



Volume 4, Number 3
2016

Salus Journal

A peer-reviewed, open access journal for topics concerning
law enforcement, national security, and emergency management

Published by
Charles Sturt University
Australia
ISSN 2202-5677



Volume 4, Number 3, 2016

www.salusjournal.com

Published by

Charles Sturt University
Australian Graduate School of Policing and
Security
PO Box 168
Manly, New South Wales, Australia, 1655

ISSN 2202-5677

Advisory Board

Associate Professor Nicholas O'Brien (Chair)
Professor Simon Bronitt
Professor Ross Chambers
Professor Mick Keelty AO, APM
Mr Warwick Jones, BA MDefStudies

Editor-in-Chief

Dr Henry Prunckun
Charles Sturt University, Sydney

Assistant Editor

Ms Kellie Smyth, BA, MAPAnth, GradCert
(LearnTeach in HigherEd)

Web Editor

Mr Patrick McKenzie

Editorial Board—Associate Editors

Dr Jeremy G Carter
Indiana University-Purdue University

Dr Anna Corbo Crehan
Charles Sturt University, Canberra

Dr Ruth Delaforce
Griffith University, Queensland

Dr Garth den Heyer
New Zealand Police

Dr Victoria Herrington
Australian Institute of Police Management

Dr Valerie Ingham
Charles Sturt University, Canberra

Dr Stephen Marrin
James Madison University, Virginia

Dr Alida Merlo
Indiana University of Pennsylvania

Dr Alexey D Muraviev
Curtin University, Perth, Western Australia

Dr Maid Pajevic
*College 'Logos Center' Mostar,
Bosnia-Herzegovina*

Dr Felix Patrikeeff
University of Adelaide, South Australia

Dr Tim Prenzler
Griffith University, Queensland

Dr Suzanna Ramirez
University of Queensland

Dr Susan Robinson
Charles Sturt University, Canberra

Dr Rick Sarre
University of South Australia

Dr Patrick F Walsh
Charles Sturt University, Sydney

Dr Grant Wardlaw
Australian National University, Canberra

Dr Troy Whitford
Charles Sturt University, New South Wales

Salus Journal

Volume 4, Number 3

2016

Contents

Research Article

Temporal Aspects of Child Homicide in Australia

Amber C McKinley, Rachel MacCulloch, and Martin Lark

1

Critical Essays

Root Cause Approach to Prisoner Radicalisation

Nathan Thompson

18

What's in a Marking: Aerial Identification Numbering of Fire Appliances

Vincent Hurley

34

Police Body Cameras: Seeing May Be Believing

Noel Otu

49

Book Reviews

Sex Crimes in the Fifties

Susan Robinson

65

The Handbook of European Intelligence Cultures

Henry Prunckun

68

Licensing

All material published in *Salus Journal* is published under a Creative Commons License. Under this licence you are free to copy and distribute the essays, articles, and reviews under the following conditions: 1) you give attribution to the author(s); 2) the essays, articles, and reviews are not used for commercial purposes without written permission of the author(s); 3) that you do not alter, transform, or build upon the essays, articles, or reviews; and 4) further distribution is based on the “share-alike” principle.

Temporal Aspects of Child Homicide in Australia

Amber C McKinley,* Rachel MacCulloch, and Martin Lark

ABSTRACT

Using National Homicide Monitoring Program data from 1989 to 2012, this study examined the temporal aspects of child homicide in Australia. It was hypothesised that there would be daily and weekly variation in the occurrence of child homicide, with peaks in the late afternoon, evening, and early hours of the morning and on Fridays, Saturdays and Sundays. It was also hypothesised that the number of child homicides would be evenly distributed across seasons. The sample consisted of 916 children (aged 0–17) killed in 802 homicide incidents in Australia between 1989 to 2012. Data relating to time of day, and day of the week, were analysed using a chi-square test, followed with calculations of incidence ratios and 95% confidence intervals. Data relating to season of the year were examined descriptively, due to uncontrollable factors preventing significance testing. Results partially supported the hypotheses. There was daily and weekly variation in the occurrence of child homicide, with peaks in the evening hours and on Saturdays; however, no peaks were observed on Fridays and Sundays. Additionally, the hypothesis that child homicides peak in the late afternoon and early hours of the morning was unable to be accepted or rejected due to grouping issues. The study also found slight seasonal variation in the occurrence of child homicide, with a slight peak in spring; however, whether this peak is significant is unknown.

Keywords: child homicide, temporal aspects, time of day, day of week, season, Australia

TEMPORAL ASPECTS OF CHILD HOMICIDE IN AUSTRALIA

Even though child homicide is a relatively rare event, comprising only 13% of all homicides in Australia in 2010–12 (Bryant & Cussen, 2015), it has received a reasonable amount of attention from Australian researchers. This is because it is still a leading cause of injury death for Australian children. It ranks third among all causes of injury deaths for children, with the two most common being transport-related deaths and accidental drowning (AIHW, 2012).

* Corresponding author: amckinley@csu.edu.au

Additionally, although the child homicide rate in Australia is declining, it is not declining at the same rate as the general homicides (Bryant & Cussen, 2015).

The unlawful killing of children has also always evoked strong emotions from the public and attracted widespread media attention, making people more inclined to study it. However, most of the research conducted in Australia has examined the characteristics of filicides or the more common characteristics of child homicides in general. A search of the literature failed to reveal any studies that have examined the temporal aspects of child homicides; that is, those aspects related to time, such as time of the day, day of the week, and month of the year. International research suggests that child homicides do differ among many of these variables, and that this data can be used to better inform authorities about high-risk periods and triggers. This study sought to do the same in Australia.

LITERATURE REVIEW

Characteristics of Child Homicides

Research conducted both in Australia and overseas has consistently found that the victims of child homicide are more likely to be younger than older and have an almost equal chance of being male or female (Abel, 1986; Bryant & Cussen, 2015; Chew et al., 1999; Dolan et al., 2003; Strang, 1996; Yarwood, 2004). It has also consistently found that many child homicide offenders are either related to the victim (biologically or by marriage; usually a parent) or a friend/acquaintance of the victim, with the former being most common (Abel, 1986; Chew et al., 1999; Cussen & Bryant, 2015; Dolan et al., 2003; Mouzos & Houliaras, 2006; Mousoz & Rushforth, 2003; Paulson & Rushforth, 1986; Strang, 1996; Yarwood, 2004). They are also more likely to be male than female (Nielssen et al., 2009; Paulson & Rushforth, 1986; Strang, 1996). Finally, research has consistently found that child homicides most commonly occur in a residential location (most frequently the victim's home) and most commonly involve the victim being beaten to death or killed with a firearm (Abel, 1986; Chew et al., 1999; Cussen & Bryant, 2015; Dolan et al., 2003; Mouzos & Houliaras, 2006; Mousoz & Rushforth, 2003; Paulson & Rushforth, 1986; Strang, 1996; Yarwood, 2004).

