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# AN EXPLORATION OF 1<sup>ST</sup> AND 2<sup>ND</sup> GENERATION CPTED FOR END OF YEAR SCHOOL LEAVERS AT ROTTNESST ISLAND

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## Abstract

*The end-of-year post exam celebrations for Year 12 secondary school students presents a unique crime prevention proposition in Australia each year. Students of approximately 17 years of age congregate in a variety of locations in large groups known as 'Leavers'. Traditionally a number of 'rite of passage' activities, fuelled by additional factors such as alcohol, drugs and peer pressure, have resulted in an increased risk of crime and anti-social behaviour. This paper examines mitigation strategies aligned with Crime Prevention Through Environmental Design (CPTED) when placed at an event. Using the annual Leavers cohort at Rottnest Island, W.A., a number of 1<sup>st</sup> and 2<sup>nd</sup> generation CPTED instruments are discussed and evaluated. The additional isolation factor of the island highlights the value of 2<sup>nd</sup> generation social cohesion and its likely impact in reducing a number of crime-related social issues. The paper concludes that increased 2<sup>nd</sup> generation CPTED treatments significantly improve crime reduction and fear of crime in temporary locations when used for mass gatherings at events.*

## Key Words

Crime Prevention Through Environmental Design, CPTED, Social Cohesion, Anti-social behaviour, leavers.

## INTRODUCTION

Crime prevention through environmental design (CPTED) has been lauded as a low cost yet highly effective method for meeting the challenges of combining security concepts, architectural and situational elements, and security technologies (Atlas, 2002). New approaches to crime prevention now focus on merging the design elements of built infrastructure and the natural environment with the situational difficulties and the social demands of a specific event. In the case of year twelve secondary school post-exam revelry, there is perhaps no greater need for this merge than as is presented by the yearly 'Leavers' event that occurs immediately after final exams for most year 12 students. Where 1<sup>ST</sup> generation CPTED has been deemed ineffective as a stand-alone strategy, it now gains greater respect when combined with 2<sup>ND</sup> generation techniques that foster social cohesion and increased threshold capacity.

## THE PROBLEM OF LEAVERS

The problem of Leavers at Rottnest Island is defined by the momentary nature of a three day event that supplants the otherwise normal operations of the island with teenage rites of passage, crimes of opportunity, and the social isolation of students from parents and family. Law enforcement, using standard 1<sup>ST</sup> generation CPTED training are ill equipped to cope with multiple criminal acts. Under normal conditions the acts of crime involving teenage anti-social behavior and its more serious extensions are far more easily resolved on the mainland where parents and family, or other care mechanisms can be brought to play with comparative ease. Rottnest Island presents a compounded problem since Leavers deliberately seek to separate themselves from these family care systems. On the one hand the isolation from parent and family represents freedom for Leavers. On the other hand it represents increased risk for Leavers who are often unprepared for the multiplier effects of family isolation, heightened peer group expectations, and post exam euphoria. The addition of high percentage novice use of substances ranging from alcohol to hard drugs further disconnects normal behavioural expectations from anticipated Leavers conduct. This paper examines the effectiveness of both 1<sup>ST</sup> Generation and 2<sup>ND</sup> Generation CPTED techniques in order to mitigate against drastically increased risks of criminal acts during the Rottnest Leavers event.

Rottnest Island is situated 18 kilometres off the coast of Perth in Western Australia (RIA, 2011). The island is usually patronised by families as a resort destination, but for the three days of the annual 'leavers' event (and for some time after), the island becomes an "adult" playground for year twelve students. In this setting, the island is a destination of convenience, positioned relatively close to the greater Perth metropolitan area, yet sufficiently removed from parental and community reach so as to represent a premium destination for school leavers anxious to let off steam, celebrate outside of parental control, and enjoy a sought-after experience in the form of post exam revelry.

As a destination for students that is disengaged from the mainstream community of socially acceptable behaviour, Rottnest Island commands considerable appeal for approximately 1400 students who seek to escape some of the constraints of the mainland. For many students, the time at Rottnest represents an important 'Rite of Passage' that marks the transition from school student to adult. Despite the positive benefits of such an event, the Rottnest 'leavers' cohort also represent a group at high risk from a number of multiple and sometimes cascading crime scenarios. The consumption of alcohol, the ingestion of drugs, sexual and social encounters, peer group pressures, isolation from parents, activities in dark and muted areas, social confinement and sexual assault onboard private vessels, poor eating and drinking, extreme heat, and teenage exuberance, all contribute to a three day cocktail of circumstance that is characterized by frequent crime-related incidents.

