITUATIONAL PREVENTION**

Stephen Gibbs
Major, United States Army
B.S., Excelsior University, 2002

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN DEFENSE ANALYSIS

from the

**NAVAL POSTGRADUATE SCHOOL
June 2010**

Author: Stephen Gibbs

Approved by: Hy Rothstein
Thesis Advisor

Michael Freeman
Second Reader

Gordon McCormick
Chairman, Department of Defense Analysis

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

This research introduces and adapts the 25 techniques of Situational Crime Prevention for use in counterinsurgency operations. These techniques are based on a set of powerful theories within the fields of Environmental and Situational Criminology. Situational Prevention is a strategy that addresses specific crimes, or insurgent activity, by managing, designing, and manipulating the environment in a manner that seeks to increase the risk to the insurgent, while reducing the insurgent's potential reward for committing the act. The 25 techniques offer a practical means to apply these theories to the reality of counterinsurgency operations. Use of the 25 techniques would expand the repertoire of preventive countermeasures, and enable a security force to intervene in the causal chain events to prevent or reduce the occurrence of insurgent violence and crime. These techniques originate from five core principles: increasing effort, increasing risk, reducing rewards, removing excuses, and reducing provocations.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
A.	BEHAVIOR IS A FUNCTION OF BOTH THE PERSON AND THE ENVIRONMENT.....	2
II.	THEORETICAL PERSPECTIVES ON THE RELEVANCE OF SITUATIONAL PREVENTION IN COIN	5
A.	ROUTINE ACTIVITY THEORY	5
B.	CRIME PATTERN THEORY	7
C.	THE OPPORTUNITY STRUCTURE OF INSURGENCY.....	13
1.	Targets.....	13
2.	Tools	14
3.	Weapons.....	15
4.	Facilitating Conditions	15
D.	THE PRINCIPLES OF SITUATIONAL PREVENTION.....	16
E.	THE 25 TECHNIQUES OF SITUATIONAL CRIME PREVENTION ...	18
F.	CONCLUSION	23
III.	CASE STUDIES: SITUATIONAL PREVENTION IN COIN.....	25
A.	OPERATION CUL-DE-SAC	25
B.	THE RING OF STEEL AND THE PEACE LINES OF BELFAST	32
C.	THE ISRAELI SECURITY FENCE	40
D.	CONCLUSION	49
IV.	CONCLUSION	51
	LIST OF REFERENCES.....	55
	INITIAL DISTRIBUTION LIST	59

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF FIGURES

Figure 1.	Routine Activity Theory and the Basic Crime and Attack Triangles	6
Figure 2.	Brantingham Crime Pattern Theory	9
Figure 3.	Insurgent Activity Templating Process.....	11
Figure 4.	Homicides Fell during Operation Cul-de-Sac	30
Figure 5.	Assaults Fell during Operation Cul-de-Sac.....	31
Figure 6.	Ring of Steel on a City Map.....	35
Figure 7.	Peace Walls Belfast.....	37
Figure 8.	Geospatial Analysis of Both Ring of Steel and the Peace Walls	39
Figure 9.	Israeli Security Fence	40
Figure 10.	Suicide Bombings in Israel since Construction of the Security Fence	43
Figure 11.	Number of Suicide Bombings Executed and Prevented by Year, 2000-2008.	44
Figure 12.	Number of Israeli Deaths from Suicide Bombings, by Year, 2000-2008.	45
Figure 13.	Walled Section Target Concealment	46
Figure 14.	Casualty Density Maps.....	48

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

Table 1.	Increase Effort	19
Table 2.	Increase Risk.....	20
Table 3.	Reduce Rewards	21
Table 4.	Reduce Provocations	22
Table 5.	Remove Excuses.....	22

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

CPTED	Crime Prevention Through Environmental Design
ICURS	Institute of Canadian Urban Research Studies
IDF	Israeli Defense Force
IED	Improvised Explosive Devices
LAPD	Los Angeles Police Department
NIJ	National Institute for Justice
OCDS	Operation Cul-de-Sac
PIRA	Provisional Irish Republican Army
SCP	Situational Crime Prevention

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

I would like to thank Professors Hy Rothstein and Michael Freeman for their guidance and support through the entire thesis process. Their counsel and insight were vital in articulating and adapting the principles of environmental criminology for use in counterinsurgency operations. Thank you for your patience and contribution to this research.

I would also like to acknowledge the work of criminologists Ronald V. Clarke and Grame R. Newman, which is the basis for much of this research.

I would also like to thank LTC (P) Reginald Bostick and LTC Daniel Guadalupe who encouraged and made possible my advanced education at the Naval Postgraduate School.

Also, I would be remiss if I did not acknowledge the soldiers, officers, and non-commissioned officers of the 4th Psychological Operations Group (Airborne) with whom I will proudly serve upon completion of my educational endeavors.

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

The purpose of this research is to introduce the theories and techniques of Situational Crime Prevention, and then hypothesize that they are applicable for use in counterinsurgency operations. Counterinsurgency techniques should be the practical application of good theory. Regrettably, theory is often considered irrelevant to security forces when conducting counter insurgency operations. Criminologists Marcus Felson and Ronald Clarke, in their publication, *Opportunity Makes the Thief*, argue this irrelevance likely comes from attributing insurgency solely to political, religious, or socioeconomic factors. Unfortunately, these factors are often beyond the purview of counterinsurgent, and therefore, often have little practical application.¹

Opportunity theories within criminology could bring theoretical relevance to counterinsurgency operations. Opportunity theories emphasize five principles and 25 techniques that can be implemented at all levels of conflict to reduce insurgent violence and crime.

These techniques are derived from the following three theoretical approaches: routine activity theory, crime pattern theory, and the rational choice perspective. Felson and Clarke say these theories build on the old adage that “opportunity makes the thief.” In counterinsurgency operations, these theories build on David Kilcullen’s concept of the “accidental guerilla.” These theories, principles, and techniques are described in this research, which theorize that the techniques can be used to reduce insurgent opportunities, and thereby, reduce insurgent violence, crime, and the number of accidental guerillas.²

¹ Marcus Felson, R. V. G. Clarke and Great Britain. Home Office. Policing and Reducing Crime Unit, *Opportunity Makes the Thief : Practical Theory for Crime Prevention* (London: Home Office, Policing and Reducing Crime Unit, Research, Development and Statistics Directorate, 1998), 1. This introduction is modeled from Felson and Clarke’s introduction and extended from criminology to counterinsurgency.

² Ibid.

A. BEHAVIOR IS A FUNCTION OF BOTH THE PERSON AND THE ENVIRONMENT

Individual behavior is a function of both the person and the environment. This is one of the most well known principles in social psychology, and is referred to as Lewin's Equation. Lewin's Equation is often expressed in the symbolic terms of, $B = f(P, E)$. Most counterinsurgency theories focus primarily on the person, and discount the situational factors within the environment that turn an insurgent's motivation into action.³

Insurgency is a form of behavior, and as such, is also governed by Lewin's Equation. Insurgent behavior depends upon the conjunction of motivation (of whatever nature and whatever source) with opportunity (whether defined in terms of risks, efforts or rewards of the act).⁴

Lewin's Equation shows the importance of the immediate situation in understanding an insurgent's behavior, rather than relying solely upon their past experiences. The causal effect that the environment has on insurgent behavior is evidenced by the fact that no attack can take place without overcoming the physical requirements to execute it.

Conversely, the majority of people with strong political or religious grievances do not take up arms against the state, and many of the people that do participate in a rebellion, belong to the upper or middle class.⁵ At this time, no theory exists that is based upon what always leads the person to an insurgency, but situational opportunities within the environment are always necessary for insurgent activity to occur.

Insurgent violence and crime are, in part, a result of situational opportunities within the environment. By approaching insurgent acts of violence

³ "Field Theory—Kurt Lewin," <http://wilderdom.com/theory/FieldTheory.html>.

⁴ R. V. G. Clarke and Graeme R. Newman, *Outsmarting the Terrorists* (Westport, CT: Praeger Security International, 2006).

⁵ Marc Sageman, *Leaderless Jihad: Terror Networks in the Twenty-First Century* (Philadelphia: University of Pennsylvania Press, 2008), 48.

as politically motivated crimes, they can be prevented or reduced through the application of the 25 techniques of Situational Crime Prevention (SCP). These techniques originate from five core principles: increasing effort, increasing risk, reducing rewards, removing excuses, and reducing provocations.

THIS PAGE INTENTIONALLY LEFT BLANK

II. THEORETICAL PERSPECTIVES ON THE RELEVANCE OF SITUATIONAL PREVENTION IN COIN

Situational crime prevention is a strategy that addresses specific crimes, or insurgent activity, by managing, designing, and manipulating the environment in a manner that seeks to increase the risk to the offender, while reducing the offender's potential reward for committing the act.⁶

Situational crime prevention is informed by theory, and as stated earlier, has Lewin's Equation as one of its foundations. Situational prevention also draws from three approaches within criminology: Routine Activity Theory, Crime Pattern Theory, and the Rational Choice Perspective.

These three theories are often referred to collectively and individually as opportunity theories. Each of the theories is unique, but they all share three common assumptions. The first assumption is that crime, and in this case insurgent activity, is a result of an interaction between disposition and situation. The second and third commonalities are that all three theories seek to explain criminal acts, not criminals, and stress the importance of situational opportunities.

A. ROUTINE ACTIVITY THEORY

Criminologists Lawrence Cohen and Marcus Felson developed routine activity theory. This theory states that for a crime to occur, three things must come together at the same time and place: a likely offender, a suitable target, and the absence of a capable guardian to prevent the crime. Routine activity theory always assumes a likely offender exists, and focuses on targets, guardianship, and place.⁷

⁶ Ronald V. Clarke, "Situational Crime Prevention: Its Theoretical Basis and Practical Scope," *Crime and Justice* 4 (1983): 1.

⁷ Felson, Clarke and Great Britain, *Opportunity Makes the Thief: Practical Theory for Crime Prevention*, 5.

Since all three elements must be present for a crime to occur, if one element can be controlled, it is possible to prevent or reduce crime. This is often modeled as the “Basic Crime Triangle,” but can also be viewed as a “Basic Attack Triangle” as shown in Figure 1.

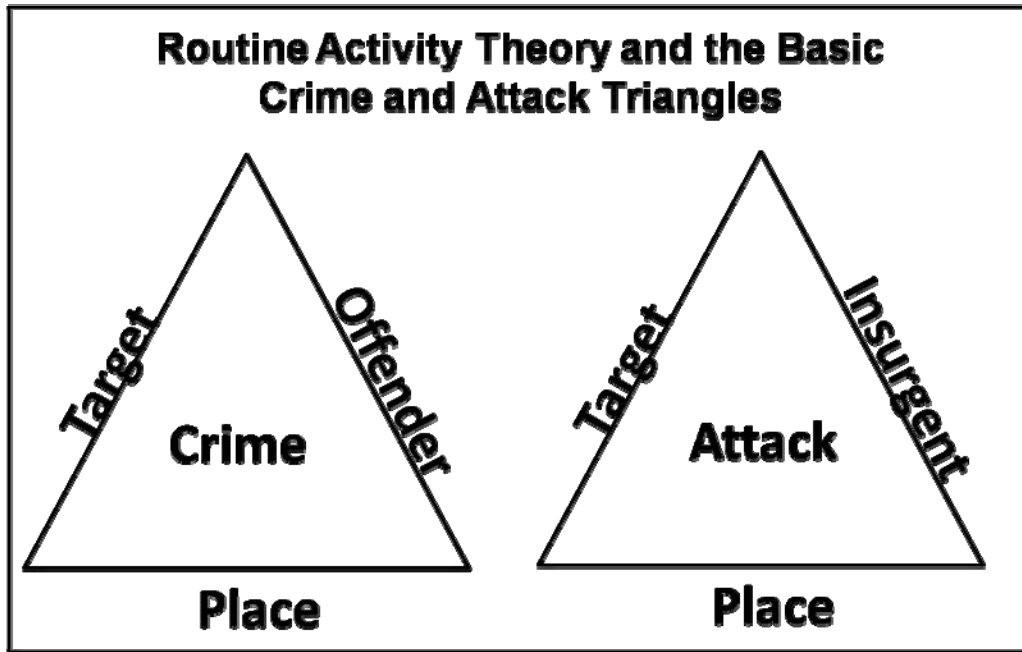


Figure 1. Routine Activity Theory and the Basic Crime and Attack Triangles⁸

The guardian is not always a member of a security force, but could be anyone whose presence or proximity can deter a crime from happening. A target can be a person, place, or an object whose location in time and space puts it at more or less risk of criminal attack.⁹

Routine activity theory considers targets from the criminal's point of view. Evaluating targets from an insurgent's point of view is important because insurgents, like criminals, are only interested in targets they value. This provides

⁸ “Center for Problem Oriented Policing about CPOP”
<http://www.popcenter.org/about/?p=triangle>.

⁹ Felson, Clarke and Great Britain, *Opportunity Makes the Thief: Practical Theory for Crime Prevention*, 5.

some explanation as to why every potential criminal opportunity is not exploited, and why every potential insurgent target is not attacked.

Felson and Clarke state, “although the routine activity theory begins with the basic elements of crime and activity patterns, it ends up emphasizing changes in technology and organization on a societal scale.”¹⁰

A societal scale example is the increased use of global communications technology by everyday people. This technology is exploited to increase the political value of insurgent violence and acts of terrorism, and allows the movement of information and money across regional and international boundaries. These structural changes in the situational opportunities for insurgency and terrorism have societal implications.¹¹

B. CRIME PATTERN THEORY

Environmental criminologists Patricia and Paul Brantingham developed crime pattern theory, which was published in the book, *Environmental Criminology* in 1981. Crime pattern theory seeks to discover how offenders look for and find criminal opportunities in the course of their everyday lives. Since insurgent violence is mechanically and operationally the same as ordinary crime, crime pattern theory can be used to understand how insurgents identify and select targets while going about their activities of daily living.