Temporal Aspects of Child Homicides

Time of Day. Dolan, Guly, Woods, and Fullam (2003) examined the temporal aspects of child homicides (ages 0 - 16) committed by males in the UK between 1967 and 1988. They found that most incidents (54/64; 84%) occurred between 12pm and 2am, and that the time of highest risk was between 5pm and 10pm (23/64; 36%), closely followed by 10pm to 2am. These findings support those from an earlier study by Paulson and Rushforth (1986) that examined the temporal aspects of child homicides (0–15 years) committed in Cuyahoga County, Ohio, between 1958 and 1982. That study found that victims aged 0–5 were most commonly killed between 7–9pm (~19%), closely followed by 4–6pm (~18%), 1–3pm (~16%) and 10–12pm (noon; ~17%). Additionally, victims aged 5–9 were most commonly killed between 7–9pm (~24%), closely followed by 4–6pm (~23%). Moreover, victims aged 10–14 were most commonly killed between 1–3am (~21%), closely followed by 4–6pm (~18%), 7–9pm (~15%) and 10–12am (midnight; ~14%).

The findings from the above studies also support those from a large-scale study by Chew, McCleary, Lew, and Wang (1999), which examined the temporal aspects of child homicides (ages 0–15) committed in California between 1981 and 1990. That study found that child homicide incidents were most commonly committed between 12pm and 8pm (as opposed to between 8pm and 4am, and 4am and 12pm). Overall, these findings suggest that children are most commonly killed in the late afternoon, evening, and early hours of the morning. Several possible explanations have been put forward for this, including that these periods are the ones where victims and offenders are likely to have the most contact (e.g., not be sleeping or at school/work), where older victims and offenders are most likely to have been drinking/consuming drugs, and where victims and offenders are most likely to be tired and irritable (Chew et al., 1999; Dolan et al., 2003; Paulson & Rushforth, 1986).

Day of Week. In their study, Dolan et al. (2003) found that child homicide incidents (0–16 years) were most commonly committed on Saturdays (15/64; 23%), closely followed by Sundays (12/64; 19%) and Fridays (10/64; 16%). These findings support those from an earlier study by Abel (1986) that looked at the temporal aspects of child homicides (0–15 years) committed in Erie County, New York, between 1972 and 1984. That study found that homicide incidents involving children were most commonly committed on Saturdays (24%), closely followed by Mondays (18%), Fridays (15%), and Sundays (15%). The findings

of that study are supported by a study by Lucas et al. (2002), which examined the temporal aspects of (abuse-related) filicides committed by military personnel in the US between 1985 and 1997. That study found that a disproportionate number of incidents involving infants (0–1 years; 47%), young children (1–4 years; 52%), and older children (4–15 years; 50%) were committed on weekends. These findings are also supported by Schmidt et al. (1996: Saturdays: 31%, Sundays: 25%). It is important to note that the study by Lucas et al. (2002) did not present its data by the day of the week (i.e., it was presented by weekday vs. weekend), so the days with the highest frequencies for each age group and overall are unknown.

Explanations regarding why child homicides may most commonly occur on weekends are like those put forward for why child homicides most commonly occur in the late afternoon, evening, and early hours of the morning; namely that these periods are the ones where victims and offenders are likely to have the most contact and where older victims and offenders are most likely to have been drinking/consuming drugs (Chew et al., 1999; Dolan et al., 2003; Paulson & Rushforth, 1986).

Season. Homicides have been known to rise in the summer months and drop in winter (Bryant & Cussen, 2015; Chan & Payne, 2013; Falk & Falk, 1990); however, this does not seem to apply to child homicides. A study by Laskey et al. (2010) examined the temporal aspects of child homicides (ages 0–5) committed in five US states between 1999 and 2006, found that the number of child homicide incidents did not vary significantly by season or month. These findings contrast with a study by McCleary and Chew (2002) that examined the temporal aspects of child homicides (ages 0–15) committed in the US between 1976 and 1998. That study found that homicides involving young children (0–5) peaked in winter, while homicides involving older children (5–14) peaked in summer. They also found that the number of homicides involving children in general (0–15) did not vary significantly by season. The latter finding supports results from a study by Goetting (1990), which examined the temporal aspects of child homicides (ages 0–15) committed in Detroit, Michigan, in 1982 and 1983. That study found that the number of homicide incidents involving children did not significantly vary by season.

These findings suggest that homicides involving children in general are almost equally likely to occur in any season. This may be because the homicides of younger children peak in winter and the homicides of older children peak in

summer and, when these data are combined, homicides involving children are somewhat evenly distributed across seasons. This is plausible if the findings from the study by McCleary and Chew (2002) can be applied to child homicides in general, which is possible given that Laskey et al. (2010) stated that their non-significant result for children under the age of five may have been caused by their sample size, which was smaller than the one used by McCleary and Chew (2002), or their dataset which was different to the one used by those authors.

The summer peak in the homicides of older children (5–14) could be explained by summer breaks increasing the amount of contact between victims and offenders, the increase in drug and alcohol use by individuals in summer (Fitzgerald & Mulford, 1986; Puljula et al., 2007; Uitenbroek, 1996), and the increase in aggression often experienced by people in warmer months (Anderson, 2001; Geen & Donnerstein, 1998). The winter peak in the homicides of younger children (0–4) is more difficult to explain; however, it is important to note that illnesses/other causes of death for children in this age group also peak in winter (e.g., sudden infant death syndrome, influenza, and meningococcal; Byard, 2004; Fleming, Pannell, & Cross, 2005; MacDorman & Rosenberg, 1993). This would make young children easier to kill during this time, provide parents with a possible explanation for the death of their child, and increase the likelihood of parents snapping and killing their child (e.g., due to children being more irritable when sick, demanding more from their parents, and/or crying or screaming in pain).