The Leavers event at Rottnest Island operates in the face of a number of matchless conditions. Students who attend the island do so largely motivated by the prospect of copious opportunities and freedoms that arise from an event free from parental supervision and isolated from the regulations of many mainland venues. In contrast, Rottnest Island normally exists in its contemporary form for a different year-round clientele than teenage revelers. For approximately 360 days of each year the island plays host to a much more family-friendly, adult patronage. The Leavers event is unlike any of the other events that take place at Rottnest. It therefore requires an adjustment in terms of social and behavioral expectations from key island stakeholders, the business community, law enforcement, and the Rottnest Island Authority.

Rottnest Island is an A-class nature reserve that has crucial flora and fauna. The Island also holds significance to Aboriginal communities (RIMP, 2009). The Leavers' Week activities pose a substantial risk to Rottnest Island's reputation as a world-class tourist destination. The Rottnest Island Management Plan (RIMP) 2009 - 2014 Guiding Principles state that by "fostering appropriate events, activities and experiences and imposing strong controls on anti-social behaviour will encourage a safe, family-orientated environment". Anti-social behaviour associated with Leavers' activities can be defined as: acts of violence and aggressive behaviour; vandalism; theft; nuisance acts including rowdy and disorderly conduct; and cruelty directed towards local wildlife (e.g. Quokkas).

Of the contributing factors that are associated with Leavers' anti-social behavior, there are five that dominate the discussion. The first is alcohol and drug abuse. Substance abuse has a magnified presence during the Leavers event due to three key multipliers. Alcoholic beverages are widely available and accessible without parental control and are obtained from "Toolies" (those over 18 years of age opportunists who sell and distribute for their own profiteering). Alcohol and drugs are consumed under peer-group conditions that encourage rapid consumption and excessive consumption patterns. The alcohol content of many drinks are considerably higher than school leavers will comprehend, and the effects of many drugs are underestimated and misunderstood by first time users. The second factor is the isolation that Rottnest Island imposes on Leavers. There are insufficient requirements for adult sponsorship of lodging and very limited accountability constraints. As with alcohol and substance abuse, lodging responsibilities are also subject to opportunistic deeds by Toolies. The third factor is one of expectation. For Leavers the event is perceived as an essential 'rite of passage' that is accompanied by the false assumption that many laws are not applicable on the island. Easy access to alcohol and the pattern of public drinking are constant reminders that some laws are ignored or relaxed. The fourth factor is associated with the Rottnest community. In this case, there is an established resistance from the business community towards the event. This results in poor stakeholder cohesion, conflicting financial interests, and reduced stakeholder communication and agreement. The fifth factor is the existing physical security and protection systems. The Island suffers from poor application of 1<sup>ST</sup> generation CPTED principles that is further exacerbated by a hesitation to change and a problematical set of environmental regulations associated with A-class reserves.

## **1ST AND 2ND GENERATION CPTED**

Crime prevention through environmental design is defined as the use of a built environment where that environment acts to prevent or reduce the incidence of crime, the fear of crime, and to improve the quality of life (Crowe, 1991). In its 1<sup>ST</sup> generation form, CPTED theory is underpinned by the three requirements of natural surveillance, natural access control, and territorial reinforcement (Newman, 1972). Simple ploys such as playing

classical music in front of shopping centres to persuade young skateboarders away from loitering are useful starting points in understanding the possibilities using a CPTED approach. 1<sup>ST</sup> generation CPTED involves the application of physical design principles to an area in order to minimise the environmental support for criminal behaviour (WAPC, 2006). It also serves to reinforce positive behavior from the same design philosophy. When designed properly, CPTED environments lead to the reduction in crime and the fear of crime. (Crowe, 2000; Hillier, Saville and Cozens, 2005; Schneider, 2005; Wortley and Mazerolle, 2008). Gen. 1 CPTED differs from the *Defence in Depth* strategy, which entails a series of physical barriers to limit access to potential crime targets, by focusing on the design of physical space to encourage legitimate use and deter criminal activity.

However, 1<sup>ST</sup> generation CPTED draws criticism from criminologists who argue that many environmental strategies only shift criminal behaviour rather than reducing it (Atlas, 2008). Additionally it is limited as it is designed around a rational mindset that assumes criminal behavior is always committed through rational choice (Cleveland & Saville, 1999). It is further limited as a stand-alone strategy when applied to applications that are events rather than property focused. Some examples of the application of 1st Generation CPTED include; the maintenance of facilities to portray the message that they are owned and cared for; adequate signage to deter intruders and criminal activity by reinforcing ownership and legitimate use; satisfactory lighting; Closed Circuit Television (CCTV); and open space environments to promote surveillance and increase the perceived risk of criminals being caught. The human space in CPTED must have a designated function. It must be defined and supported by the design of the location (Crowe, 2000).