Crime pattern theory argues that opportunities for insurgent violence do not always occur randomly; insurgents often search for and create these opportunities. Crime pattern theory also provides insight into how an insurgent evaluates these opportunities and chooses to act upon them.

Crime pattern theory contains three main elements: nodes, paths, and edges. Nodes are the places that a person goes to, such as home, work, and

¹⁰ Felson, Clarke and Great Britain, *Opportunity Makes the Thief: Practical Theory for Crime Prevention*, 6.

¹¹ Ibid.

places of recreation. The space around these nodes is considered activity space, which is a sub component of a person's overall awareness space. In activity space, people do the things that they do, live, work, socialize, commit crime, or engage in insurgent activities.

Paths are the routes that people take to and from these nodes. Offenders and insurgents look for opportunities and targets around their activity nodes and along the paths between them.

Edges refer to the boundaries of the areas where an insurgent lives and works. Certain types of attacks are more likely to occur at the edges, such as sectarian violence between ethnic groups. More violent events occur along the edges because people from different activity spaces come together at the edges. Clarke and Felson state that the edges become important because a distinction exists between insiders and outsiders. Insiders more often attack within their activity spaces, while outsiders find it safer to attack at the edges and then retreat into their own areas.¹²

Brantingham and Brantingham would argue that target selection is largely dependent on routine pathways used by insurgents to move between their normal, daily activity nodes; attacks are most likely to occur where the awareness space of the insurgent transects with suitable targets.¹³

Crime pattern theory is also modeled with a triangle. Figure 2 shows how an insurgent goes from his residence to work to recreation. Around these nodes of activity, and along the paths and edges, he looks for situational opportunities to conduct attacks. Crime pattern theory posits that insurgents may find these opportunities a bit distant from their paths, but they prefer to conduct operations in the areas that they know because the effort and risk required to commit an attack increases the further an insurgent moves outside of his activity space. The

¹² Felson, Clarke and Great Britain, *Opportunity Makes the Thief: Practical Theory for Crime Prevention*, 6.

¹³ Pat Brantingham and Paul Brantingham, "Crime Pattern Theory," http://www.ceamos.cl/ceamos/images/stories/actividadesyeventos/pattern_theory1.pdf.

diagram also shows a buffer zone around the insurgent's residence. Little insurgent activity occurs within the buffer zone because of the risk of being identified and renounced to the authorities. There are five target areas within the diagram. Attacks are more likely to take place in target areas 1, 2 and 3 because they transect the insurgent's activity space. Target areas 4 and 5 are less likely to be attacked because they do not intersect with the insurgent's activity space. The insurgent may, in fact, be unaware of target areas 4 and 5 if they are also located outside of his awareness space.

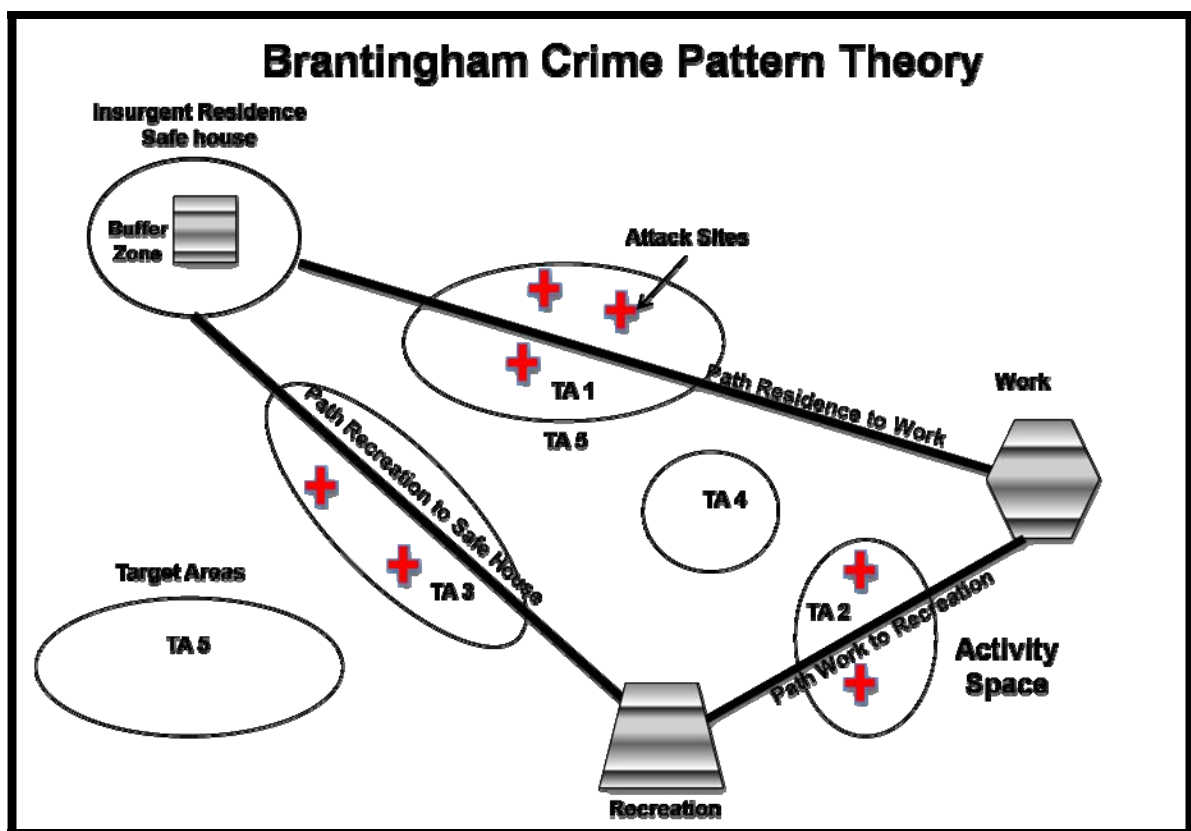


Figure 2. Brantingham Crime Pattern Theory¹⁴

Crime pattern theory also provides insight on how an insurgent evaluates opportunities and chooses to act upon them. The following is an adaptation of some of the principles of crime pattern theory taken from the Institute of

¹⁴ Adapted from Kim Rossmo, *Geographic Profiling* (Boca Raton, FL: CRC Press, 2000).

Canadian Urban Research Studies (ICURS). As insurgents move through a series of activities, they make decisions. When these activities, such as planting improvised explosive devices (IED), are repeated frequently, the decision process becomes routine. This routine creates an abstract guiding template. For decisions to commit a crime, this is called a crime template. For decisions to commit insurgent attacks, this can be called an attack template, or in the example of emplacing IEDs, an IED attack template.¹⁵

Individual insurgents or networks of insurgents conduct attacks when a triggering event occurs and a process by which they can locate a target or a victim that fits within an attack template. Insurgents continually revise their attack templates based upon experience rather than assuming them to be constant over time, and this revision alters future actions. This is also called scripting, and one of the goals of the counterinsurgent should be to rewrite the insurgent's script, by introducing failure into their operations.

The following is an example of how this process can be applied to forming an IED attack template. An insurgent observes a lightly-defended convoy of military vehicles traveling down a pre-identified section of roadway. This acts as a triggering event that fits his IED attack template, and the insurgent attempts to attack the convoy with an IED. If the attack is successful, the template is reinforced. If the attack fails, or if an insurgent is captured or killed, the template must be revised. During this period of revision, subsequent attacks may be prevented or delayed until the template can be re-written; often resulting in a net decrease of attacks over time. Figure 3 shows this insurgent activity templating process.

¹⁵ Brantingham and Brantingham, "Crime Pattern Theory."
http://www.ceamos.cl/ceamos/images/stories/actividadesyeventos/pattern_theory1.pdf.

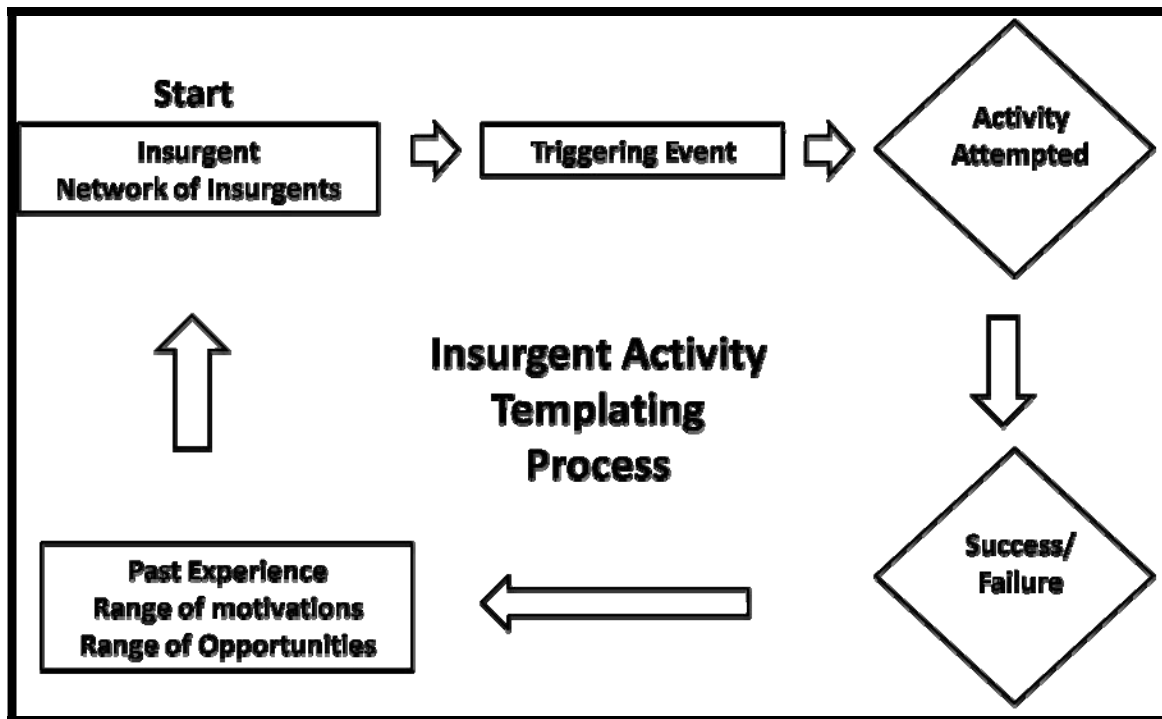


Figure 3. Insurgent Activity Templating Process¹⁶

The rational choice perspective focuses on the insurgent's individual decision-making process. Its main assumption is that insurgent activity is purposeful behavior, and that it is designed to benefit the insurgent. The rational choice perspective also attempts to see the act from the insurgent's point of view. Clarke describes the rational choice perspective as seeking to "understand how offenders make crime choices, when driven by a particular motive within a specific setting, which offers the opportunities to satisfy that motive."¹⁷ The rational choice perspective assumes the insurgent thinks before acting, taking into account some benefits and costs in committing an attack.

Although insurgents make rational decisions, their rationality is bounded by risk, uncertainty, and the operational constraints that they face. Clarke

¹⁶ Adapted from Brantingham and Brantingham, *Crime Pattern Theory*, http://www.ceamos.cl/ceamos/images/stories/actividadesyeventos/pattern_theory1.pdf.

¹⁷ Felson, Clarke and Great Britain, *Opportunity Makes the Thief: Practical Theory for Crime Prevention*, 7.

theorizes that the “offender’s calculus is mostly based on that which is most evident and immediate, while neglecting the more remote costs and benefits of crime or its avoidance.”¹⁸

Specificity is also an important aspect of the rational choice perspective. To understand an insurgent’s choices, it is necessary to analyze each specific type of attack. The reason for this specificity is that each type of attack has different objectives and is influenced by very different situational factors. For example, there are several different types of bombing attacks, including IEDs, car bombings, and suicide bombings.

This is not to say that insurgents who conduct one type of bombing would never conduct another; it simply states that conducting a suicide bombing attack is quite different from planting an IED. Each type of attack is conducted against entirely different targets, with different types of bombs, and different objectives. Insurgents have to make different choices when conducting different types of attacks, and therefore, each type of attack must be analyzed specifically.¹⁹ Specificity makes *modus operandi* a primary consideration within the rational choice perspective.

This concludes the overview of the three main theories informing situational prevention, which can be categorized by the level of explanation they address. Routine activity theory examines insurgent behavior from the societal level. Crime pattern theory addresses the meso or operational level, and the rational choice perspective addresses the individual. Each theory treats situational opportunities as a cause of insurgent behavior, and focuses on what an insurgent actually does while engaging in these activities. Clarke and Felson argue that, together, these three theories indicate that society and the local community can change insurgent opportunities, while the individual insurgent makes decisions in response to these changes. Clarke and Felson further state,

¹⁸ Felson, Clarke and Great Britain. *Opportunity Makes the Thief: Practical Theory for Crime Prevention*, 14.

¹⁹ *Ibid.*, 7.

“altering the volume of crime opportunities at any level will produce a change in criminal outcomes.”²⁰ Therefore, altering the volume of insurgent opportunities at any level also produces a change in the outcomes of insurgent activities; in particular, violence and crime.

C. THE OPPORTUNITY STRUCTURE OF INSURGENCY

In their book, *Outsmarting the Terrorists*, Clarke and Newman have identified a basic opportunity structure required for crime to occur, and have theorized that terrorism and insurgency require the same opportunity structure. The opportunity structure of terrorism and insurgency consists of targets, tools, weapons, and facilitating conditions.²¹

Clarke and Newman call these the “four pillars of terrorist opportunity,” and state they are a “result of technology, the physical environment of society and the systems and services that help it to function.”²² The opportunity structure can be analyzed as described below.