METHOD

Aim and Hypotheses

The aim of this study was to examine the temporal aspects of child homicide in Australia. It was hypothesised that there would be daily and weekly variation in the occurrence of child homicide, with peaks in the late afternoon, evening, and early hours of the morning and on Fridays, Saturdays and Sundays. It was also hypothesised that the number of child homicides would be evenly distributed across seasons.

Sample

The sample consisted of 916 children (aged 0–17) killed in 802 reported homicide incidents in Australia between 1 July 1989 to 30 June 2012. The distribution of their ages is presented in Table 1. It is important to point out that

this number is likely to represent an underestimation of the number of children killed during this period, as homicides involving younger children (<5 years of age) sometimes go unreported. This is because, for this age group, some natural and unnatural causes of death are difficult to distinguish (e.g., children who die from sudden infant death syndrome are difficult to distinguish from those who die from being smothered; Finkelhor & Ormrod, 2001; Riedel & Welsh, 2015; Yarwood, 2004).

Table 1—Solved and Unsolved Homicides Involving Child Victims by Age

Age Group	Solved	Unsolved	Total
Under 1	173	29	202
1–9	369	22	391
10–14	100	10	110
15–17	199	11	210
Unknown/Not Stated	3	0	3
Total	844	72	916

Source: AIC NHMP 1989/90–2011/12 [computer file]

Procedure

A request was made to the National Homicide Monitoring Program (NHMP) at the Australian Institute of Criminology (AIC) for all temporal-related child homicide data collected by them since their formation (1 July 1989). The study also requested data relating to homicide location and victim-offender relationship, which it considered was necessary to present for contextual reasons.

The data received was in the form of pre-tabulated descriptive statistics separated into solved and unsolved homicides with missing numbers (shown as *n.p.*) where the numbers were less than five and could have identified the individual case. A totals column was added to each table, with possible totals presented in rows where the unsolved and/or solved column contained an *n.p.* The months that child homicides were committed were also grouped by season,

and two tables examining victim-offender relationship were combined. Following this, a chi-square goodness-of-fit test was conducted to see whether child homicides were evenly distributed across the day. This was then repeated for day of week.

Although there was strong interest in also conducting this test for season of year, it was not possible due to the amount of missing data. After this, and in line with Tiihonen et al. (1997), Laskey et al. (2010), and Shinsugi et al. (2015), incidence ratios and 95% confidence intervals were calculated for each time period/day of the week. This was done to find out which time periods contained significantly more or less homicides than expected. Incidence ratios were calculated by dividing the observed number of homicides by the expected number of homicides and 95% confidence intervals were calculated using the Eurocat organisation's (2016) online tool. The number of homicides in a time period were considered to have significantly deviated from what was expected when 1 was not contained in their confidence interval.

RESULTS

Table 2 shows that the majority of child homicides occurred in a residential location, most commonly the victim's home ($n = 509$; 56%). Of note is that almost 10% of these reports ($n = 44$) were listed as unsolved. Additionally, of the 916 deaths reported, 533 (58%) were carried out by a parent or carer (filicide; see Table 3). A further significant number were committed by friends/acquaintances ($n = 164$; 18%). Child homicides committed by strangers accounted for 69 (8%) of reported cases.

Table 2—Solved and Unsolved Homicides Involving Child Victims by Location

Location	Solved	Unsolved	Total
Victim's Home	465	44	509
Offender's Home	70	n.p.	71–74
Other Person's Home	24	n.p.	25–28
Hospital/Health Care Institution	n.p.	0	1–4
Shop/Shopping Mall	5	n.p.	6–9
Car Park/Public Garage/Service Station	11	0	11
Recreation/Food Venue	10	0	10
Public Transport	n.p.	0	1–4
Public Transportation Connected Facilities	6	0	6
Workplace/School	n.p.	n.p.	2–8
Private Motor Vehicle	53	n.p.	54–57
Street/Road/Highway	61	n.p.	62–65
Sporting Oval/Facility	n.p.	0	1–4
Open Area/Waterway	99	15	114
Other Location	29	n.p.	30–33
Unknown/Not Stated	n.p.	n.p.	2–8
Total	844	72	916

Note. n.p. = not provided (cell size <5). Solved and unsolved homicides are primarily provided to show where the possible totals were derived from. Source: AIC NHMP 1989/90–2011/12 [computer file].

Table 3—Solved and Unsolved Homicides Involving Child Victims by Victim–Offender Relationship

Victim–Offender Relationship	Solved	Unsolved	Total
Domestic	593	6	599
Intimate Partner	28	0	28
Filicide	527	6	533
Siblicide	15	0	15
Other Family	23	0	23
Friend/Acquaintance	163	1	164
Close Friend	46	0	46
Acquaintance	79	1	80
Acquaintance/Neighbour	n.p.	0	1–4
Acquaintance—less than 24 hours	8	0	8
Relationship Rival	n.p.	0	1–4
Gang Member	5	0	5
Other	20	0	20
Stranger	68	1	69
Unknown	20	64	84
Total	844	72	916

Note. n.p. = not provided (cell size <5). Source: AIC NHMP 1989/90–2011/12 [computer file].

Table 4 shows a significant association between time of day and the rate of child homicides, χ^2 (3, $N = 837$) = 27.66, $p < .001$. The 95% confidence intervals indicate that significantly more homicides than expected occurred between 6:00pm and 11:59pm ($IR = 1.17$, 95% $CI = 1.02$ – 1.32) and significantly less than expected occurred between 6:00am and 11:59am ($IR = 0.69$, 95% $CI = 0.58$ – 0.81). The number that occurred between 12:00am and 5:59am ($IR = 1.06$, 95% $CI = 0.92$ – 1.20) and 12:00pm and 5:59pm ($IR = 1.08$, 95% $CI = 0.95$ – 1.23) was higher, but not significantly different to what was expected.

Table 4—Chi Square and Post Hoc Test Results: Time of Day

Time of day	Observed N	Expected N	Residual	Ratio	95% CI
12:00–5:59am	221	209.25	11.75	1.06	0.92-1.20
6:00–11:59am	145	209.25	-64.25	0.69	0.58-0.81*
12:00–5:59pm	227	209.25	17.75	1.08	0.95-1.23
6:00–11:59pm	244	209.25	34.75	1.17	1.02-1.32*
Total	837				

Note. χ^2 (3, $N = 837$) = 27.66, $p < .001$. Residual = Observed N - Expected N. Ratio = Observed N/Expected N.