2<sup>ND</sup> generation CPTED is defined as a supplemental extension to 1<sup>ST</sup> generation CPTED that focus on explicit social and cultural dynamics in each individual neighbourhood (Atlas, 2008). It is not a replacement for 1<sup>ST</sup> generation CPTED. Instead, it is intended to augment physical environmental design through the addition of socially cohesive stratagem. To further characterize 2<sup>ND</sup> generation beyond this simple definition, it is necessary to consider crime prevention over a period of time, rather than as a moment in time. Whilst 1<sup>st</sup> generation CPTED is about design strategies to prevent criminals from entering an area, 2<sup>nd</sup> generation CPTED is about preventing crime from growing within an area (Saville and Cleveland, 1999).

2nd generation CPTED extends beyond basic physical design and focuses on the various social issues within society as well as other situational factors. This approach offers the promise of more enhanced and realistic crime prevention strategies (Ibid). In the past the rational offender theory applied to traditional CPTED strategies has been offender-focused, rather than victim-focused. 2nd generation CPTED and Designing Out Crime strategies are designed to expand on this perspective to incorporate a more holistic approach to crime prevention within the community (Cleveland & Saville 1999). Without 2<sup>nd</sup> generation CPTED, factors such as adolescent-isolation (from parents and older peers), remain as untreated risks.

Key dynamics behind the requirement for 2nd generation CPTED strategies include their application to alcohol-related crime, such as public disorder and anti-social behaviour, where 'rationality' is often relatively absent due to intoxication (DOCRC, 2011). 2<sup>nd</sup> generation CPTED is a more reliable strategy for changing an offender's character or motivation. This is more beneficial to longer-term and more practical solutions in preventing crime (Geason & Wilson, 1990). Overall, however, it is the social interaction and cohesion amongst all stakeholders that enables a more holistic (and therefore successful) approach (Saville & Cleveland, 1999). Social cohesion promotes the idea of legitimate users taking responsibility and involvement in an ongoing manner. This can be achieved by mutually supported social events, joint meetings and discussions, and awareness programs. In many instances these additional concepts require high-level connectivity with local authorities, law enforcement, and agencies from a broad church of relations. In combination, these requirements demand an understanding of the threshold or capacity that the local community can tolerate and deliver. This is particularly difficult in built environments where the normal purpose of the environment is uniquely different from the social makeup that defines a particular event (Atlas, 2008). Such is the case with Rottneest Leavers.

## **ASSESSMENT AND METHODOLOGY**

This study compared 1<sup>ST</sup> and 2<sup>ND</sup> generation CPTED elements as they presented on Rottneest Island for the annual Leavers event. A list of CPTED techniques used on the Island was compiled by taking known CPTED techniques and looking at past event history to determine which factors were present in previous Leavers events at Rottneest Island. This literature was then overlaid with observations on the part of the researchers, largely based on visits to the Island and observations about the environment. A third collection of data came from a broad range of interviews to key stakeholders on or connected with Rottneest Island and the Leavers event. These stakeholders were identified through the literature as reviewed and by employing a snowball approach to stakeholders. This meant that stakeholders were invited to suggest other stakeholders who were connected with either the Leavers event or with Rottneest Island.

Within the unique conditions of Rottnest Island during the post-exam 'leavers' period, crime prevention requirements could be most accurately described as "like a magician...", pulling "the divergent forces of architecture, operational/management practices, governmental bureaucracy, and vested interests together in a collaborative process." (Atlas 2008, p14). The process of evaluating the circumstances of this unique event, used a holistic approach to incorporate 2nd generation CPTED elements alongside traditional 1<sup>ST</sup> generation CPTED instruments. What is best practice crime prevention in most large-scale events of this size is not necessarily best practice within the isolated environment of Rottnest Island. The method for treating risk management at Rottnest Island therefore looks much more closely at 2<sup>nd</sup> generation social cohesion than similar events that occur on the mainland. This approach was applied to the three day event known as 'Rottnest Leavers'.

Comparisons between 1<sup>ST</sup> and 2<sup>ND</sup> generation techniques were recorded and noted for evaluation. The assessment was carried out over a three month period between March and June of 2011. It takes the form of a community-focused risk audit as described by Greg Saville (2008). Researchers conducted their assessment using known crime data from the Office of Crime Prevention (OCP) and the Western Australian Police Service. They incorporated interview results from face-to-face and telephone meetings with Rottnest Island business stakeholders, Police and Emergency service providers, the Rottnest Island Authority, events coordinators, Island rangers, and a range of social community service groups. The collection of data incorporated a combination of qualitative field research techniques based on a handpicked sample of stakeholders, and allowed for snowballing to a second generation of samples (O'Leary, 2005). The assessment also included a comprehensive review of current and past online social media literature, focusing on dedicated Facebook sites and their corresponding counter-narratives and postings.