1. Targets

Clarke and Newman identify eight characteristics of targets that make them attractive to terrorists and insurgents, and express them through the acronym EVIL DONE.²³ EVIL DONE is a tool that assists in identifying and prioritizing potential targets through the eyes of an insurgent.²⁴

²⁰ Felson, Clarke and Great Britain. *Opportunity Makes the Thief: Practical Theory for Crime Prevention*, 7.

²¹ Clarke and Newman, *Outsmarting the Terrorists*, 9.

²² *Ibid.*, 9.

²³ G. R. Newman, "Reducing Terrorist Opportunities: A Framework for Foreign Policy," *Crime Prevention Studies* 25 (2009): 33–60.

²⁴ R. Boba, "Evil Done," *Crime Prevention Studies* 25 (2009): 71–92. Boba scales the criteria to develop a methodology to score and rank targets consistently across target types and between different analysts.

Exposed: Targets that are highly visibility and attract attention, such as the Twin Towers in New York City.

Vital: Targets that provide critical necessities for the daily functioning of society, such as transportation systems, utilities, and communication systems.

Iconic: Of symbolic value, such as the Pentagon or religious shrines.

Legitimate: An acceptable target in the eyes of the enemy's public.

Destructible: Any target that can successfully be destroyed or disabled.

Occupied: To inflict as many casualties as possible.

Near: Close to the insurgent's base of operations or those easily accessible by mechanized transportation, making them close in time.

Easy: Targets that are accessible with minimal security, and are within the insurgent's operational capacity to attack.²⁵

2. Tools

Newman defines the tools of insurgency as “products that are used in the course of an attack.”²⁶ Motor vehicles, mobile phones, false identity documents, and information about the target are almost always used by insurgents during the course of an attack. Ordinary criminals also seek out and use many of these same tools. The tools of insurgency can be controlled in generally three ways: 1) modify the products so that they cannot be used for criminal purposes, 2) make the products more difficult to obtain illegally, and 3) track the use of the products.²⁷

²⁵ Newman, “Reducing Terrorist Opportunities: A Framework for Foreign Policy,” 33–60.

²⁶ Ibid.

²⁷ Clarke and Newman, *Outsmarting the Terrorists*, 117.

3. Weapons

Nine characteristics make weapons attractive to insurgents, and are expressed through the acronym MURDEROUS.²⁸

Multi-purpose: Weapons that can be used against different types of targets.

Undetectable: Weapons, such as plastic explosives, that can pass through security checkpoints.

Removable: Easily transported.

Destructive: Explosives are more destructive than small arms. A fully automatic weapon is more destructive than a handgun.

Enjoyable: Terrorists and insurgents, like criminals, and soldiers, become attached to their weapons.

Reliable: Dependability is an important factor in mission success.

Obtainable: The ability of an insurgent to acquire the weapon by whatever means.

Uncomplicated: Weapons cannot be more sophisticated than the insurgent's ability to use them.

Safe: Explosives are less safe for an insurgent than firearms.²⁹

4. Facilitating Conditions

Clarke describes facilitating conditions as the "social and physical arrangements of society that make specific acts of terrorism possible."³⁰ Facilitating conditions make it ESEER for insurgents to conduct their operations, and are expressed by the same acronym.

²⁸ Newman, "Reducing Terrorist Opportunities: A Framework for Foreign Policy," 33–60.

²⁹ Ibid.

³⁰ Clarke and Newman, *Outsmarting the Terrorists*, 117.

Easy: Examples include cash as a means of exchange, and governmental corruption.

Safe: Governments' inability to authenticate an individual's identification.

Excusable: Kinsmen injured or killed as a result of collateral damage.

Enticing: Cultural and religious endorsement of heroic acts of violence.

Rewarding: Some insurgents are paid for their services. Other insurgents may seek status, absolution, or the promise of sex in the afterlife.³¹

Opportunity structures operate at the strategic, operational, and tactical levels of an insurgency, but it is at the tactical level where the opportunity structure of an insurgency is most profound. Newman argues that the first step to understanding the opportunity structure of an insurgency is to identify it at the tactical level. Tactical level opportunity structures are identified, "by focusing on the specific economic, physical, cultural, and social elements within the environment, on the ground where the insurgents operate."³² By identifying the targets, tools, weapon, and facilitating conditions at the tactical level, it is possible to trace the links between what are essentially local insurgent activities, and the operational and strategic conditions that both enhance and constrain them.³³

D. THE PRINCIPLES OF SITUATIONAL PREVENTION

Situational crime prevention (SCP) theory introduces 25 opportunity-reducing techniques. According to Clarke and Newman, the principal value of these techniques is to increase the repertoire of possible interventions used to

³¹ Newman, "Reducing Terrorist Opportunities: A Framework for Foreign Policy," 33–60.

³² Ibid.

³³ Ibid.

reduce specific forms of insurgent violence and crime. The 25 techniques are designed around five main principles that research has shown to affect the decision-making process of criminal offenders. These five categories are also the core principles of SCP, increasing effort, increasing risk, reducing rewards, reducing provocations, and removing excuses.³⁴ Charts articulating the principles with their corresponding techniques and suggested COIN related interventions are shown in subsequent pages.

The first two principles of increasing effort and risk are cost variables. Five techniques are designed to increase the perceived level of effort to commit an attack, and are also designed to increase the perceived risk in conducting an attack.

The third principle of reducing anticipated rewards is a benefit variable. The five techniques within this category are intended to reduce the insurgent's anticipated rewards.

The last two principles of removing excuses and reducing provocations can be considered supplemental variables. Each of these categories also has a set of five techniques designed to remove excuses (justification, rationalization) for violence, and immediate provocations or temptations for committing an attack.

The theory argues that situational changes should be made that seek to increase the perceived amount of effort and risk, decrease anticipated rewards, and remove excuses and provocations. The theory advocates for a balance between increasing perceived costs and decreasing perceived benefits. An imbalance either results in an attack being conducted, or an over allocation of security resources. Specifically, when an imbalance indicates benefits exceed costs, an insurgent makes the rational choice to commit the attack. When the imbalance increases perceived costs beyond what is needed to counterbalance anticipated rewards, an attack is deterred, but this may result in an over allocation of security resources.

³⁴ Clarke and Newman, *Outsmarting the Terrorists*, 188–189.

Adapting situational crime prevention theory to counterinsurgency operations then leads to the following propositions:

- **Proposition 1.** Increasing the effort required to commit specific insurgent activities leads to a reduction in those activities.
- **Proposition 2.** Increasing the risk involved in committing specific insurgent activities leads to a reduction in those activities.
- **Proposition 3.** Reducing the anticipated reward of engaging in specific insurgent activities leads to a reduction in those activities.
- **Proposition 4.** Removing excuses for engaging in insurgent activities leads to a reduction in those activities.
- **Proposition 5.** Reducing provocations to commit insurgent activities leads to a reduction in those activities.

These propositions are taken directly from situational crime prevention theory and, by extension, the rational choice perspective.

E. THE 25 TECHNIQUES OF SITUATIONAL CRIME PREVENTION

The first set of five techniques are designed to increase the effort required for insurgents to engage their targets, acquire their weapons, use their tools, exploit facilitating conditions, and maintain their organization. When operations become more difficult, an insurgent system can be forced to expend more effort and resources to maintain its operational tempo successfully. Clarke and Newman argue, “if we can raise the level of effort high enough for some their tasks, we may see them either give up on a particular target or take much longer to execute their terrorist mission.”³⁵ Table 1 shows the five effort reducing techniques with some possible COIN related interventions.³⁶

³⁵ Clarke and Newman, *Outsmarting the Terrorists*, 189.

³⁶ Adapted from Clarke and Newman, *Outsmarting the Terrorists*, 190-194.

Situational Prevention Principle	Technique	COIN Related Intervention
Increase Effort	1. Harden Targets	T-Barriers, Shatter Proof Glass
	2. Control Access	Gating, Fencing, Entry phones, Swipe Cards
	3. Screen Exits	Tickets needed, Export Documents, Property tagging
	4. Deflect Offenders	Street Closures, Parking Restrictions, No Loitering
	5. Control Tools & Weapons	Disable unregistered cell phones, RFID/GIS tracking of weapons

Table 1. Increase Effort

Increasing the risk of being killed, captured, or mission failure is a cost consideration within an insurgent's individual decision-making process. Even a suicide bomber faces risk, the risk of mission failure. Table 2 shows the five risk increasing techniques with possible COIN related interventions.³⁷

³⁷ Adapted from Clarke and Newman, *Outsmarting the Terrorists*, 190-194.

Situational Prevention Principle	Technique	COIN Related Intervention
Increase Risk	1. Extend Guardianship	Deterrence Patrolling , Take Routine Precautions
	2. Assist Natural Surveillance	Lighting, Defensible Space Design, Hotline Reporting numbers
	3. Reduce Anonymity	National ID Card, Register SIM cards in Cell Phones, Biometrics
	4. Utilize Place Managers	Reward Vigilance, Care Takers, Employee Training
	5. Strengthen Formal Surveillance	CCTV, Alarm Systems, Security Guards, metal detectors

Table 2. Increase Risk

Reducing the anticipated rewards of insurgent and terrorist activity is becoming recognized as an effective strategy, not only in reducing that activity, but also in hampering insurgent recruitment efforts. Marc Sageman, in his book, *Leaderless Jihad*, says it is important to take the “glory” out of engaging in these activities, and that glory is a type of reward.³⁸ The five reward reducing techniques not only help prevent attacks, but mitigate the subsequent damage from successful attacks, denying the insurgents their anticipated rewards.

³⁸ Sageman, *Leaderless Jihad: Terror Networks in the Twenty-First Century*, 177.

Situational Prevention Principle	Technique	COIN Related Intervention
Reduce Rewards	1. Conceal Targets	Low Profile Vehicles, Avoid Identifying Signage & Markings
	2. Remove Targets	Limit Unnecessary Convoys, Removable electronics in Vehicles
	3. Identify Property	Stamp Small Arms, GPS Tagging, Property Markings, Vehicles ID Numbers (VIN)
	4. Disrupt Markets	License Vendors, Controls on Classified Ads.
	5. Deny Benefits	Use of publicity to highlight hypocrisy of insurgent acts, Design guidelines to reduce casualties

Table 3. Reduce Rewards³⁹

Reducing provocations and removing excuses are the final two principles of situational prevention, and each principle offers five additional techniques that assist in allaying insurgent violence and making it inexcusable.

³⁹ Adapted from Clarke and Newman, *Outsmarting the Terrorists*, 190–194.

Situational Prevention Principle	Technique	COIN Related Intervention
Reduce Provocations	1. Reduce Frustrations and Stress	Treat Public Courteously, Expanded Seating, Efficient Queuing (Line Management)
	2. Avoid Disputes	Separate Rival Factions, Fight Enemies Strategy not his Forces
	3. Reduce Emotional Arousal	Avoid Provocative Announcements, Clear ROE
	4. Neutralize Peer Pressure	Marginalize Agitators, Say No Campaigns
	5. Discourage Imitation	Rapid clean up of Attack Scenes, Censor Details of Modus Operandi

Table 4. Reduce Provocations⁴⁰

Situational Prevention Principle	Technique	COIN Related Intervention
Remove Excuses	1. Set Rules	Clear ROE, Clear rules for public demonstrations, Clear Regulations, Codes of Conduct
	2. Post Instructions	No Parking, No Entry , No Cell Phones
	3. Alert Conscious	Require ID & Signature, Visible Electronic Surveillance
	4. Assist Compliance	Barriers, Public Restrooms, Litter Bins, Designated Parking Areas
	5. Control Drugs and Alcohol	Alcohol Free Events, public Shaming

Table 5. Remove Excuses⁴¹

⁴⁰ Adapted from Clarke and Newman, *Outsmarting the Terrorist*, 190–194.

⁴¹ Ibid.

The value of the 25 techniques of situational prevention is that they offer a practical means to apply the principles of opportunity theory to the reality of counterinsurgency operations. Use of the 25 techniques expands the repertoire of interventions, and enables a security force to intervene in the causal chain events to prevent or reduce the occurrence of insurgent violence and crime.

The 25 techniques also provide a way of systematizing an insurgency reducing strategy. Situational prevention must be a continual process to be an effective part of counter insurgency operations. Criminals, terrorists, and insurgents are adaptive. They make rational decisions to exploit new opportunities whenever they become available, which is one of the limits of situational prevention; there is never a final solution.⁴²

F. CONCLUSION

Insurgent behavior, like all behavior, is a function between the person and the environment. As such, insurgent activities depend on the conjunction between the insurgents' motivation (of whatever nature and whatever source) and the situational opportunities presented to them within their environment (whether defined in terms of risks, efforts or rewards of their acts).⁴³ Society and the local community can change insurgent opportunities, while the individual insurgent makes decisions in response to these changes.

The 25 techniques of situational prevention provide a means to reduce the volume of insurgent opportunities, and affect insurgent decisions by altering their perceptions of risk and anticipated rewards. Altering the volume of insurgent opportunities at any level also produces a change in the outcomes of insurgent activities; in particular, violence and crime.

⁴² Clarke and Newman, *Outsmarting the Terrorists*.

⁴³ *Ibid.*, 6.

THIS PAGE INTENTIONALLY LEFT BLANK

III. CASE STUDIES: SITUATIONAL PREVENTION IN COIN

Situational prevention has not been used explicitly as a framework for reducing insurgent violence in counterinsurgency operations. However, the principles and techniques of situational prevention are often implemented intuitively in reducing specific types of terrorist or insurgent attacks.