There was also a significant association between the day of the week and rate of child homicides, χ^2 (6, $N = 906$) = 24.38, $p < .001$ (see Table 5). The 95% confidence intervals indicate that significantly more homicides than expected occurred on Saturday ($IR = 1.24$, 95% $CI = 1.05$ – 1.44) and significantly less than expected occurred on Tuesday ($IR = 0.72$, 95% $CI = 0.58$ – 0.87). There was no significant difference between the number of observed and expected homicides for any other day of the week.

Table 5—Chi Square and Post Hoc Test Results: Day of Week

	Observed N	Expected N	Residual	Ratio	95% CI
Monday	152	129.43	22.57	1.17	1.00–1.37
Tuesday	93	129.43	-36.43	0.72	0.58–0.87*
Wednesday	112	129.43	-17.43	0.87	0.71–1.03
Thursday	126	129.43	-3.43	0.97	0.81–1.15
Friday	126	129.43	-3.43	0.97	0.81–1.15
Saturday	160	129.43	30.57	1.24	1.05–1.44*
Sunday	137	129.43	7.57	1.06	0.89–1.24
Total	906				

Note. χ^2 (6, $N = 906$) = 24.38, $p < .001$. Residual = Observed N - Expected N. Ratio = Observed N/Expected N.

Table 6 shows child homicides most commonly occurred in spring ($n = 249\text{--}252$), followed by winter ($n = 235\text{--}238$) and summer ($n = 230\text{--}233$). Autumn contained the least number of child homicides with 191. Whether any of these numbers represent a significant departure from what one would expect is unknown (because the chi square and post hoc testing was unable to be completed due to the missing data). An examination of the frequency distribution suggests that it is unlikely except for autumn and potentially spring.

Table 6—Solved and Unsolved Homicides Involving Child Victims by Season

Month	Solved	Unsolved	Total
Summer	216	14–17	230–233
December	63	7	70
January	77	n.p.	78–81
February	76	6	82
Autumn	169	22	191
March	59	6	65
April	60	6	66
May	50	10	60
Winter	221	14–17	235–238
June	65	7	72
July	80	6	86
August	76	n.p.	77–80
Spring	235	14–17	249–252
September	70	n.p.	71–74
October	82	6	88
November	83	7	90
Unknown/not stated	3	n.p.	4–7
Total	844	72	916

Note. n.p. = not provided (cell size <5). Source: AIC NHMP 1989/90–2011/12 [computer file].

DISCUSSION

This study examined the temporal aspects of child homicide in Australia. It was hypothesised that there would be daily and weekly variation in the occurrence of child homicide, with peaks in the late afternoon, evening, and early hours of the morning and on Fridays, Saturdays and Sundays. It was also hypothesised that the number of child homicides would be evenly distributed across seasons. The results partially supported the hypotheses. There was daily variation in the occurrence of child homicide, with a peak in the evening hours (6:00–11:59pm) and a trough in the mid-to-late morning (6:00–11:59am).

The hypothesis that child homicides also peak in the late afternoon and early hours of the morning was unable to be confirmed or denied due to the way the data the authors received was grouped. It seems plausible that they would if looked at in isolation. The study also found weekly variation in the occurrence of child homicide, with a peak on Saturdays and a trough on Tuesdays. However, no peaks were observed on Sundays and Fridays. There was also slight seasonal variation in the occurrence of child homicide, with a slight peak in spring and a slight trough in autumn. However, whether these peaks and troughs represent significant departures from the average is unknown. Thus, the hypothesis that child homicides are evenly distributed across the seasons could not be confirmed or denied.

The findings obtained in this study for time of day largely support those from previous research (Chew et al., 1999; Dolan et al., 2003; Paulson & Rushforth, 1986). It is likely that child homicides peak in the evening hours because this period represents the one where victims and offenders are most likely to be in contact (i.e., not be sleeping or at school/work), where older victims and offenders are most likely to have been drinking/consuming drugs, and where victims and offenders are most likely to be tired and irritable (Chew et al., 1999; Dolan et al., 2003; Paulson & Rushforth, 1986). Additionally, it is likely that child homicides occur with the lowest level of frequency during the mid-to-late morning for the opposite reason.

The findings relating to the day of the week partially support those from previous research (Abel, 1986; Dolan et al., 2003; Lucas et al., 2002, Schmidt et al., 1996). These studies found that child homicides peak on Saturdays and Sundays, with two also finding that they peak on Fridays (Abel, 1986; Dolan et al., 2003). Nevertheless, it should be noted that none of these studies employed

the use of significance testing so whether these peaks were significant is unknown. This may explain why their findings do not mirror those found here. As mentioned previously, child homicides likely peak on Saturdays because this day represents one of two where victims and offenders generally have the most contact and where older victims and offenders are most likely to have been drinking/consuming drugs (Chew et al., 1999; Dolan et al., 2003; Paulson & Rushforth, 1986). The other day for high victim-offender contact and drug/alcohol use is Sunday. Drug and alcohol use is not quite as high on this day, however, which may explain why it was not also identified as a peak period.

The finding that child homicides trough on Tuesdays is more difficult to explain. It may represent the day that people are most settled into their week (i.e., are not mourning the end of the weekend and not anticipating the start of the next). The fact that studies have found that it is the day that people are least likely to consume alcohol and one of the least common days for committing alcohol-related violence may also help explain it (ABS, 2013; Boogaerts et al., 2016; Foster et al., 2015). Alternatively, it could just be an anomaly.

The results relating to season of the year neither support nor contrast with those from previous research (Goetting, 1999; Laskey et al., 2010; McCleary & Chew, 2002). This is because all previous studies employed significance testing, while this study was unable to. If significance testing was performed on the current data, it appears that the results would either show no seasonal variation in the occurrence of child homicide or seasonal variation, with a peak in spring and/or a trough in autumn. The former seems more likely and would be in line with previous findings.

This study had several limitations. Firstly, the authors had no access to the raw data and thus had no control over how the data were categorised and organised. This prevented them from being able to determine whether child homicides peak in the late afternoon and early hours of the morning. Secondly, due to the number of *n.p.s* in the seasonal data, the authors were unable to perform a chi-square test (and any necessary follow-up testing) on season of the year. Finally, due to issues with underreporting, the dataset may not have captured all child homicides that occurred in Australia during the examined period. This, along with the fact that all examined variables contained some 'unknowns', may have affected the accuracy of the results.