The assessment included four site surveys of the key event areas on the island, and an evaluation of the key natural, built, and socially-constructed areas that pertained to the Rottnest Leavers event. Towards the end of the assessment period the investigators called a group meeting of key stakeholders from the Rottnest Island Authority, the Youth Affairs Council of WA, the Red Frogs group, and the Youth Division of the Western Australian Police Service. This meeting was used as an exit strategy to confirm their findings, and to test the veracity of their major results against views from notable peak stakeholder groups. The summary of the major findings are discussed below in this paper. Since the island is uniquely identifiable, so too are its stakeholders. This paper therefore discusses findings in broad terms rather than identifying any one single source of information. It is intended to describe the inclusion of 2<sup>nd</sup> generation CPTED and its application to events as an exemplar of the value of social cohesion in crime prevention, rather than the description of a specific research data set.

## **RESULTS**

The results of the study were tabulated into a chart that shows which forms of CPTED had perceived efficacy and acceptance. Table 1 is a summary of those perceptions, whilst the 2<sup>ND</sup> generation instruments of note are further described in greater detail.

Table 1. CPTED 1<sup>ST</sup> & 2<sup>ND</sup> generation instruments – evaluation and efficacy.

CPTED Treatment	Description	1 <sup>ST</sup> Gen CPTED	1 <sup>ST</sup> & 2 <sup>ND</sup> Gen	Evaluation of Treatment	Popular with cohort	Success/ Efficacy
LEAVERS Information Tape	Pre-event information in the form of an audio tape that is played during the ocean crossing by ferry.	No	Yes	Works on two levels. Firstly it relays important news regarding what students may expect – thus establishing important boundaries and rules in an environment that students may 'expect' to operate without rules or regulations	No	Medium
Bags Searched on Arrival	Police Officers search bags and confiscate alcohol and other contraband items	Yes	No	Seemingly effective- but useless against Toolies and hard-core criminals who may pre-deliver items in prior weeks and hide them on the island	No	Low
Rangers Briefing	Sessions given to inform about rules and expectations	No	Yes	Useful in establishing the norms and values of the island – and delivered by adults who are not Police	Yes	Medium/ High
Tenancy Terms and Sponsorship Agreement	Agreement requiring an adult sponsor or the accommodation and ensure tenants behave within rules	Yes	No	Flawed in many cases as 'sponsors' may be randomly acquired (in some cases paid) and are effectively accommodation Toolies rather than parents or guardians	No	Low
CCTV Cameras	Designed to record movement and activity and to act as a deterrent to would be criminals	Yes	No	Limited number of cameras, designed to protect business property, with no connection with areas frequented by Leavers cohort – easy to avoid or to circumvent	No	Very low - ineffective
Glare Lighting	Designed to prevent criminals from entering areas by aiming lighting at their eyes	Yes	No	Limited to a handful of areas, restrictions in line with A-class reserve mean that this lighting is not deployed widely at Rottnest. This form of CPTED moves crime to another location rather than reducing its occurrence	No	Very low - ineffective
Increased Security Staff	Additional staff act as territorial reinforcement also with surveillance and access control capabilities	Yes	No	Confrontational form of crime prevention that does not contribute to social cohesion. In an environment of peer and alcohol-fueled behavior - increased staff can have the reverse effect, driving Leavers away from designated areas and into other opportunistic environments for crime	No	Low/ Medium
Event Scheduling	3 day event scheduled – designed to restrict the event to just 3 days	Yes	No	Assumes Leavers will leave after three days. Ignores contrary past evidence that shows Leavers remain after 3 days (when enforcement numbers return to lower levels)	No	Medium
Pathway Lighting	Low level lighting illuminates pathways and encourages social and regular usage of designated access control	Yes	Yes	Effective on several levels. Encourages social cohesion. Reduces likelihood of sexual assault and reduces crimes of opportunity such as vandalism and graffiti.	Yes	High
Free Island Shuttle Bus	System for encouraging movement in pre and post evening events	Yes	Yes	Encourages social cohesion. Allows for interaction of cohort and encourages engagement with a broad range of Island facilities and activities	Yes	High
Transitional Events	Events specifically target Leavers who remain in the party zone, in close contact with drug, alcohol and peer-motivated risk opportunities	No	Yes	Effective across several levels. Encourages social cohesion, whilst reducing time spent at party areas. Transitional events reduce incidence of drunken behavior (and substance abuse). Transitional events are independently stimulating, encouraging Leavers to engage in non peer-driven behavior.	Yes	Highly Effective
Recovery Breakfast	Designed to break Leavers from the cycle of constant alcohol consumption.	No	Yes	Every mouthful of breakfast reduces the likelihood of all-day drinking. Creates social cohesion, fills up event time with non-drinking activities.	Yes	Highly Effective
Red Frogs Community Support Teams	A volunteer- based informal chaplaincy network that frequents events such as leavers to provide a positive presence in mass attended parties (such as Leavers)	Yes	Yes	Provides territorial reinforcement at the 1 <sup>st</sup> Generation level – but more importantly engages with a range of leavers who require 'on the scene' assistance and emotional support where applicable.	Yes	Highly Effective
24Hr Nursing Post	Evaluation and support for first aid and accidents	Yes	Yes	Provides surveillance and intelligence on incidents in a timely manner. Also provides 2 <sup>nd</sup> gen social support and assistance and referral for those in crisis.	Yes	Highly Effective
Leave Your Mark Video Diary	Encourages social reporting, high-level cognitive and societal behavior.	No	Yes	This activity promotes high level social cohesion and delivers increased threshold capacity.	Yes	Highly Effective
Leave Your Mark Wall	Promotes citizenship and environmental/habitat awareness	No	Yes	Promotes high level social cohesion and delivers increased threshold capacity.	Yes	Highly Effective
Food Outlets extended Trading	Connectivity between business community and leavers cohort	Yes	Yes	Natural Surveillance, increased social engagement, reduction in alcohol and 24 hr party cycle	Yes	Highly Effective