This chapter consists of three case studies evaluating the effectiveness of situational prevention techniques when used to reduce violence. The first case examined is Operation Cul-de-Sac (OCDS), which was an experiment conducted against gang violence in the City of Los Angeles, California. The second case is that of Peace Walls and the security cordon in Belfast Northern Ireland, commonly referred to as the Ring of Steel, and the third case reviews the effects of the Israeli Security Fence on suicide bombings in Israel.

These cases were selected for two reasons. First, the interventions that were taken clearly involved changing the physical environment for the purpose of reducing paramilitary style attacks. Secondly, similar techniques were used in each of these cases to increase effort and risk, which allowed for a more valid cross comparison.

Other measures were taken in conjunction with situational prevention in these cases, and some displacement of violence and some adaptation of tactics by different groups occurred. Nevertheless, opportunity reduction appears to have reduced the overall level of violence.

A. OPERATION CUL-DE-SAC

Operation Cul-de-Sac (OCDS) was an experiment to ascertain if situational prevention techniques could be used to “design” out violent gang crime. This experiment was conducted for two years, and evaluated by the U.S. Justice Department’s National Institute for Justice (NIJ). NIJ’s evaluation concluded that OCDS appeared to have significantly reduced violent crime,

including homicide. Another significant finding by NIJ was that the reduction of violent crime in the test area did not increase crime in the surrounding areas.⁴⁴

In 1989, the Los Angeles Police Department (LAPD) conducted an analysis of a ten-block area. This area had the highest rate of gang-related drive-by shootings, homicides, and assaults. The LAPD analysis concluded that the majority of drive-by shootings occurred along the boundaries of neighborhoods connected with major through streets.⁴⁵

This observation by the LAPD about where most of the drive-by shootings were occurring is consistent with the Brantingham's crime pattern theory. The boundaries of neighborhoods are the edges between different groups of people's activity spaces, and the major thoroughfares were the paths that gang members traveled that transected these target areas. These paths provided ample and easy opportunity in terms of targets and facilitating conditions to conduct drive-by shootings, homicides, and assaults.

Operating on Ronald Clarke's situational prevention theory, the LAPD assumed that these violent crimes were not random events. The LAPD surmised that gang members made rational decisions about whether to commit specific acts of criminal violence, and whether they should commit those acts in specific neighborhood settings or situations. There was ample empirical evidence to support this theory as it related to other crimes, but OCDS was one of the first attempts to apply situational prevention to reduce gang violence.⁴⁶

At the time OCDS was conducted, many criminologists and law enforcement officials doubted that situational prevention would be effective in reducing gang violence. The objections raised are very similar to the objections now being offered in reference to its application in counterinsurgency operations.

⁴⁴ James R. Lasley, *Using Traffic Barriers to "Design Out" Crime: Key Findings and Implications for Law Enforcement Agencies; A Program Evaluation of LAPD's Operation Cul-De-Sac* (Rockville, MD: National Criminal Reference Service, 1996), 2–4.

⁴⁵ *Ibid.*, 1.

⁴⁶ *Ibid.*, 3.

The two objections most often raised were that gang crime is more motivated and organized than other crime, and that preventing these activities in one area would simply displace them to another area. In spite of these objections, the experiment was conducted in the following manner.

The LAPD used three principles and at least five techniques of situational prevention to reduce the opportunities for these specific types of paramilitary style gang violence. The LAPD applied the principles of increasing effort and risk, and also reduced rewards through the following techniques: 1) controlling access, 2) deflecting offenders, 3) extending guardianship, 4) assisting natural surveillance, and 5) concealing targets.

The intervention used to implement these principles and techniques was to place simple traffic barriers that blocked motor vehicle access to the areas in which the violence was taking place. The LAPD initially placed cement freeway dividers at the end of streets intersecting with the major thoroughfares. These barriers were put in place within the time span of one week. The cement barriers were eventually replaced with locked steel gates that could be opened to permit access to emergency vehicles. The barriers generally allowed one unrestricted entry and exit point into the neighborhoods, which essentially created cul-de-sacs.⁴⁷

Redesigning the traffic flow into this high crime area was a means of implementing several of the principles and techniques of situational crime prevention. Redirecting traffic obviously controls access to and deflects offenders away from the target area. Cul-de-sacs also assist in natural surveillance and conceal targets by forcing a driver to decrease vehicle speed and turn around to exit the street; thus, making it easier for residents, the natural guardians of their neighborhoods, to identify suspicious drivers and vehicles. Targets are partially concealed because an offender must make a purposeful effort to enter the area;

⁴⁷ Lasley, *Using Traffic Barriers to "Design Out" Crime: Key Findings and Implications for Law Enforcement Agencies; A Program Evaluation of LAPD's Operation Cul-De-Sac*, 2.

he does not spot a target of opportunity by merely passing by. This increases the effort and risk involved to a perpetrator when entering into these areas and committing violent crimes.

The technique of extending guardianship is implemented in several ways by creating cul-de-sacs. Cul-de-sacs reduce through traffic, which allows residents to learn who belongs in their neighborhood and who does not. Clarke explains how street closures can also keep residents from committing crimes in their own neighborhoods because offenders cannot as easily blame outsiders to deflect suspicion from themselves. Clarke also indicates that attackers risk retaliation from their would-be victims when their escape routes are blocked, and this also assists in reducing drive-by shootings.⁴⁸

Cul-de-sacing streets also weakened the opportunity structure required to commit drive-by shootings, homicides, and assaults. The opportunity structure of crime and insurgency consists of targets, tools, weapons, and facilitating conditions. Motor vehicles are tools almost always used by criminals and insurgents in conducting operations. Many violent crimes and insurgent attacks, such as drive by shootings, cannot be conducted without the use of motor vehicles. Cul-de-sacs restrict the use of motor vehicles, which constrains their effective use as a tool for crime and insurgency. The importance of traffic patterning and traffic control within urban areas cannot be understated in reducing criminal and insurgent violence.

OCDS further reduced the opportunity structure of violent crime by making it more difficult to access targets, and reducing facilitating conditions that made the violence less easy, less safe, less enticing, less excusable, and less rewarding.⁴⁹ Facilitating conditions are the social and physical arrangements of

⁴⁸ R. V. G. Clarke and United States, Dept. of Justice, Office of Community Oriented Policing Services, "Closing Streets and Alleys to Reduce Crime should You Go Down this Road?" U.S. Dept. of Justice, *Office of Community Oriented Policing Services*, 6.

⁴⁹ ESEER is the acronym that describes the societal and environmental conditions that enhance insurgent opportunity.

society that make specific criminal acts possible. There are five categories of facilitating conditions and they are described by the acronym (E, S, E, E, R), and OCDS reduced these conditions.

The number of homicides and street assaults declined significantly in both years of OCDS, and then increased after the program ended according to James Lasley, who concluded there was no displacement of violent crime to the surrounding areas.⁵⁰ The contiguous areas outside of the OCDS test area also benefited from a decrease in violent crime, which is known as “diffusion” within situational criminology. Lasley theorizes this diffusion may have occurred because the areas of possible displacement may be the turf of other rival gangs, and that the perpetrators would not enter into that territory.

Crime pattern theory and the rational choice perspective also support the diffusion. The crimes were occurring on the edges of neighborhoods by outsiders who could then retreat into their own activity spaces. As the traffic barriers redirected the paths taken by gang members away from the OCDS area, they did not necessarily cause them to transect with other potential target areas, but deflected them onto the major thoroughfares.

As explained in the previous chapter, offenders may find targets a bit distant from their paths, but they prefer to stay within their own activity space because effort and risk tends to increase the farther a person strays from their activity space. This is a factor in the offender’s rational decision-making process.

In 1980, the year before OCDS was conducted, there were seven homicides, 38 drive-by shootings, and 190 aggravated street assaults committed within the ten-block test area. In the two years OCDS was conducted, only one homicide occurred within the test area. Aggravated assaults also decreased in the OCDS area from 176 to 163 in 1990 and from 163 to 138 in 1991. See

⁵⁰ Lasley, *Using Traffic Barriers to "Design Out" Crime: Key Findings and Implications for Law Enforcement Agencies; A Program Evaluation of LAPD's Operation Cul-De-Sac*, 1.

Figures 4 and 5⁵¹, which are statistically significant results that cannot be explained by random fluctuations in crime rates.⁵²

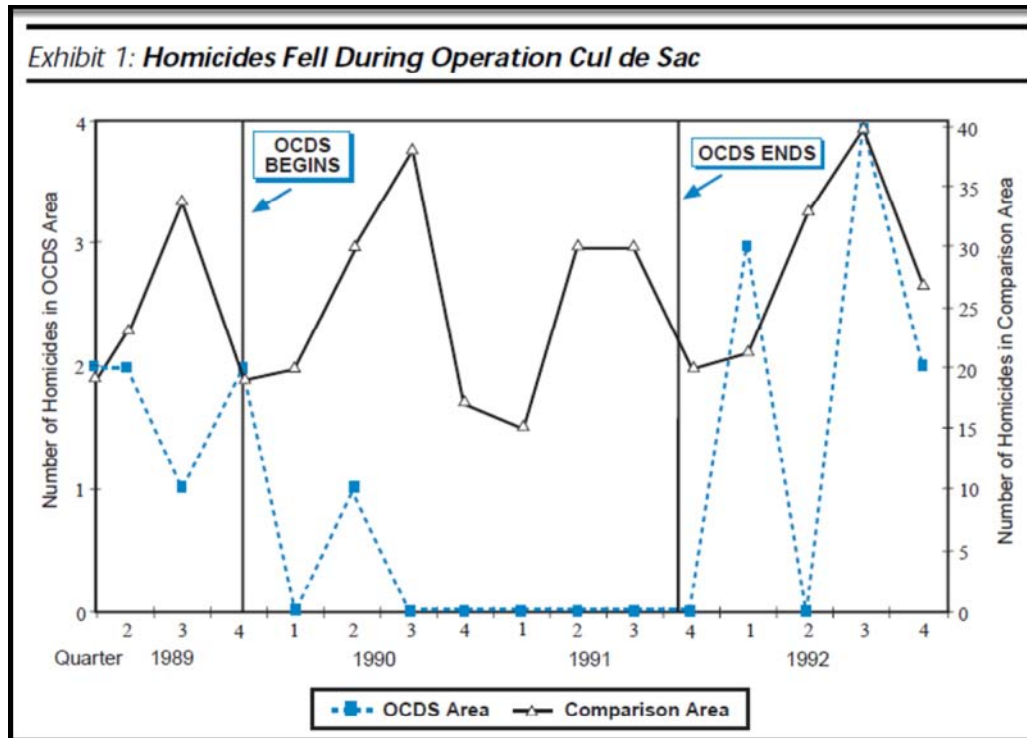


Figure 4. Homicides Fell during Operation Cul-de-Sac⁵³

⁵¹ Lasley, *Using Traffic Barriers to "Design Out" Crime*, 1996.

⁵² Lasley, *Using Traffic Barriers to "Design Out" Crime: Key Findings and Implications for Law Enforcement Agencies; A Program Evaluation of LAPD's Operation Cul-De-Sac*, 2–3. All crime data were reported by year, as well as quarterly. Since the sample sizes were very small, tests were conducted to determine their statistical significance,* with the test for significance set at $p < .05$. (For findings significant at this level, the chances are less than 5 in 100 that the result has occurred randomly.) The statistical tests used both parametric (t-test for correlated samples) and nonparametric methods (the Wilcoxon Matched-Pairs Test). See S. Siegel, *Nonparametric Statistics for the Behavioral Sciences* (New York: McGraw Hill, 1956).

⁵³ Lasley, *Using Traffic Barriers to "Design Out" Crime* 1996, 4–5.

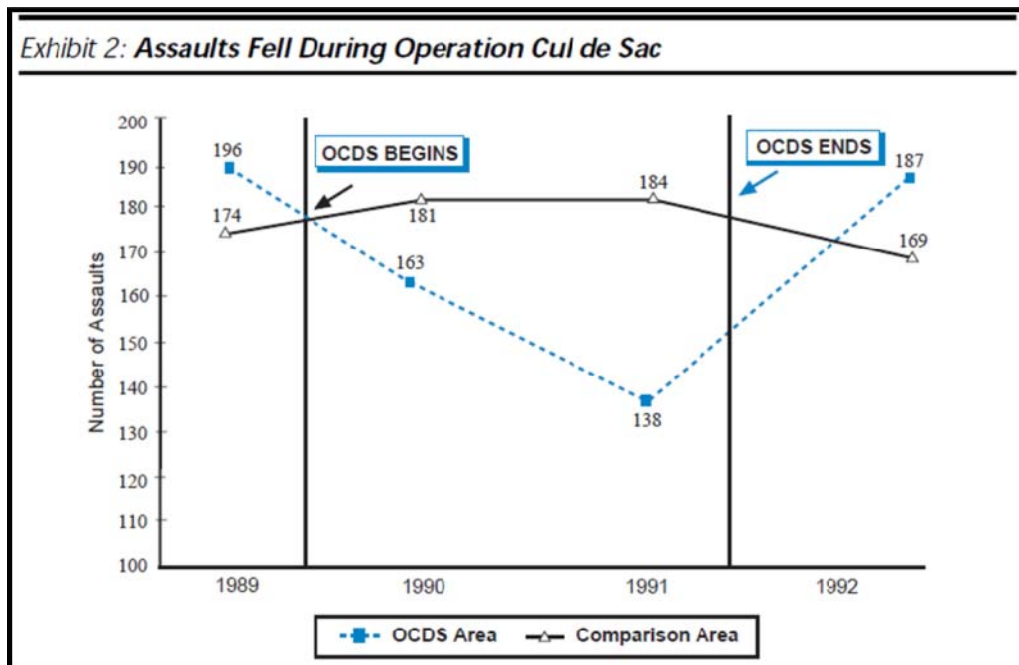


Figure 5. Assaults Fell during Operation Cul-de-Sac⁵⁴

Lasley also observed that gang members did not adjust their modus operandi to adapt to the presence of the traffic barriers. That is to say, gang members did not seek to find alternative ways to sustain their operational capacity for violence. A notable difference exists between OCDS and the two remaining test cases examined in this chapter. Ideologically motivated perpetrators seem to make a more concerted effort to overcome obstacles to sustain their operational capacity. Gang members and accidental guerrillas appear to be more apt merely to exploit available opportunities. However, as demonstrated in the remaining case studies, even the most dedicated insurgents have difficulty maintaining their operational capacity when situational opportunities are reduced.