It would have been beneficial if the study could have established: 1) whether child homicides peaked in the afternoon and early hours of the morning; 2) whether there is a seasonal variation in the occurrence of child homicide in Australia; and, 3) whether day and day of week together made a difference. Such findings could provide authorities with a more complete picture of the temporal nature of child homicides in Australia. Nonetheless, this study provides insights into a leading cause of death for Australian children. It is hoped that the results of this study can be used to inform authorities about high-risk periods and triggers, leading to practice changes and/or refinement in interventions.

ABOUT THE AUTHORS

Dr Amber McKinley, BLibSt, MCJ, PhD is an Applied Victimologist and lecturer at the Australian Graduate School of Policing and Security, Charles Sturt University, Canberra. She is also a Squadron Leader (specialist reserve) in the Royal Australian Air Force and works with Australia Defence Force investigators as an Applied Victimologist. She teaches and researches a number of subjects, including applied victimology, homicide-solvability, criminal behaviours, forensic victimology and criminalistics.

Rachel MacCulloch, BSc, MSc, is a General Research Academic at the Australian Graduate School of Policing and Security, Charles Sturt University. Her research interests include homicide solvability, clearance rates, victimology and police officer recruitment and retention. Ms MacCulloch's academic background is in Psychology (Australian National University) and Organisational Psychology (University of Leicester).

Martin Lark, MLM(Pol&Sec), is a Major in the Australian Defence Force whose current appointment is Provost Marshal at the Headquarters Joint Operations Command, Bungendore, New South Wales. Mr Lark served 32 years in the British Army's Royal Military Police, 25 years of which were in the Special Investigation Branch. During this time, he undertook operational tours in Northern Ireland, Bosnia, and Kosovo.

REFERENCES

- Abel, E. L. (1986). "Child Homicide in Erie County, New York." *Pediatrics*, 77, 709–713.
- Anderson, C. A. (2001). "Heat and Violence." *Current Directions in Psychological Science*, 10, 33–38.
- Australian Bureau of Statistics. (2013). *Australian Health Survey: Alcohol*. Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4363.0.55.001Chapter4>
- Australian Institute of Health and Welfare (AIHW). (2012). *A Picture of Australia's Children 2012*. Retrieved from www.aihw.gov.au/publication-detail/?id=10737423343
- Boogaerts, T., Covaci, A., Kinyua, J., Neels, H., & van Nuijs, A.L.N. (2016). "Spatial and Temporal Trends in Alcohol Consumption in Belgian Cities: A Wastewater-Based Approach. *Drug and Alcohol Dependence*, 160, 170–176.
- Bryant, W., & Cussen, T. (2015). *Homicide in Australia: 2010–11 to 2011–12: National Homicide Monitoring Program Report*. Canberra, Australia: Australian Institute of Criminology.
- Byard, R. W. (2004). *Sudden Death in Infancy, Childhood and Adolescence* (2nd ed.). Cambridge, UK: Cambridge University Press.
- Chan, A., & Payne, J. (2013). *Homicide in Australia: 2008–09 to 2009–10 National Homicide Monitoring Program Annual Report*. Canberra, Australia: Australian Institute of Criminology.
- Chew, K.S.Y., McCleary, R., Lew, M.A., & Wang, J.C. (1999). "The Epidemiology of Child Homicide in California, 1981 through 1990." *Homicide Studies*, 3, 151–169.
- Cussen, T., & Bryant, W. (2015). "Domestic/Family Homicide in Australia. *Research in Practice*. Canberra: Australian Institute of Criminology.
- Dolan, M., Guly, O., Woods, P., & Fullam, R. (2003). "Child Homicide." *Medicine, Science and the Law*, 43, 153–169.
- Eurocat. (2016). *A Simple Statistical Test and Calculator*. Retrieved from <http://www.eurocat-network.eu/asimplestatisticaltest>

- Falk, G., & Falk, C. (1990). *Murder: An Analysis of its Forms, Conditions, and Causes*. Jefferson, NC: McFarland & Company.
- Foster, S., Gmel, G., Estévez, N., Bähler, C., & Mohler-Kuo, M. (2015). "Temporal Patterns of Alcohol Consumption and Alcohol-Related Road Accidents in Young Swiss Men: Seasonal, Weekday and Public Holiday Effects. *Alcohol and Alcoholism*, 1, 1–8.
- Finkelhor, D., & Ormrod, R. (2001). *Homicides of Children and Youth*. Washington, DC: US Department of Justice.
- Fitzgerald, J.L., & Mulford, H.A. (1986). "Drinking Frequency Changes in Selected Contexts by Season in Iowa, 1979–1980. *Journal of Studies on Alcohol*, 47, 311–315.
- Fleming, D.M., Pannell, R.S., & Cross, K.W. (2005). Mortality in Children from Influenza and Respiratory Syncytial Virus. *Journal of Epidemiology and Community Health*, 59, 586–590.
- Geen, R.G., & Donnerstein, E. (1998). *Human Aggression: Theories, Research, and Implications for Social Policy*. San Diego, CA: Academic Press.
- Goetting, A. (1990). "Child Victims of Homicide: A Portrait of their Killers and the Circumstances of their Deaths. *Violence and Victims*, 5, 287–296.
- Laskey, A.L., Thackeray, J.D., Grant, S.R., & Schnitzer, P.G. (2010). "Seasonality of Child Homicide. *The Journal of Pediatrics*, 157, 144–147.
- Lucas, D.R., Wezner, K.C., Milner, J.S., McCanne, T.R., Harris, I.N., Monroe-Posey, C., & Nelson, J.P. (2002). "Victim, Perpetrator, Family, and Incident Characteristics of Infant and Child Homicide in the United States Air Force." *Child Abuse & Neglect*, 26, 167–186.
- MacDorman, M.F., & Rosenberg, H.M. (1993). "Trends in Infant Mortality by Cause of Death and Other Characteristics, 1960–88. *Vital and Health Statistics, Series 20: Data from the National Vital Statistics System* (No. 20). Washington, DC: National Center for Health Statistics.
- McCleary, R., & Chew, K.S.Y. (2002). "Winter is the Infanticide Season: Seasonal Risk for Child Homicide. *Homicide Studies*, 6, 228–239.
- Mouzos, J., & Houliaras, T. (2006). *Homicide in Australia: 2004–05 National Homicide Monitoring Program (NHMP) Annual Report*. Canberra, Australia: Australian Institute of Criminology.