The results show that 1<sup>ST</sup> generation CPTED instruments hold less acceptance than 2<sup>ND</sup> generation instruments. As stand-alone strategies, 1<sup>ST</sup> generation systems not only engender low acceptance by Leavers, but they may also contribute to the 'cyclone' effect, indirectly encouraging angered leavers to commit acts of crime as part of a heightened response to rules and mainland parental control. Since the theory surrounding leavers behavior often refers to their poor peer-group conduct collectively, the addition of 2<sup>nd</sup> generation systems that are embedded with a commitment to some form of social interaction suggests that social cohesion is a useful catalyst for the reduction of opportunistic criminal acts.

The results also show that in addition to social cohesion, an increase in connectivity (both physically and socially) promotes a stronger sense of threshold. This allows large cohorts to interact over several days with minimal involvement in criminal behavior. Oscar Newman's (1972) 'Broken Windows' theory was originally applied as a 1<sup>ST</sup> generation physical security concept, but these results suggest the broken windows theory has greater alignment with social cohesion than deterrence. Social fissures and lack of cohesion are the dynamic components of 2<sup>ND</sup> generation CPTED. Many 2<sup>nd</sup> generation instruments of CPTED operate on more than one level. At first glance they augment the efficacy of natural surveillance, access control, and territorial reinforcement. Distinctively prominent instruments that leverage off the back of the CPTED model are discussed here in more detail.

## **CRIME PREVENTION FOR A DIFFERENT COHORT**

Whilst there are a variety of physical security instruments installed into the built infrastructure of the island, they remain poorly suited to the specific needs of the Rottneest Leavers event. To characterize the poor application of 1st generation CPTED strategies an examination of the Closed Circuit Television (CCTV) and natural surveillance on Rottneest Island is instructive. There are only seven official CCTV units currently operating on the island (WA Today, 2010) and their application is focused primarily towards protecting the Rottneest Island Business Community (RIBC) interests rather than historic 'hot spots' or obvious areas of congregation and adolescent violence. In addition to this the CCTV units are located where they can be easily accessed and tampered with to be rendered ineffective countering any surveillance efforts by authorities.

Since the Leavers event is only a single event in the yearly calendar, the need for event-based surveillance has taken a back seat to the protection of business premises. This is not a criticism of the business crime prevention strategies, but rather an indicator of where crime prevention assets have been deployed. The installation of CCTV has not been an operational priority on Rottneest Island. State records reveal that a twenty thousand dollar (\$20,000) funding allocation from the Office of Crime Prevention Local Government Partnership Fund during the 2008/2009 financial year, to assist with upgrading the CCTV systems on Rottneest Island, in line with the State Government's *Blue Iris* initiative (OCP, 2009), remained unused for CCTV. The Rottneest Island Authority has not used this funding for its intended purpose and as a result the CCTV systems on the island have not been upgraded for some time.