OCDS was one of the first formally conducted experiments to use situational prevention in reducing semi-organized gang violence in the United States, and was evaluated by the USDOJ's National Institute of Justice. The

⁵⁴ Lasley, *Using Traffic Barriers to "Design Out" Crime* 1996, 4–5.

National Institute of Justice concluded that OCDS appeared to reduce violent crime significantly without displacing the violence into adjoining areas.

B. THE RING OF STEEL AND THE PEACE LINES OF BELFAST

This case study analyzes the Ring of Steel and the Peace Lines of Belfast. This particular case study is predicated more on anecdotal evidence and testimonials than on scientifically quantifiable evidence because the interventions were geographically focused, while the majority of the statistical data is regional. Many other countermeasures were also taken in conjunction with these situational approaches. To paraphrase the words of Nick Ross, few randomized double-blind trials exist when it comes to counterinsurgency operations.⁵⁵

Ross also writes that even though he could not recall the term “situational crime prevention” being applied to British policy in Northern Ireland, it was fundamental to the British’s success.⁵⁶ Ross cites the Peace Walls and the “Ring of Steel” placed around Belfast’s shopping center as being rarely celebrated, but highly successful in preventing attacks by the Irish Republican Army (IRA). Similar situational preventive measures were also taken in London and Manchester after the IRA conducted bombing attacks in these cities. These preventive measures included re-patterning traffic, search points, and closed circuit television cameras. All of these types of interventions increased the effort and risk involved in conducting attacks in those cities.

Ross observes that even though these preventive measures may have been applied piecemeal, and without an overarching strategy, they were highly effective. Violence was often prevented altogether, and when violence did occur, it generally forced the shift to lesser value targets, and more importantly, less “spectacular” targets. When attacks could not be prevented, damage was

⁵⁵ N. Ross, “How to Lose the War on Terror: Lessons of a 30 Year War in Northern Ireland,” *Crime Prevention Studies* 25 (2009): 229–244.

⁵⁶ *Ibid.*

limited.⁵⁷ Channeling attacks to lesser value targets and limiting the damage of those attacks reduces the rewards of the act, and theoretically, figures into an insurgent's rational decision-making process.

The "troubles" in Northern Ireland between Catholic Republicans, Britain, and Protestant Loyalists began in 1968. Bombings and shootings became routine. Stephen Brown writes that for the citizens of Belfast, the campaign of terror commenced in July 1970, when, without warning, a large bomb destroyed a bank in the city's business district and injured 33 people.⁵⁸

This represented a change in tactics by the IRA as the city center's business district had not been previously targeted. Shootings and bombings increased in 1972, and in response, authorities began to implement situational preventive measures.⁵⁹

Beginning in March of 1972, two control zones were established in the city center, an inner zone and an outer zone. These zones were created to make it more difficult to conduct car bombings. The inner zone prohibited the parking of motor vehicles at any time. The outer zone offered relaxed parking restrictions at night. However, the IRA adapted by employing proxy bombs, whereby people were coerced to drive car bombs into British military targets, and incendiaries.⁶⁰ The city then established a security segment or cordon around the core of the city's business district in mid-July 1972.

The security segment consisted of barbwire barriers that blocked access to the city center from side streets. Checkpoints were established at the main entrances where the British Army searched all pedestrians and delivery vehicles before entry. These measures applied the principles of increasing effort and risk,

⁵⁷ Ross, "How to Lose the War on Terror: Lessons of a 30 Year War in Northern Ireland," 229–244.

⁵⁸ Ralf Brand, "The Power of Meaning: Artifacts and Social Practices in a Contested City," *EASST Conference 2006* (2006), www2.unil.ch/easst2006/Papers/B/Brand.pdf, 1.

⁵⁹ Clarke and Newman, *Outsmarting the Terrorists*, 171.

⁶⁰ Brand, "The Power of Meaning: Artifacts and Social Practices in a Contested City," 3.

and also reduced terrorist rewards by preventing successful bombing attacks within the city's business district. The security segment is an intervention based upon the situational prevention techniques of controlling access and strengthening formal surveillance.

Three days after the cordon was established, the Provisional Irish Republican Army (PIRA) detonated 22 bombs within 75 minutes of each other in Belfast. These bombings occurred on July 21, 1972 and became known as Bloody Friday. Jon Coafee, on July 22, quotes the Belfast Telegraph, "the city has not experienced such a day of death and destruction since the German blitz of 1941 [however]...it was significant that all yesterday's explosions occurred outside the new restricted traffic zones."⁶¹ Coafee further states, "since its inception no car bomb has exploded inside the Belfast Ring of Steel (the security segment) and it can therefore, according to security forces, be judged successful."⁶² Coafee also stresses that Bloody Friday appeared to support the theory that preventing attacks in one location would merely displace them to another location. However, this displacement did not continue.

By 1974, the crude system of barbwire barriers was replaced by steel gates, which became known as the "Ring of Steel." By 1976, there were only two entry points into the city center with all other avenues being opened for exit only. The city center was divided into secure gated segments with checkpoints and searches conducted before entry. The City of Belfast employed a Civilian Search Unit consisting of male and female inspectors to conduct the searches. Figure 6 depicts the Ring of Steel on a city map and was taken from Stephen Brown's article, *Central Belfast's Security Segment: An Urban Phenomenon*.

⁶¹ Jon Coafee, *Terrorism, Risk, and the City: The Making of a Contemporary Urban Landscape* (Aldershot, Hants, England; Burlington, VT: Ashgate, 2003), 21.

⁶² Ibid., 26–27.

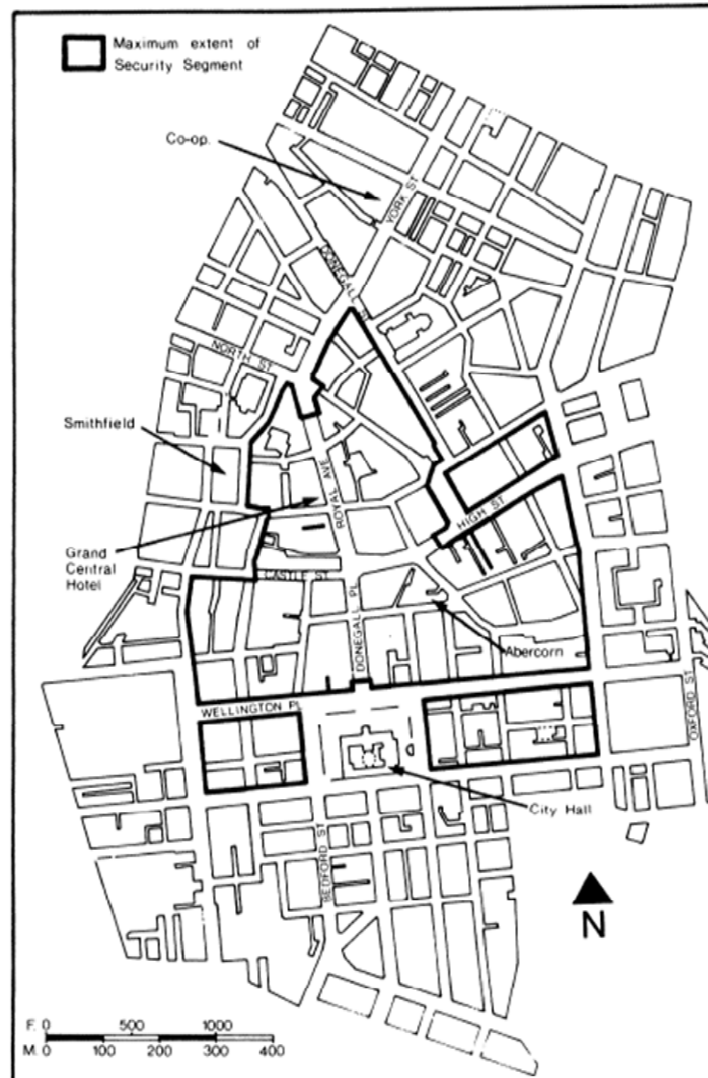


Figure 6. Ring of Steel on a City Map⁶³

Although the area protected by the security segment may appear to be geographically small, it represents the heart of Belfast's business district, and Belfast is the capital of Northern Ireland.

Part of the IRA's strategy was to target Northern Ireland economically. Between 1970 and 1975, there were over 1,800 explosions and over 40 percent of these had targeted commercial properties. Many shops, offices, and nightclubs

⁶³ Stephen Brown, "Central Belfast's Security Segment: An Urban Phenomenon," *Area 17*, no. 1 (1985): 2.

were destroyed, and some of these businesses were targeted more than several times. During the same time period, over 300 centrally located businesses had been destroyed, which amounted to a loss of over 25 percent of the retail floor space in the city. The IRA was successfully strangling the city economically, and it had to be stopped if Britain was going to win the peace.⁶⁴

Other preventive measures were also taken, but the effectiveness of the Ring of Steel can be inferred by the fact that no car bomb has exploded inside the Ring of Steel since its implementation, including the bombing attacks that occurred on Bloody Friday. Although other factors would have also contributed, the success of the Ring of Steel was also supported by the significant decrease in the number of bombings in the city from 62 in 1974, to three in 1984.⁶⁵

Besides the Ring of Steel, the government also erected "Peace Walls" to separate the interfaces between Protestant and Catholic communities in Northern Ireland. These barriers were erected for the purpose reducing sectarian violence. The Peace Walls work on the principles of increasing effort and risk, but it can also be argued that they remove immediate provocations and temptations to just drive into another's neighborhood and commit sectarian violence.

The Peace Walls of Northern Ireland were erected not only in Belfast, but also in Derry, and other cities. The walls were originally designed to be temporary structures for reducing sectarian violence between Catholic and Protestant communities. However, because of their effectiveness, they still stand today.

In fact, 53 Peace Walls are maintained in Northern Ireland today, and 42 of these are located in Belfast. The first wall, wall number one, was erected in 1969 following riots and house burnings. The last wall was built in 2009 on the grounds of an integrated primary school following a period of local tension.⁶⁶

⁶⁴ Brown, "Central Belfast's Security Segment: An Urban Phenomenon," 3.

⁶⁵ Clarke and Newman, *Outsmarting the Terrorists*, 171.

⁶⁶ "BBC NEWS |UK| Northern Ireland | the Walls that Don't Come Down," http://news.bbc.co.uk/2/hi/uk_news/northern_ireland/8121362.stm.

The Peace Walls vary in construction and length. Some walls are 25 feet high and constructed of concrete, corrugated iron, and fencing, while some consist merely of a white line painted on the ground. Ralf Brand, in an article entitled, "The Power of Meaning: Artifacts and Social Practices in a Contested City," describes the Peace Walls:

Some walls are a few hundred meters in length and others are several kilometers long. Some are operated year-round by the police while others are controlled by the adjacent communities. In some cases, sophisticated local arrangements facilitate the continuation of daily life along fortified interfaces. For example, it is the nearby chemist who holds a key to the pedestrian gate at Duncairn Gardens to ensure the accessibility to medical drugs to anyone at any time.⁶⁷

Figure 7 shows the location and relative length of the first Peace Wall constructed in the early 1970s.

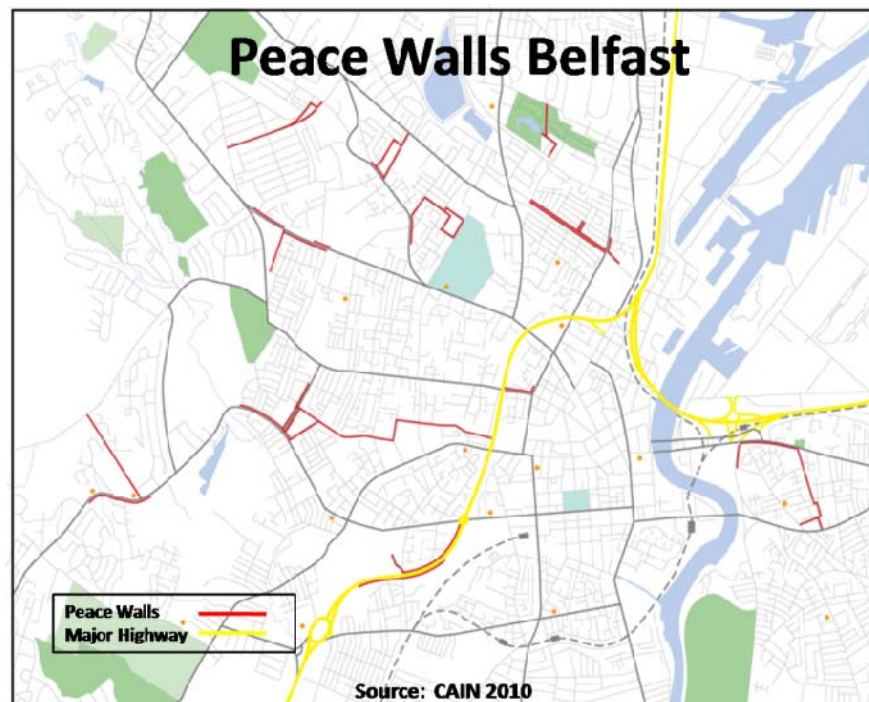


Figure 7. Peace Walls Belfast⁶⁸

⁶⁷ Brand, "The Power of Meaning: Artifacts and Social Practices in a Contested City," 7.