- Mouzos, J., & Rushforth, C. (2003). "Family Homicide in Australia." *Trends and Issues in Crime and Criminal Justice*. Canberra, Australia: Australian Institute of Criminology.
- Nielssen, O.B., Large, M.M., Westmore, B.D., & Lackersteen, S.M. (2009). "Child Homicide in New South Wales from 1991 to 2005." *Medical Journal of Australia*, 190, 7–11.
- Paulson, J.A., & Rushforth, N.B. (1986). "Violent Death in Children in a Metropolitan County: Changing Patterns of Homicide, 1958 to 1982." *Pediatrics*, 78, 1,013–1,020.
- Puljula, J., Savola, O., Tuomivaara, V., Pribula, J., & Hillborn, M. (2007). "Weekday Distribution of Head Traumas in Patients Admitted to the Emergency Department of a City Hospital: Effects of Age, Gender and Drinking Pattern." *Alcohol and Alcoholism*, 42, 474–479.
- Riedel, M., & Welsh, W.N. (2015). *Criminal Violence: Patterns, Explanations, and Interventions* (4th ed.). New York, NY: Oxford University Press.
- Schmidt, P., Graß, H., & Madea, B. (1996). "Child Homicide in Cologne (1985–94)." *Forensic Science International*, 76, 131–144.
- Shinsugi, C., Stickley, A., Konishi, S., Ng, C.F.S., & Watanabe, C. (2015). "Seasonality of Child and Adolescent Injury Mortality in Japan, 2000–2010." *Environmental Health and Preventive Medicine*, 20, 36–43.
- Strang, H. (1996). "Children as Victims of Homicide." *Trends and Issues in Crime and Criminal Justice*. Canberra, Australia: Australian Institute of Criminology.
- Tiihonen, J., Rasanen, P., & Hakko, H. (1997). "Seasonal Variation in the Occurrence of Homicide in Finland." *American Journal of Psychiatry*, 154, 1,711–1,714.
- Uitenbroek, D.G. (1996). "Seasonal Variation in Alcohol Use." *Journal of Studies on Alcohol*, 57, 47–52.
- Yarwood, D.J. (2004). *Child Homicide: Review of Statistics and Studies*. Ascot, UK: Dewar Research.

- o O o -

Root Cause Approach to Prisoner Radicalisation

Nathan Thompson[†]

ABSTRACT

Prison radicalisation in Australia has become a key focal point for the subject literature on radicalisation. However, while attention has been directed at identifying and apprehending violent extremists, less consideration has been given to what could be done with these people when convicted. This paper applies the *root cause model* to prisoner radicalisation to investigate the environmental, social and individual influences that contribute to radicalisation in prisons. This examination took a holistic view of the prison radicalisation process that is based on causal factors rather than the traditional *phase model* approach. It is argued that this is an important step in gaining an understanding of the interplay of influences in the prison radicalisation process. It is posited that once such an understanding is gained, it is more likely that effective disruption of the radicalisation process can occur.

Keywords: Prison, radicalisation, root cause model, violent extremists

INTRODUCTION

Prison have long been referred to as a *school for crime* (Palermo, 2011). Some now extend this analogy to radicalisation, violent extremism and in some cases, terrorist recruitment (Smelser and Mitchell, 2002: 28). Despite the global interest in radicalisation since the declaration of the war on terror, no single profile exists for prisoners who are most vulnerable to radicalisation. With an increasing number of offenders being incarcerated globally for terrorism-related offences, the risk of the proliferation of radical views throughout correctional institutions is, arguably, increasing with time.

This paper posits that *contemporary phase* models are limited in their application and therefore a *root cause* approach was preferred. The importance of this approach is that its focus is on causal factors rather than on the chronology of the process. When applied to prison radicalisation, circumstances that are unique to the correctional environment reveal risk factors at three levels:

[†] Corresponding author: nthomps2@our.ecu.edu.au

institutional, social, and individual. The result is a picture of the interplay of factors that make prisoner radicalisation likely to occur.

It is argued that by developing a causation focused response, correctional institutions could be in a better position to identify vulnerable prisoners as well as the environmental factors to concentrate interventions and disengagement programs.

It should be noted that the scope of this paper is restricted to correctional environments and therefore it does not consider the effect of cultural and lifestyle factors that developed prior to imprisonment, nor how pre-incarceration factors contribute to vulnerability at an individual level.

CRIMINALS VERSUS RADICALS

Attention to the issue of prison radicalisation in Australia has become a topic of interest within the subject literature (Silke, 2014; Useem & Clayton, 2009). However, while attention has been directed at identifying and apprehending radicals and violent extremists (e.g. *Counter-Terrorism Legislation Amendment (Foreign Fighters) Act* (Cth), 2014; Mullins, 2011), less consideration has been given to what could be done with these offenders after they have been convicted.

The issue of prison radicalisation is divided into two categories: firstly, the management of those after being convicted of terrorism-related offences; and secondly, those who were indoctrinated during their incarceration (Silke, 2014). Furthermore, a common finding among existing studies of radicalisation in correctional institutions was that they had often been conducted in isolation, focusing on a single ideological motive. Nonetheless, if a holistic view is taken, we are likely to see that the nature of the ideology—whether religious, racial or religio-political—is not a determinant in the likelihood that radicalisation will occur, but the subject literature does reveal several commonly agreed and disputed areas.

First, it was accepted amongst authors that there was an important distinction between conventional criminals and those who were radicalised (Anti-Defamation League, 2002; Blazak, 2001; Dugas & Kruglanski, 2014; Mulcahy, Merrington, & Bell, 2013; O'Toole & Eyland, 2011; Silke, 2014). Mulcahy et al. (2013: 11) specified the distinction stating “terrorists are motivated by ideological, religious or political gain, whereas criminals are largely driven by material gain.” Dugas and Kruglanski (2014: 430) concurred

stating “the demands of protecting the public from terrorists are different from those related to the typical criminal offender. This difference lies not only in the degree of threat but also in the motivations that propel the actor.” This contrast was not limited to radical Islamists with similar findings for right-wing hate groups. Blazak (2001: 994) extended the significance of motive to Nazi skinheads by specifying that “unlike economically driven gangs, hate groups have ideological motivations for recruitment.”