## **PEER GROUP MULTIPLIERS**

Much of the attraction to Rottneest Island in the immediate post-exam period is driven by peer group pressures and social expectations within school sub-groups. Adolescents are socialized into their own peer groups. This makes them subject to a range of peer pressures that can introduce higher-order themes (sex, drugs, alcohol) requiring increased maturity (Allen, Porter & McFarland, 2005). The pressure to conform has both positive and negative aspects, and society expects a range of deviance from mild to moderate behavioural change. These peer demands result in higher risk scenarios, and are multiplied through multiple iterations of the social expectations through online social media such as Facebook and MySpace (Schoolies, 2011).

The application of 2<sup>nd</sup> Generation CPTED to an event such as Leavers therefore takes on greater significance than 1<sup>st</sup> Generation CPTED alone. It should, however, work in concert with 1<sup>st</sup> Generation concepts rather than independently. At first glance there are three broad elements that are likely to be effective. The first would include education strategies to tackle alcohol and drug abuse among Leavers. This would include the dissemination of detailed information packs and lectures at schools by relevant stakeholders and authorities. The second includes superior cohesion and supervision strategies including greater community and parental involvement. The third element would focus on attitudinal strategies that would make Leavers and parents more accountable for anti-social behaviour during Leavers' Week activities such as introducing behavioural attributes for entry into tertiary level studies. These elements all derive impetus from programs, events and activities that encourage social cohesion (Baba and Austin, 1989). A system such as this does not need all students to require entry to university, but rather that with sufficient weight in numbers the discussions regarding anti-social behavior gain peer-reinforced recognition.

## **THE VALUE OF SUBTLE LIGHTING**

2nd Generation CPTED provides a further extension of the value of social cohesion when applied to lighting. The purpose of researching the importance of lighting and pathway innovation during events is to consider ways to provide school leavers with a sense of security and safety. Kunstle, Clark, and Schneider (2003) made specific discoveries that noted the importance of exterior lighting and pathway lighting in note only assisting 1<sup>st</sup>

Generation CPTED requirements, but also in social buoyancy by helping to foster confidence and assurance within individuals. Victimization shows that if persons are feeling safe and confident then they are less likely to be chosen or attacked by a predator, thus through social cohesion and community culture this can be achieved (Rea, 1993). CPTED 2<sup>nd</sup> generation can be used on Rottnest Island as it integrates crime of opportunity and the impact of the surrounding environment on individuals (Atlas, 1999). The importance of having sufficient lighting during an event such as leavers on Rottnest Island is amplified due to the many students who are not familiar with the island. This can increase their vulnerability as targets for crimes such as sexual assault. Lighting is therefore an essential part of growing the sense of safety within individuals as well as assisting CCTV systems in the identification of offenders in the event of an attack. Site surveys confirmed information from business stakeholders and past Leavers students that areas of Rottnest Island felt unsafe at night because of poor or inadequate lighting. Following the designated pathways from the camping ground to the shopping area, light-meter readings indicated an average reading of under 3 (three) Lux. Many visitors were observed using their mobile phones to view the pathway and to stop the risk of running over wildlife whilst riding bicycles.

## **SOCIAL COHESION**

An important distinction that marks the Rottnest event apart from other assessable fixtures/events is the improvised development of its social community. Whilst 1st Generation CPTED focuses on physical and tangible elements a more comprehensive CPTED stance should also match people and their activities to the environment. The “Leavers” cohort holds several commonalities. They have all finished year 12 exams, are of the same age, and are looking to celebrate. Beyond these unities however, they represent a disparate group of vastly contrasting styles, behaviors and maturity.

Social cohesion is a bond that is created between individuals and groups. This bond is essential for people to function normally within society, essentially providing unwritten social rules between one another on how to act and what is socially acceptable. (McKinnon, 2007) Social cohesion can be isolated into several themes; these include tolerance, responsibility, democratic participation and mutual respect. (Acar, 2011) However in terms of teenage mass gatherings, ‘respect’ can be considered to be a significant 2<sup>nd</sup> Generation CPTED theme. Respect is what governs the level of cooperation between individuals within a social context. (Friedkin, 2004)

One advantage of creating a strong socially cohesive bond between the ‘Leavers’ and Rottnest Island is to channel a feeling of respect toward the island’s community and culture. The rationale behind this sentiment works in two directions The return direction resulting in the island community suffering less from the effects of the ‘Leavers’ and embracing leavers as a part of their culture. If a strong socially cohesive bond existed between the leavers and the island’s community and culture, spin-offs should include a decrease in vandalism, violence, and alcohol-fuelled anti-social behavior.