⁶⁸ "CAIN: Maps: Maps of Ireland and Northern Ireland," <http://cain.ulst.ac.uk/images/maps/maps.htm>.

Brand also describes other less spectacular situational preventive measures, such as the liberal use of cul-de-sacs to reduce sectarian violence. He also states that many of the solutions for reducing violence are “candidates for any textbook about Crime Prevention through Environmental Design (CPTED).”⁶⁹

CPTED is a sub field of situational prevention based on the concept that proper design and effective use of the built environment can lead to a reduction in both the incidence and fear of crime, while also improving the quality of life.⁷⁰

CPTED is based on four interrelated principles: natural surveillance, natural access control, territorial reinforcement, and maintenance. When taken into consideration, these principles deter and reduce crime, and in this case, sectarian political violence. Brand states that the cul-de-sac design in the Short Strand neighborhood deliberately “minimized the exit points in the area, thus permitting it to be secured quickly and with minimum resources.”⁷¹

It is difficult to demonstrate the effectiveness of the Ring of Steel and the Peace Walls conclusively. However, a geospatial analysis of both Ring of Steel and the Peace Walls illustrates how these structures can increase the effort and risk required to conduct insurgent attacks within the city of Belfast.

⁶⁹ Brand, “The Power of Meaning: Artifacts and Social Practices in a Contested City,” 8.

⁷⁰ “Crime Prevention through Environmental Design (Basic CPTED): Community Security by Design—University of Louisville,” <https://louisville.edu/ncpi/upcoming-seminars/community-security-by-design.html>.

⁷¹ Brand, “The Power of Meaning: Artifacts and Social Practices in a Contested City,” 8.

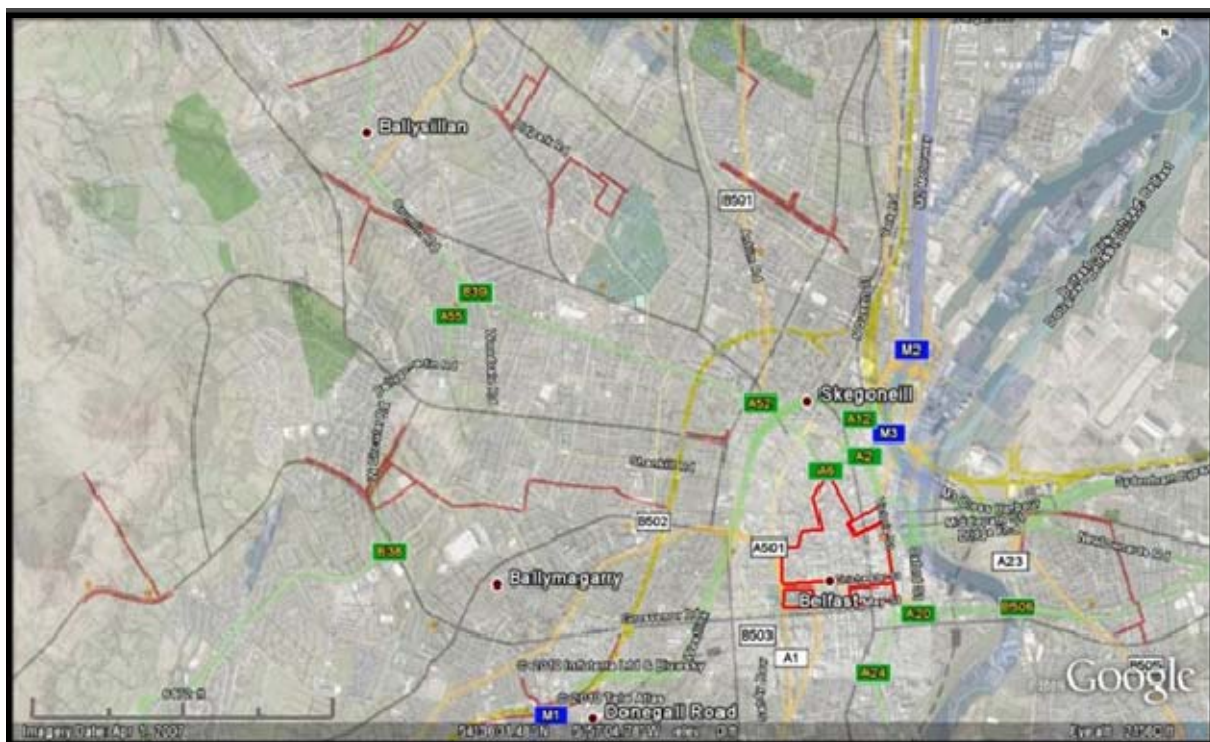


Figure 8. Geospatial Analysis of Both Ring of Steel and the Peace Walls⁷²

This geospatial analysis was conducted by geo-referencing the previously shown maps of the Security Segment and the Peace Walls as image overlays to the satellite images of Belfast in Google Earth. This provides a depiction of the Peace Walls and the Ring of Steel as they were in mid 1970s. The analysis shows that the Ring of Steel and the Peace Walls are located in an area less than 2.5 miles from north to south and less than 4.5 miles from east to west.

These structures, combined with formal surveillance, screening, and direct action taken by security forces, increase the effort and risk required to conduct insurgent operations in Belfast. Although only anecdotally possible to conclude that the erection of the Ring of Steel and the Peace Walls resulted in a

⁷² Author created image in Google Earth by adding Figures 6 and 7 as image overlays to the satellite image of Belfast. This enabled the author to conform the figures to the actual satellite images of the terrain.

statistically significant reduction in insurgent attacks, the interventions are at least perceived to be effective, as evidenced by the fact that the structures are still maintained today.

C. THE ISRAELI SECURITY FENCE

The final example of situational prevention analyzed is that of the Israeli Security Fence, which consists primarily of a network of chain link fences and vehicle barrier trenches designed to increase the effort and risk required to conduct terrorist attacks against Israel. The fence was constructed with a crossing point on average every 1.8 miles to enable the controlled access of people and goods, as well as to allow the Israeli security forces to conduct formal surveillance and exit screening.⁷³

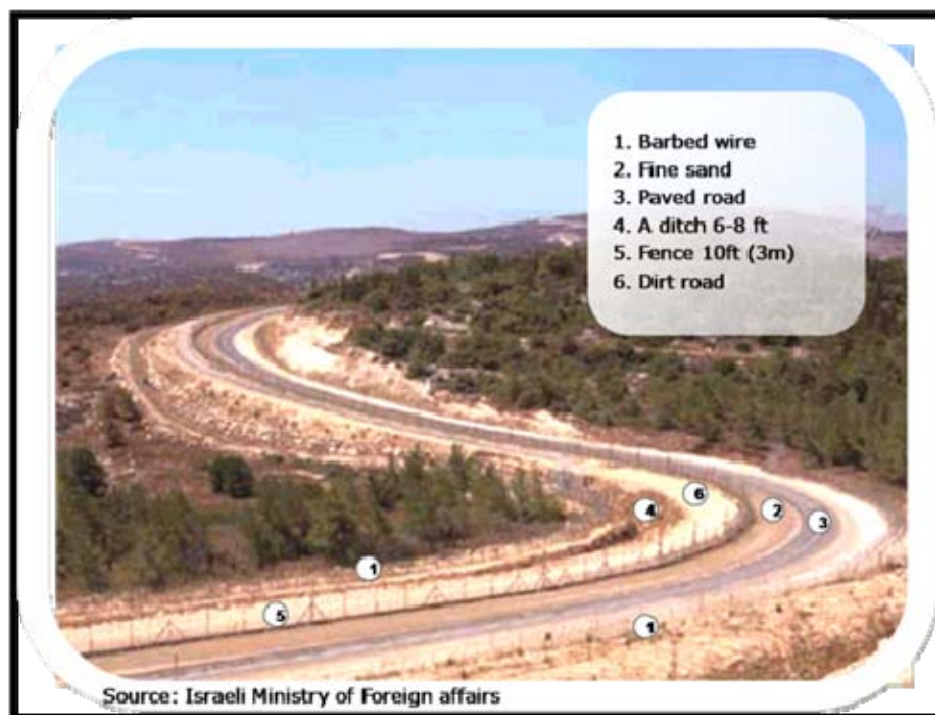


Figure 9. Israeli Security Fence⁷⁴

⁷³ "The Israeli Government's Official Web site, by the Ministry of Foreign Affairs," <http://securityfence.mfa.gov.il/mfm/web/main/missionhome.asp?MissionID=45187&>.

⁷⁴ Ibid.

Construction of the fence began in May of 2002 as part of a larger Israeli military operation known as Operation Defensive Shield. Operation Defensive Shield was initiated after a suicide bomber killed 30 people and wounded 140 others in the Passover Massacre on March 27, 2002. According to the Israeli Foreign Ministry, 55 suicide-bombing attacks occurred against Israel in 2002, and these resulted in the deaths of 220 people.⁷⁵

Only one of these suicide bombings had originated from the Gaza Strip. Since 1994, a security fence has operated along the entire land border of the Gaza strip, and was reinforced in 2000. The Israelis surmised that the security fence had stopped the suicide bomber in Gaza, and then they proceeded to construct a similar obstacle as an integral part of Operation Defensive Shield.

Major General Doron Almog is the former commander of the Israeli Defense Force's (IDF) Southern Command. He commanded the Southern Command, which includes the Gaza Strip from 2000–2003. General Almog, in an article entitled, "Lessons of the Gaza Security Fence for the West Bank," states, "the experience gained by the IDF's Southern Command in the Gaza Strip is the basis for our efforts to implement the new fence in the West Bank."⁷⁶

General Almog writes that as a Gaza Strip Division commander, he was involved in building the original security fence in 1994. When he assumed the Southern Command in 2000, he found that the Palestinians had dismantled the security fence. General Almog states his "first move" as commander was to rebuild the fence with the addition of a 1-kilometer buffer zone, and high technology observation posts. These observation posts allow an IDF soldier to

⁷⁵ "Suicide and Bombing Attacks since the DOP (September 1993)," <http://www.mfa.gov.il/MFA/Terrorism-+Obstacle+to+Peace/Palestinian+terror+since+2000/Suicide+and+Other+Bombing+Attacks+in+Israel+Since.htm>.

⁷⁶ "Lessons of the Gaza Security Fence for the West Bank—Maj. Gen. (Res.) Doron Almog," <http://www.jcpa.org/brief/brief004-12.htm>.

observe a 6-kilometer area day and night. These interventions were supplemented with new rules of engagement pertaining to anyone who entered into this area.⁷⁷

General Almog states that during his tenure as commander, there were “400 attempts by Palestinians to cross the boundaries of the Gaza Strip, all of which failed.” He attributes this success rate to the security fence, actionable intelligence, and responsive actions inside the territory.⁷⁸

Successful suicide bombings decreased immediately after the first section of the new fence in the West Bank was completed. Successful attacks decreased from a high of approximately 17 per month in 2002, to an average rate of approximately two per month in 2004. Since construction of the fence began, the number of attacks has declined by more than 90 percent. The number of Israelis killed and wounded has also decreased by more than 70% and 85%, respectively, after erection of the fence.⁷⁹ Figure 10, obtained from the Israeli government’s Ministry of Foreign Affairs, shows an immediate drop in successful suicide bombings and an immediate increase in intercepted attacks after the completion of the first sections of the security fence.

⁷⁷ "Lessons of the Gaza Security Fence for the West Bank—Maj. Gen. (Res.) Doron Almog."

⁷⁸ Ibid.

⁷⁹ "Israel's Security Fence," <http://www.jewishvirtuallibrary.org/jsource/Peace/fence.html>.

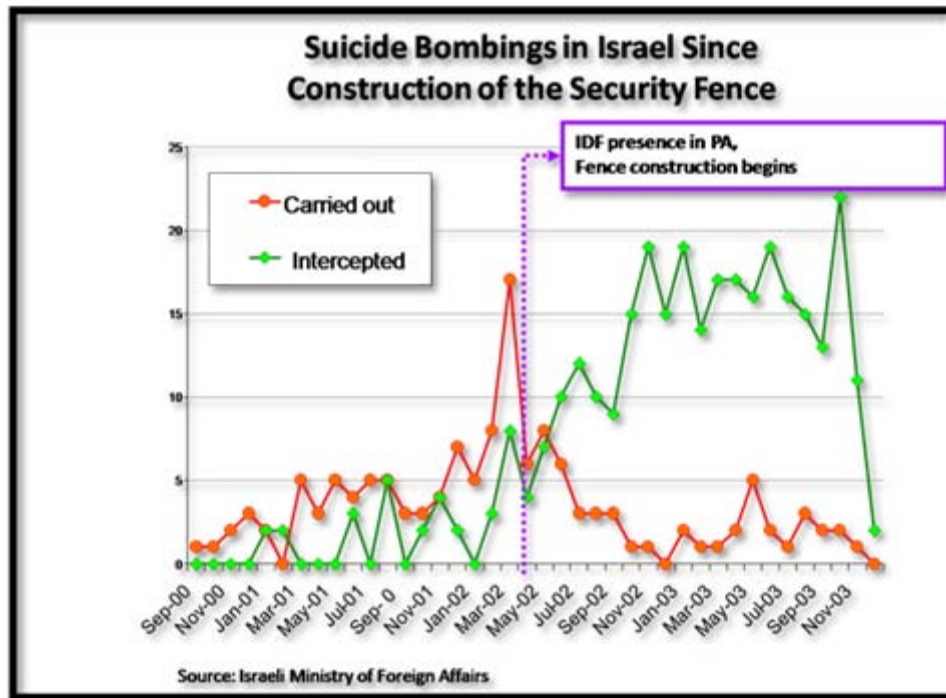


Figure 10. Suicide Bombings in Israel since Construction of the Security Fence⁸⁰

The Israeli Defense Ministry states, “the security fence, the buffer zone, and even the sections of the fence which have not been completed, limit the ability of terrorist organizations to enter Israel, and present operational obstacles, making it difficult for them to carry out suicide bombing attacks within Israel.”⁸¹

The following figures illustrate the reduction in successful suicide bombings and Israeli casualties by year after the first sections of the security fence were completed. Note the initial increase and then the subsequent substantial decrease in the number of intercepted attacks, which is an indicator that a drop has also occurred in the number of attempted suicide bombings. A reduction in the number of attempted attacks is an indicator of a decrease in the motivation required to commit these attacks.