Given this situation, it could be argued that radicalised prisoners are a specific category of offenders who differ from conventional criminals. However, scholar’s views could be divided when considering the influence that correctional facilities have on the likelihood of radicalisation occurring. The supportive argument is that prisons are incubators for radicals and recruiting grounds for extremists, while opponents may challenge the correlation between incarceration and the uptake of radical ideologies (Anti-Defamation League, 2002; Hamm, 2009; Jones, 2014; Merola & Vovak, 2012; Silke, 2014; Trujillo, Jordan, Gutierrez, & Gonzalez-Cabrera, 2009).

Supportive Arguments

Adherents to the supportive view, such as Mulcahy et al. (2013), argue that the volatility of the prison environment rendered prisoners vulnerable to recruitment by extremists. Riley (2002: 457) concurred, stating that “prisons are home to violent, predatory individuals” where prisoner minority groups were often targeted and victimised (Jones, 2014). Hamm (2009) and Trujillo et al. (2009) take the argument further by saying that custodial environments contain conducive conditions for jihadist recruiters to seek and indoctrinate prisoners from these vulnerable groups. Exit-Deutschland (2014) supported this position by saying that right-wing extremist groups were known to have a strong influence over prisoners and continually spread extremist material throughout the prison system.

In response, Muslim prisoners in Britain were reportedly forming prison gangs to gain a degree of protection from the hostility directed at them by non-Muslim prisoners; some prisoners were found to be converting to Islam to seek protection through gang membership also (Jones, 2014). A similar situation was observed among right-wing hate groups, such as the Aryan Circle, that formed to protect white prisoners from victimisation in this volatile environment (Anti-Defamation League, 2002). Several such prison gangs in the United States were

found to harbour radicalised ideologies and represented a source of the extremist threat within the prison environment (Anti-Defamation League, 2002). It was further identified that Islamist prisoners used gang recruitment models to disseminate extremist beliefs and to recruit (Hamm, 2009).

As was found with Islamist gangs, right-wing hate groups were also observed to have favoured the gang recruitment model (Blazak, 2001). According to the Anti-Defamation League (2002: 5), “inmates entering the system are easily recruited into prison gangs, primarily because such gangs offer protection,” however, these gangs can also represent a social precursor for ideological radicalisation (Silke, 2014).

Regardless of the ideology, the net result for the prison system is that ordinary offenders have the potential to evolve into violent extremists who represented a risk when released (Awan, 2013; Silke, 2014; Trujillo et al., 2009). This was exacerbated by some current correctional practices which were found to be conducive to ongoing radicalisation and had the potential to result in a greater commitment to violent extremism (Dugas & Kruglanski, 2014). Hamm (2009: 682) emphasised the seriousness of this risk, stating, “what happens inside correctional institutions is now a matter of national security.”

While prisons have long been referred to as schools for criminals, where prisoners are exposed to ‘criminal ideologies’ and new offending methodologies, O’Toole and Eyland (2011) stopped short of extending this ideological saturation to extremists. Hamm (2009, citing Cuthbertson, 2004) however, did make this connection when he stated that just as minor criminals were refining their methods of criminal offending, prison was also a virtual training ground for potential violent extremists, providing ideological reinforcement and equipping them with the motivation and skills to participate in extremist activity once released. Such findings are also consistent with outcomes published by the Anti-Defamation League (2002) which found that members of right-wing hate groups were expected to remain engaged with the group and continue to offer support post-release.

Discounting Arguments

Arguments in the subject literature also offer a contrasting view that focuses on prisoner conversions to Islam. These arguments say that there is no correlation between religion and the adoption of radicalised ideologies (Hamm, 2009; Jones, 2014; Merola & Vovak, 2012; Mulcahy et al., 2013). Jones (2014: 76) argued

that “Islamist militancy is not a foregone conclusion in certain prison environments. For example, in prisons where the main religion is not Islam, or in situations where prison subcultures dominate the prison environment.” A similar argument was presented by Mulcahy et al. (2013) when they stated that the relationship between the various processes of radicalisation and religion, particularly extremist versions, could not be sufficiently proven. Hamm (2009: 669) supported this finding, concluding that “there is no relationship between prisoner conversions to Islam and terrorism” and further, that the evidence indicated quite the opposite, that conversion to Islam acted as a behavioural moderator and assisted in the rehabilitation process (Hamm, 2009; Merola & Vovak, 2012).

Moreover, the prevalence of indoctrination by extremists in US prisons was low despite the impression that radicalisation was prolific (Jones, 2014). Merola and Vovak (2012: 738) supported this view when they argued “only one or a very small number of individuals out of the entirety of those incarcerated will ever pose a risk of this type [violent extremism].” Similarly, Wilner and Dubouloz (2011: 420) concluded that “few individuals who radicalise—even among those who vocally support violence in the name of their adopted cause—end up participating in violent behaviour.”

Bartlett, Birdwell, and King (2010) defined this distinction by dividing their results into radicalisation that lead to terrorist activity and that which remained radical, but non-violent. Borum (2011: 53) concluded “prisons did not factor prominently into most radicalization processes” when reviewing a 2008 study by Gartenstein-Ross and Grossman, while Jones (2014: 78) stated that there was “no evidence of widespread radicalisation, nor any indication of organised recruitment efforts.” However, these accounts were considered to be an isolated perspective of radicalisation viewed through the lens of Islamic conversion. While mainstream Islam was viewed to offer a stabilising effect for prisoner converts (Hamm, 2009; Silke, 2014), no such conclusions could be drawn for religio-political or right-wing hate groups. In contrast, right-wing extremist ideology was found to be further reinforced by the cultural and religious diversity of the prison population (Anti-Defamation League, 2002).

CAUSES VERSUS COURSES

Phase Model

While quantitative data on prison radicalisation in Australia was in short supply, it was a reasonable to draw the inference that radicalisation is occurring to some degree within prisons. It was identified that there was no single profile for prisoners who were most susceptible to radicalisation (Awan, 2013; Borum, 2011). Veldhuis and Staun (2009: 21) echoed this view, stating, “there is no single explanation for radicalisation. The causes of radicalisation are as diverse as they are abundant,” and furthermore, that the phase model was fundamentally flawed in their attempt to explain the radicalisation process.