## **COHESION AND TRANSITIONAL EVENTS**

Social events are an effective method of developing widespread social cohesion. These events bring groups and individuals together, and in so doing encourage the fusion of smaller groups into a larger community. Whilst most strategies focus on a range of showcase evening events that attract large numbers, a different strategy looks at the importance of transitional events. Post-event surveys from previous years showed that Leavers were getting bored on the island. Police and ranger reports from a study ten years before showed that leavers were wandering the island while drinking looking for some form of entertainment (Midford, Farrington, & Young, 2001). These surveys revealed that the best way to improve their leavers experience on the island was to improve the continuity and participation level of each form of entertainment. (ibid)

Rottnest Island previously held a breakfast meet every morning for the period of the ‘Leavers’ week celebrations, this event gave the youths a chance to come out and get something to eat every morning. The breakfast event served a number of useful purposes. In the first instance it provided participants with the chance to eat a hearty breakfast (rather than a possible breakfast that included the continued intake of alcohol). It gave authorities and social groups the chance to sight “at-risk” individuals from the night before, and it created another valuable opportunity for leavers to meet and interact not only with each other, but also with the Island stakeholder in the form of Police, Security, Red Frogs Crew, Drug Arm, The Green Team, WA AIDS Counsel, as well as other volunteer groups and permanent residents (Midford, Farrington, & Young, 2001). Social work groups such as Red Frogs, the Drug Arm and the Green Team form an essential layer in the ongoing scrutiny and cohesion of Leavers participants. The breakfast meet has since been discontinued despite Police and social group comments that deemed the event to be highly successful.

Transitional events need not become mass gatherings to distribute a successful social cohesion message. Daytime activities are likely to compete with a range of tent-based and chalet-based interactions. Whilst they work on a continuous trickle, they attract enormous interest from Leavers. Comments from previous intermediary events indicated strong approval. “The recovery breakfasts were ... very well patronised and commented on in a positive manner... eating while drinking would have reduced [the] effects of alcohol, but the process of providing the food may have been more potent again. There was a lot of evidence to suggest that the sausage sizzles conducted by the police did much to foster a spirit of respect and cooperation between the leavers and authorities on the Island.” (Midford, Farrington, & Young, 2001: p23). Transitional events add significantly to the development of social cohesion. For social cohesion to be effective, breakfast and other transitional events should continue to run. Anti-social behavior is not something that can be fixed overnight. Since the anti-social culture already exists, the norms and values of the student cohort need to transform gradually, concurrently evolving with increased community engagement from key island stakeholders. Transitional events provide an important bridge between boredom and highly anticipated evening events. They encourage fellowship in place of drinking, and extend the positive benefits of social cohesion into a 24hour cycle of attention rather than an expectation of fleeting cohesion in the hustle and bustle of evening events.

## **COHESION AND ACTIVITIES**

Whilst specific events with precise timing can assist in terms of transitional periods, the inclusion of activities that remain constantly open are of particular interest. These activities fill a gap alongside transitional events, and provide for social cohesion to grow in the exercise of simple but highly sought-after personalized experiences. Two programs emerged from the research, that were endorsed by the exit interviews as held with the Rottnest Island Authority representative, as well as the Red Frogs group and the Youth Affairs Council of WA. Cozens, Saville, & Hillier, D. (2005) have previously posited the value of similar events and describe them in 2<sup>nd</sup> Generation CPTED terminology as ‘social stabilisers’. Activities such as these strengthen the threshold capacity of the event, growing cohesive interaction and reducing the incidence of opportunity-driven acts of crime.

## **THE LEAVE YOUR MARK PROGRAM (LYMP)**

The leave Your Mark Program is designed for the school leavers to document the experience of their time on the island in a positive manner. The program allows for a range of positive interactions, allowing for later re-visitation of the island for Leavers, and a positive yet tangible set of activities that promote ongoing social cohesion. Opportunities to interact on a physical and tactile sense with the island community are likely to assist in the conversion of norms and values towards socially acceptable, mature behavior (Brantingham & Brantingham, 1993).

### **The Leave Your Mark Video Diary**

Social networking, through popular sites such as YouTube, allows people to share their videos with a global audience. Setting up a Leavers Video Diary tent will provides Leavers with a place to document their leaver’s stories and share them with others. It also allows for moderation, counseling and discussion of the video in positive terms. A website dedicated to sharing leavers activities on Rottnest would further extend this in order to create a sense of community. When the leavers enter the tent to record messages they can be asked a set of questions about their experience on leavers and the island promoting a positive response about the island.

### **Leave Your Mark Wall.**

Graffiti on the island is an issue throughout the year. That risk is dramatically increased during the three day Leavers event. The leave your mark wall allows secondary school leavers to leave their mark, yet in a positive way. This could include their hand print, writing a small message, or simply signing their name and leaving the date. Additionally as the wall remains on the island over a number of years, students would revisit the island in later years thus instilling a sense of a connection to the island and the community. From time to time, the original wall can be repainted and further generations can enjoy the use of it.