⁸⁰ “The Israeli Government’s Official Web site, by the Ministry of Foreign Affairs.”

⁸¹ Ibid.

This leads to an additional hypothesis that a decrease in situational opportunity results in a decline in insurgent activity. A drop in activity results in a decrease in insurgent motivation leading to a further reduction in insurgent activity. This can be modeled as a virtuous or vicious cycle as it is further possible to argue that an increase in situational opportunity also increases the activity, and the motivation to engage in the activity. Intercepted attacks appear to be a cost variable that affects the insurgent's rational choice about whether to commit, or not to commit, suicide-bombing attacks.

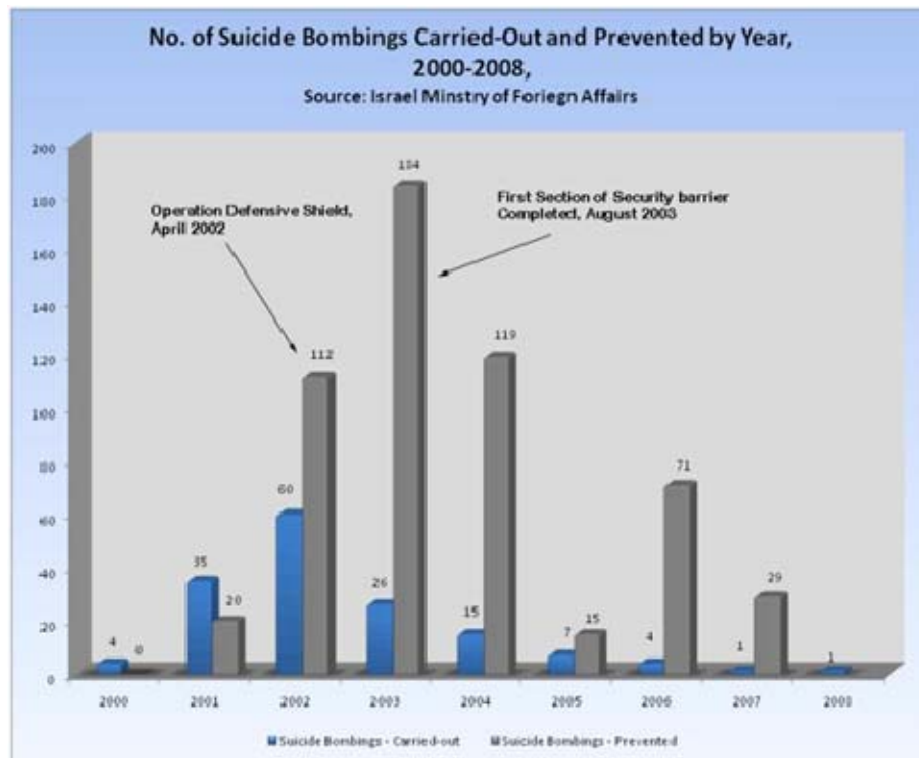


Figure 11. Number of Suicide Bombings Executed and Prevented by Year, 2000-2008.⁸²

⁸² "The Israeli Government's Official Web site, by the Ministry of Foreign Affairs."

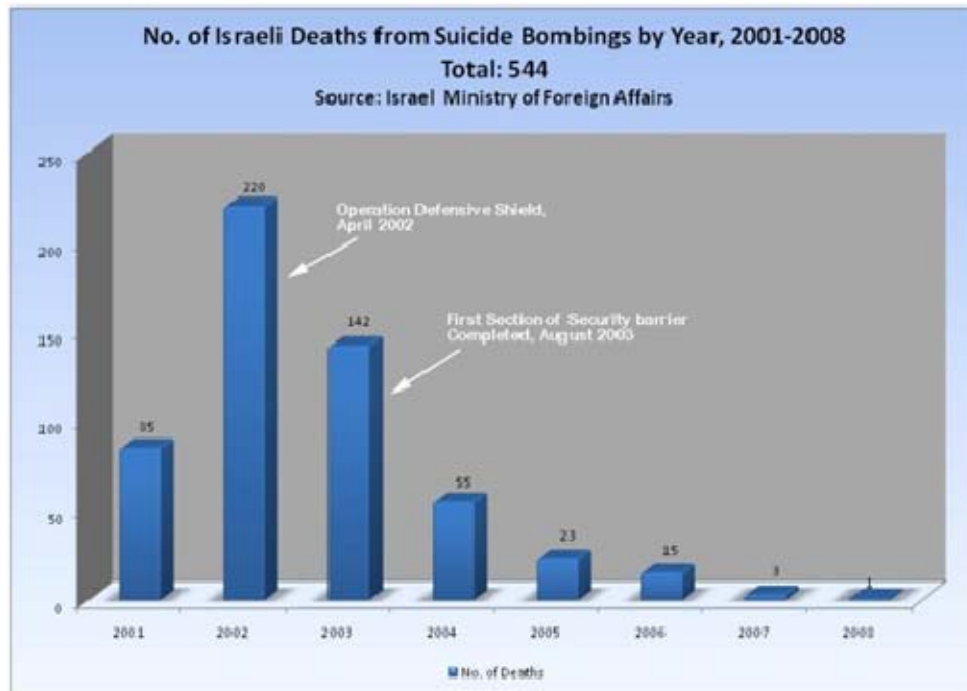


Figure 12. Number of Israeli Deaths from Suicide Bombings, by Year, 2000-2008.⁸³

The Israeli Security Fence, like the Ring of Steel, and the Peace Walls operates on several principles of situational prevention. The fence increases risk and effort, and it reduces the anticipated rewards for conducting suicide attacks by resulting in insurgent failure. The barrier also implements several techniques of situational prevention. The fence controls access, screens exits, assists in natural surveillance, and increases formal surveillance.

The fence also conceals and hardens targets. Approximately 3.8% of the security fence is walled. The walled portion of the fence line lies along Highway 6, and faces areas where Palestinian snipers can target and shoot commuters. The wall offsets buildings from the highway, and is approximately 28 feet high. This height is calculated to conceal pedestrians and motorists from a sniper's view when atop a roadside building as illustrated in Figure 13.⁸⁴ These types of

⁸³ "The Israeli Government's Official Web site, by the Ministry of Foreign Affairs."

⁸⁴ Ibid.

security measures reduce the opportunity structures of specific types of attacks, and demonstrates it is not out of the range of possibility to eliminate certain types of attacks altogether.

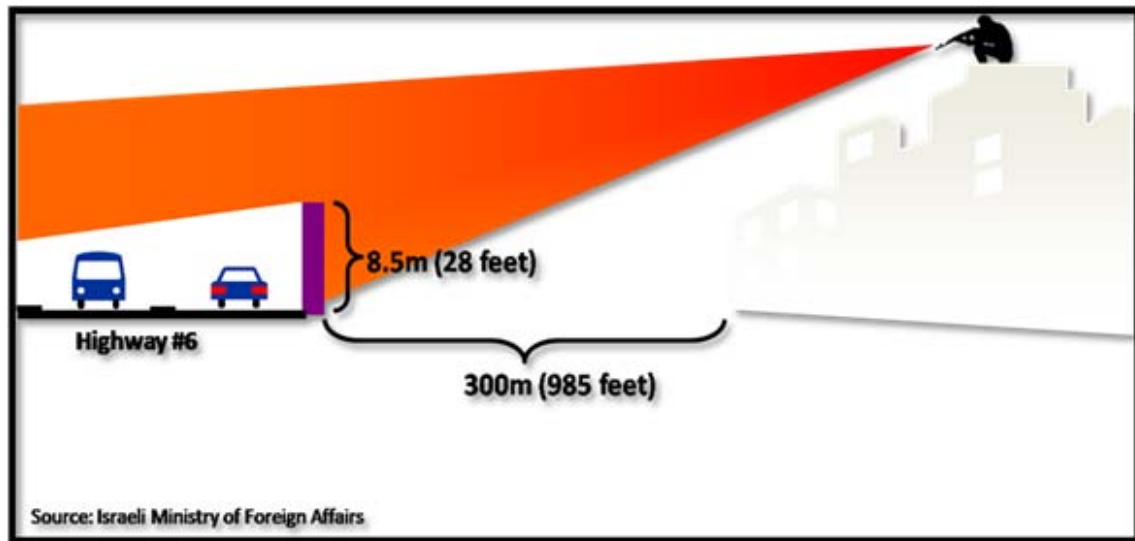


Figure 13. Walled Section Target Concealment⁸⁵

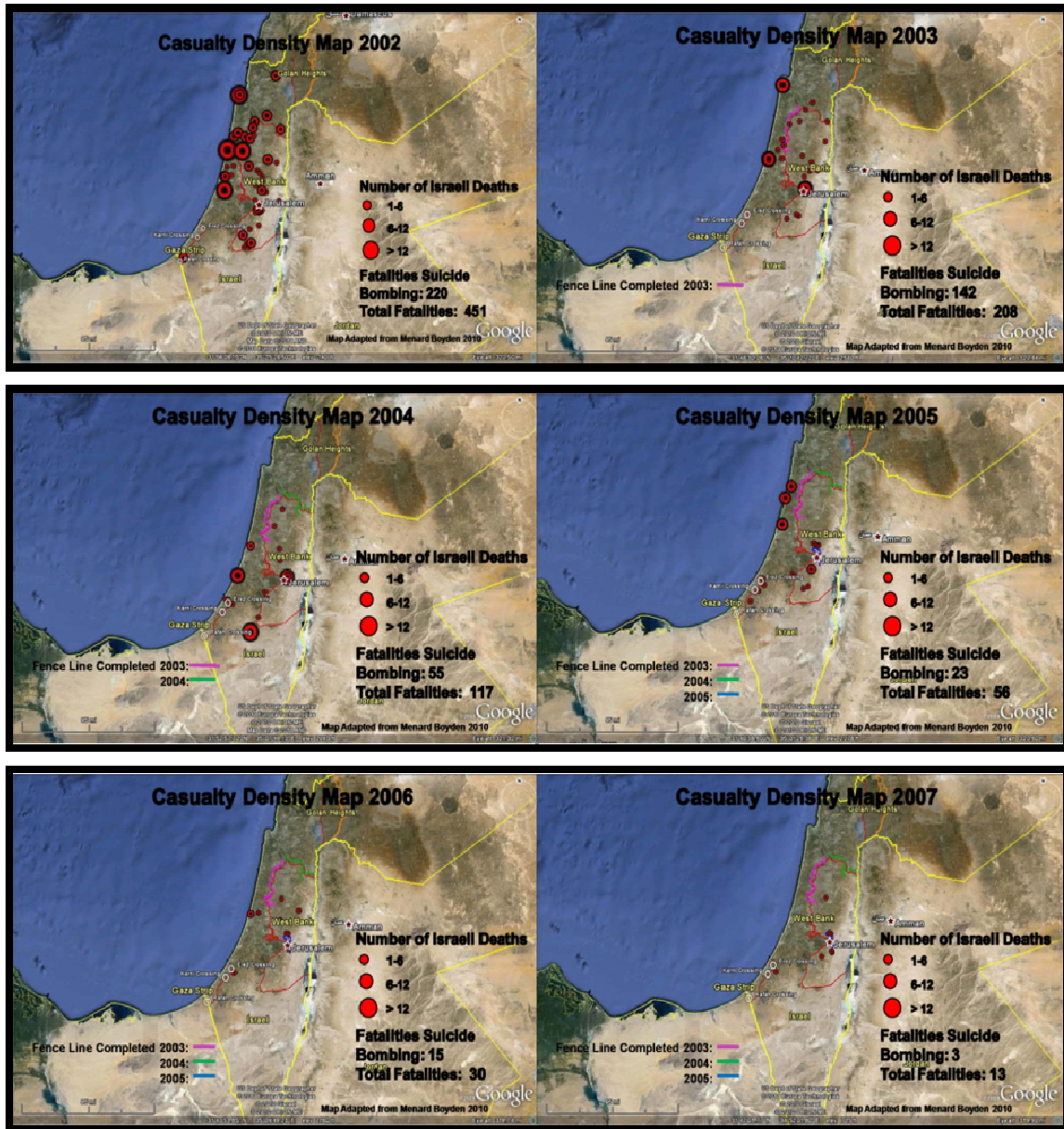
Similar to Operation Cul-de-Sac, and the Ring of Steel, the effectiveness of the security fence can be inferred from the statistically significant decrease in the number of successful suicide bombings immediately after its construction began. A geospatial analysis from 2002 to 2008 also shows a correlation between the erection of the fence and a decrease in the number of attacks and Israeli casualties from suicide bombings.⁸⁶

As construction of the security fence began, the number of suicide bombing attacks began to decrease, and the number of attacks intercepted by Israeli security forces, began to increase. The attacks that did occur were less

⁸⁵ "The Israeli Government's Official Web site, by the Ministry of Foreign Affairs."

⁸⁶ Map data adapted from Andrew Menard and Phillip Boyden, *Temporal-Spatial Analysis of Episodic Palestinian Israeli Violence during the Second Intifada* (Naval Postgraduate School: Unpublished, 2009).

effective as shown by the casualty density maps in Figure 14. These maps depict the density and location of Israeli casualties by year from all types of episodic violence.



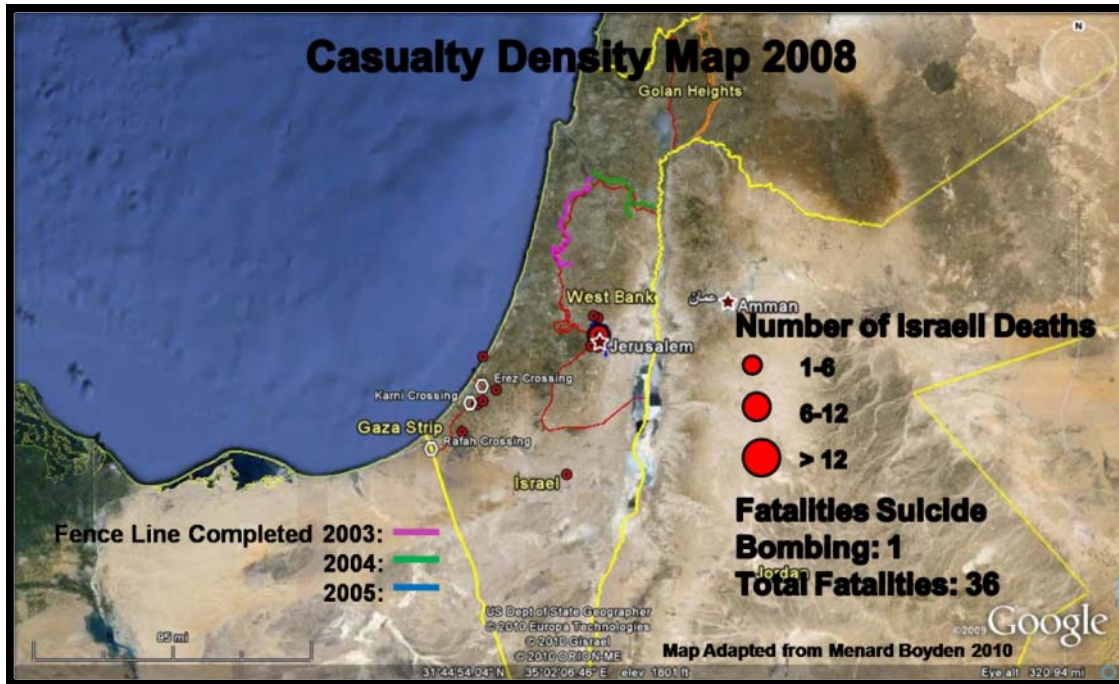


Figure 14. Casualty Density Maps⁸⁷

Analyzing these maps shows a substantial decrease in Israeli casualties as each portion of the security fence was being erected. The maps do not reveal any substantial displacement pattern of violence in an attempt to overcome the obstacles. The statistics from the Israeli Ministry of Foreign Affairs show that after an initial increase, the number of intercepted suicide bombing attacks has also decreased. This decline in the number of intercepted suicide bombings is also an indicator of a drop in the number of attempted suicide bombings. A decrease in the number of attempted suicide bombings could be the result of a reduction in the anticipated insurgent rewards resulting from the increase in intercepted or failed attacks.

A testimonial from a leader of Islamic Jihad offers additional convincing evidence supporting the effectiveness of the security fence. On November 11, 2006, Islamic Jihad leader Abdallah Ramadan Shalah, said on Al-Manar

⁸⁷ Author created casualty density maps by adding Menard and Boyden's images as overlays in Google Earth and inserting the appropriate statistical data from sources cited in the body of this research.

television that suicide bombing attacks are the Palestinian people's "strategic choice," and are meant to "create a balance of force and deterrence" in the campaign against a superior enemy.⁸⁸

Shalah further stated that his organization had every intention of continuing suicide bombing attacks, but that their timing and the possibility of implementing them from the West Bank depended on other factors. "For example," he said, "there is the separation fence, which is an obstacle to the resistance, and if it were not there the situation would be entirely different."⁸⁹

D. CONCLUSION

Creating stable situations is an essential task in counterinsurgency operations. The principles and techniques of situational prevention can provide a conceptual and technical framework to assist the counterinsurgent in creating this stable environment. The three case studies examined in this chapter demonstrated that altering the physical environment could reduce the opportunities for insurgent violence in terms of effort, risk and rewards of the acts.

These three empirical examples also validate Lewin's Equation, that behavior is a function of a person and the environment. The counterinsurgent and society can make changes to the environment, and the insurgent can then make rational decisions in response to these changes. This can and often does lead to a reduction in violence.

Situational prevention provides five principles and 25 techniques to increase interventions beyond fences and walls. Situational prevention can be used as a conceptual framework for systematically analyzing the opportunity

⁸⁸ "Islamic Jihad Leader Says Security Fence Obstacle to the Resistance 20-Nov-2006," <http://www.mfa.gov.il/MFA/Terrorism-+Obstacle+to+Peace/Palestinian+terror+since+2000/Islamic+Jihad+leader+says+security+fence+obstacle+to+the+resistance+20-Nov-2006.htm>.

⁸⁹ Ibid.

structures that terrorists and insurgents exploit when committing acts of violence or crime, and then makes it possible to find economical and acceptable means to block these opportunities.

Although other measures were taken in conjunction with situational prevention techniques in these cases, and displacement of violence and adaptation of insurgent tactics sometimes occurred, opportunity reduction appears to have an independent effect on the overall level of paramilitary violence.

IV. CONCLUSION

This research has sought to introduce the theories and techniques of situational crime prevention, and then demonstrate their applicability for use in counterinsurgency operations. The opportunity theories within criminology indicate that insurgent behavior, like all behavior, is a function between the person and the environment. Society and the local community can change insurgent opportunities, while the individual insurgent makes decisions in response to these changes. Altering the volume of insurgent opportunities at any level also produces a change in the outcomes of insurgent activities, in particular, violence and crime.

Recognizing the importance of situational opportunities within the operational environment allows for the expansion of current counterinsurgency theory and tactics. Counterinsurgency operations do not have to be restricted to direct action or abstract concepts, such as winning the support of the population. The principles and techniques of situational prevention can be applied to the here-and-now of any area of responsibility to manipulate the environmental variables that govern insurgent movement, give rise to attack patterns, and structure insurgent decisions and choices.⁹⁰ Application of these techniques increase the risk and effort associated with insurgent activities, which can, and often does, lead to a rapid and quantifiable reduction in violence.

Although situational prevention has not been used explicitly as a framework for reducing insurgent violence in counterinsurgency operations, the principles and techniques are often implemented intuitively when dealing with specific types of terrorist or insurgent attacks. The empirical examples cited in this research appear to validate Lewin's Equation, that behavior is a function of

⁹⁰ Felson, Clarke and Great Britain, *Opportunity Makes the Thief: Practical Theory for Crime Prevention*, 33.

person and the environment. These cases also suggest that opportunity reduction may have an independent effect on the overall level of insurgent violence.

The implications of these findings are that the principles and techniques of situational prevention can provide a practical means to apply the opportunity theories to counterinsurgency operations. Situational crime prevention is a strategy that addresses specific crimes, or insurgent violence, by managing, designing, and manipulating the environment in a manner that seeks to increase the risk to the insurgent, while reducing the insurgent's anticipated reward for committing the act.⁹¹

Situational prevention is a practical approach that focuses on protecting the population and securing the environment in which it lives. Situational crime prevention is designed to reduce the occurrence and fear of violence while improving the quality of people's lives. As such, the application of situational prevention techniques are worthy of consideration when conducting counterinsurgency operations.

Insurgent violence and crime are, in part, a result of situational opportunities within the environment. As such, they depend on the conjunction between the insurgents' motivation (of whatever nature and whatever source) and the situational opportunities presented to them within their environment (whether defined in terms of risks, efforts or rewards of their acts).⁹² In approaching terrorist and insurgent acts of violence as politically motivated crime, they can be prevented or reduced through the principles of situational crime prevention, which consists of increasing effort, increasing risk, reducing rewards, removing excuses, and reducing provocations.

⁹¹ Ronald V. Clarke, "Situational Crime Prevention: Its Theoretical Basis and Practical Scope," 1.

⁹² Clarke and Newman, *Outsmarting the Terrorists*, 6.

This change can be achieved through a continuous process of systematically analyzing the opportunity structures that terrorists and insurgents exploit when committing acts of violence or crime, and then applying the techniques of situational crime prevention to find economical and acceptable means to block these opportunities.⁹³

⁹³ Clarke and Newman, *Outsmarting the Terrorists*, Preface.

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF REFERENCES

- "BBC NEWS [UK] Northern Ireland | the Walls that Don't Come Down."
http://news.bbc.co.uk/2/hi/uk_news/northern_ireland/8121362.stm
(accessed April 2, 2010).
- Boba, R. "Evil Done." *Crime Prevention Studies* 25 (2009): 71–92.
- Brand, Ralf. "The Power of Meaning: Artifacts and Social Practices in a Contested City." *EASST Conference 2006*. 2006.
www2.unil.ch/easst2006/Papers/B/Brand.pdf (accessed April 1, 2010).
- Brantingham, Pat and Paul Brantingham. "Crime Pattern Theory."
http://www.ceamos.cl/ceamos/images/stories/actividadesyeventos/pattern_theory1.pdf (accessed May 13, 2010).
- Brown, Stephen. "Central Belfast's Security Segment: An Urban Phenomenon." *Area* 17, no. 1 (1985): 2.
- "CAIN: Maps: Maps of Ireland and Northern Ireland."
<http://cain.ulst.ac.uk/images/maps/maps.htm> (accessed April 7, 2010).
- "Center for Problem Oriented Policing | about CPOP"
<http://www.popcenter.org/about/?p=triangel> (accessed May 15, 2010).
- Clarke, R. V. G. and Graeme R. Newman. *Outsmarting the Terrorists*. Westport, Conn.: Praeger Security International, 2006.
- Clarke, R. V. G. and United States, Dept. of Justice, Office of Community Oriented Policing Services. "Closing Streets and Alleys to Reduce Crime should You Go Down this Road?" *U.S. Dept. of Justice, Office of Community Oriented Policing Services*, 6.
- Clarke, Ronald V. "Situational Crime Prevention: Its Theoretical Basis and Practical Scope." *Crime and Justice* 4 (1983): 225–256.
- Coaffee, Jon. *Terrorism, Risk, and the City: The Making of a Contemporary Urban Landscape*. Aldershot, Hants, England; Burlington, VT: Ashgate, 2003.
- "Crime Prevention through Environmental Design (Basic CPTED): Community Security by Design—University of Louisville."
<https://louisville.edu/ncpi/upcoming-seminars/community-security-by-design.html> (accessed January 19, 2010).

- Felson, Marcus, R. V. G. Clarke, and Great Britain. Home Office. Policing and Reducing Crime Unit. *Opportunity Makes the Thief: Practical Theory for Crime Prevention*. London: Home Office, Policing and Reducing Crime Unit, Research, Development and Statistics Directorate, 1998.
- "Field Theory—Kurt Lewin." <http://wilderdom.com/theory/FieldTheory.html> (accessed March 3, 2010).
- "Islamic Jihad Leader Says Security Fence Obstacle to the Resistance 20-Nov-2006." <http://www.mfa.gov.il/MFA/Terrorism-+Obstacle+to+Peace/Palestinian+terror+since+2000/Islamic+Jihad+leader+says+security+fence+obstacle+to+the+resistance+20-Nov-2006.htm> (accessed February 9, 2010).
- "Israel's Security Fence." <http://www.jewishvirtuallibrary.org/jsource/Peace/fence.htm> (accessed February 9, 2010).
- The Israeli Government's Official Web site, by the Ministry of Foreign Affairs. <http://securityfence.mfa.gov.il/mfm/web/main/missionhome.asp?MissionID=45187&> (accessed February 9, 2010).
- Lasley, James R. *Using Traffic Barriers to "Design Out" Crime: Key Findings and Implications for Law Enforcement Agencies; A Program Evaluation of LAPD's Operation Cul-De-Sac*. Rockville, MD: National Criminal Reference Service, 1996.
- "Lessons of the Gaza Security Fence for the West Bank—Maj. Gen. (Res.) Doron Almog." <http://www.jcpa.org/brief/brief004-12.htm> (accessed April 8, 2010).
- Menard, Andrew and Phillip Boyden. *Temporal-Spatial Analysis of Episodic Palestinian Israeli Violence during the Second Intifada*. Naval Postgraduate School: Unpublished, 2009.
- Newman, G. R. "Reducing Terrorist Opportunities: A Framework for Foreign Policy." *Crime Prevention Studies* 25 (2009): 33–60.
- Ross, N. "How to Lose the War on Terror: Lessons of a 30 Year War in Northern Ireland." *Crime Prevention Studies* 25 (2009): 229–244.
- Rossmo, Kim. *Geographic Profiling*. Boca Raton, FL: CRC Press, 2000.
- Sageman, Marc. *Leaderless Jihad: Terror Networks in the Twenty-First Century*. Philadelphia: University of Pennsylvania Press, 2008.

Siegel, S. *Nonparametric Statistics for the Behavioral Sciences*. New York: McGraw Hill, 1956.

"Suicide and Bombing Attacks since the DOP (September 1993)."

<http://www.mfa.gov.il/MFA/Terrorism-+Obstacle+to+Peace/Palestinian+terror+since+2000/Suicide+and+Other+Bombing+Attacks+in+Israel+Since.htm> (accessed April 5, 2010).

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California
3. Joint Special Operations University
Hurlburt Field, Florida
4. HQ USASOC
Ft. Bragg, North Carolina
5. HQ 4th PSYOP Group
Ft. Bragg, North Carolina
6. Naval Postgraduate School
Jennifer Duncan
Monterey, California