## **THE BUSINESS COMMUNITY**

Despite the recognized benefits of 2<sup>nd</sup> Generation CPTED and young people in designing out crime, (Checkoway and Finn, 1992; Crowe, 2000; Colquhoun, 2004) there remains a significant impasse between business owners and stakeholders and the event organizers of the three day “Leavers” event at Rottnest Island. Mention has already been made of the importance of the two-way street of respect and understanding that is a foundational

aspect of strong social cohesion. It is not enough for students to embrace the island and integrate with its community and cultural components. For social cohesion in CPTED to flourish the business community must accept and welcome the “Leavers” cohort as well. This requirement is perhaps the most difficult step. Business stakeholders look at Rottnest Island as their livelihood. Whilst most events throughout the year add to the quality, charm, and attraction of the island, the Leavers event attracts controversial press (Cox and Phillips, 2011). Exit interviews with all major business stakeholders indicated that the detachment of the Leavers event from other yearly island events remained the number one point of discontent from stakeholders. There is the expectation that students will behave in an anti-social manner, and this premise underscores the business community’s hesitation in contributing to the positive deployment of the event.

Rottnest Island has endured a longstanding connection to post exam 'leavers' celebrations for over 35 years (Schoolies, 2011). For teenage youths, the island's 'leavers' event has a cult-like status that is perpetuated by slogans such as 'Get Blotto at Rotto' describing the expectation of excessively drunken behaviour, and 'Quokka Soccer' the urban legend describing a cruel and illegal game of football where the island's most famous marsupial is used as the ball. Social networking narrative from sites such as Facebook confirm the ongoing expectations of similar 'Leavers' activities and go beyond this history to depict a raft of anti-social experiences that include first time sexual encounters, drug use, vandalism and alcohol-fueled revelry. Leavers and the Rottnest business community both contest the idea of active connection between themselves. The Rottnest business community looks to the other 362 days of the year, whilst the leavers cohort look only to the three day vent rather than a yearly strategy.

## CONCLUSION

The evaluation of 1<sup>ST</sup> and 2<sup>ND</sup> generation CPTED instruments within an isolated and confined locality such as Rottnest Island shows the usefulness of crime prevention strategies that incorporate socially cohesive interactions. Since the leavers event is built upon a foundation of expected illegal post exam behavior, it is not unreasonable to suggest that social cohesion reduces crime in situations where event participants can connect with norms and values that are otherwise missing. Students at Rottnest cohabit in a state of parental isolation. This paper concludes that 2<sup>ND</sup> generation CPTED instruments deliver vital social cohesion to a three day event that would otherwise operate under increased expectations of anti-social behavior and acts of crime. ‘Leavers’ is a milestone event for students, providing a formative and influential experience on their future adult behavior. Socially interrelated activities such as the transitional events and the ‘leave your mark’ programs discussed in this paper show a greater acceptance from students and stakeholders because they operate beyond the expectation of criminal conduct. In other events over shorter periods of time social cohesion is difficult to establish. However the three day Leavers event represents a unique opportunity in community development and policing. 1st generation CPTED remains too narrowly focused on the physical aspects of designing out crime whilst failing to address many social factors that may be associated with crime and anti-social behaviour.

This is not to discount physical security as ineffective. Bag searches, signage, natural surveillance, and natural access control remain effective ongoing risk treatments in reducing crime. However, where there is a collective intent on the part of a large cohort such as Leavers, there is a need for additional measures that reach beyond 1<sup>ST</sup> generational instruments in order further reduce anti-social behavior and early-adult crime. The inadequate CCTV system at Rottnest Island is symptomatic of the wider problem of the Leavers event. The island and its planned built environment has evolved to service family-oriented activities. In that sense, it copes for most of the year. However the Leavers event is uniquely different, and its participants have different expectations about what they expect to experience at Rottnest Island.

When CPTED includes both the physical and the social aspects of a community, the opportunity to enjoy significant reductions in the risk of crime and anti-social behavior is increased. At the same time, 2<sup>nd</sup> generation CPTED must remain a strategy that incorporates the needs of the local community. The island stakeholders have a right to peaceful interaction that extends throughout every day of the year. There is the need, therefore, for the Rottnest Leavers event to be perceived with the same level of acceptance and integration as other Rottnest activities. This paper posits that the successful attainment of such a goal is heavily reliant upon the social cohesion of 2<sup>nd</sup> generation CPTED strategies.

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