One view is that the phase model suffered from selection bias in so much as they apply solely to successfully radicalised outcomes, which were in turn reverse engineered to determine a chronology of events that lead to that end-state. But, this approach neglects unsuccessful or aborted cases (Awan, 2013; Veldhuis & Staun, 2009). Secondly, this model had the potential to victimise minority groups based on the target population and, according to Bartlett et al. (2010: 7), has the potential to “breed resentment and alienation.” This was particularly evident in the pre-radicalisation phase of the model developed by Silber and Bhatt (2007) that was criticised for labelling all Muslims as being pre-radicalised and required those authors to further define their model in the following years. It was on this basis that the phase model approach was abandoned in favour of a root cause model. This concept focused on causal factors at the macro-level, meso-level, and micro-level, which were examined to determine both the individual and group dynamics that contributed to radicalisation.

Root Cause Model

As its name suggests, Veldhuis and Staun’s root cause model concentrates on the causal factors of radicalisation, rather than the chronological ‘courses’ of the phase model. They theorised that “the root cause model provides a framework with which to analyse how causal variables at different levels relate to each other and how they shape the circumstances under which radicalisation is more—or less—likely to occur” (Veldhuis & Staun, 2009: 21).

The model divides these causal factors into macro-level and micro-level influences. The macro-level focused on the social structures and environmental influences and although these factors defined the circumstances that were conducive to radicalisation, they failed to explain why a minority will become radicalised while the majority would not. Therefore, further assessment of factors at the micro-level was necessary to identify individual susceptibility to radical indoctrination. Micro-level factors focused on the individual rather than the environment and sought to identify influences that contributed to a state of personal vulnerability. This framework was applied to the correctional context by introducing prison specific influences to determine the effect of incarceration on the likelihood of a radicalised outcome.

Macro-Level Factors. According to Veldhuis and Staun (2009: 24), macro-level factors related to systemic and environmental influences and were defined as being:

...related to social structures and include, among other factors, demographic changes, political, economic and cultural alterations, educational attainment and labour market participation. Such contextual factors are generally accepted as preconditions for crime and deviant behaviour.

In the context of prison sub-cultures, the primary factor of significance was the hostility of the prison environment that was found to create a culture that fostered ideological recruitment (Hamm, 2009; Riley, 2002; Silke, 2014; Trujillo et al., 2009). This was exacerbated by reports of targeted victimisation against prisoner minority groups (Jones, 2014) and widespread racism in some correctional institutions (Joly, 2007). Within Australian prisons, Aboriginal prisoners were observed to feature significantly in Islamic conversions and the number of Aboriginal conversions was increasing with time (Box, 2015; Harris & Phelps, 2016). This reportedly resulted in the creation of ethnic or religious based prison gangs to gain a degree of personal protection (Jones, 2014; O'Toole & Eyland, 2011). The result was that the prisoner population was fragmented into multiple sub-groups based primarily on race, culture and religion where a predisposition to violence was normalised.

Hamm (2009) identified the overcrowding in correctional facilities and as an additional factor. Facility overcrowding was an ongoing prison management issue that resulted in a decline in the general living standards of those who were

incarcerated and adversely impacted the general prison culture (Merola & Vovak, 2012; O'Toole & Eyland, 2011). Correlations were also drawn between limited access to education and employment, health care and reduced personal space and increased reports of violence and hostility (O'Toole & Eyland, 2011). Ultimately, it was argued that such a pro-violence culture would be likely to promote victimisation and enhance the need for prisoners to resort to gang membership for protection (Silke, 2014). While the interplay between overcrowding and prison culture is a topic in its own right, and beyond the scope of this paper, it was concluded that “prisons that provide the best environments for radicalising inmates are those that are overcrowded” (Silke, 2014: 55).

Micro-Level Factors. Veldhuis and Staun (2009) divided micro-level factors into two subcategories; being social factors, and individual factors. Social factors were defined as how the individual interacted with peers and influential others. Individual factors were concerned with the personal circumstances that influenced how the individual interpreted and responded to experiences. Social factors were seen to create the circumstances for ‘radicalisation by association’ through mechanisms such as *Social Movement Theory*, which Mulcahy et al. (2013) asserted was one of the most important theoretical frameworks for understanding group dynamics regarding radicalisation.

Based on findings by Della Porta (1995), Mulcahy et al. (2013: 8) postulated that “militant radicals were bound together by personal ties and by their shared activist experiences and participating radicals acted as a self-reinforcing mechanism to drive radical activists to become increasingly more radical.” A view echoed by Aly and Striegher (2012) and Sageman (2008) when they each reported that ongoing and intensive interaction with radicalised peers had the potential to further radicalise impressionable associates. Media reports of an Islamic State (IS) inspired prison gang in Goulburn Prison add further weight to this argument, where it was reported that the segregation of radical Islamists had resulted in the continuation and intensification of their radical beliefs (Phelps, 2015; Rubinsztein-Dunlop & Dredge, 2016).

As the influence of social interaction was a key contributor to the transformative process, peer interactions between prisoners could not be ignored (Veldhuis & Staun, 2009). Ryan (2007: 1,006) identified four specific areas of exploitation by radical recruiters. These were defined as *Persecution*, *Precedent*, *Piety* and *Perseverance* (referred to as the *Four Ps*) and he applied this concept to both religious and non-religious cases, summarising that “irrespective of one’s

cultural background, the formula of heroes, grievance, and goal can be easily understood.”

Reference to some form of persecution or grievance was abundant throughout the literature, and more so in relation to prisoners (Blazak, 2001; Joly, 2007; Jones, 2014; Riley, 2002; Ryan, 2007; Trujillo et al., 2009; Veldhuis & Staun, 2009; Wilner & Dubouloz, 2011). Jones (2014) identified that some young offenders entering British prisons were interacting with terrorist prisoners and converting to Islam as an act of defiance towards the justice system, driven by a self-imposed sense of victimhood. Right-wing recruitment demonstrated a similar trend where injustice, powerlessness and perceived discrimination were reportedly responsible for an increased acceptance of an extremist narrative (Exit-Deutschland, 2014). Similar findings were also reported for militant Irish republicans who exploited their perceived persecution to enhance the effectiveness of their recruitment narrative (Ryan, 2007).

The compound result of such a collective grievance was a destabilised environment that was conducive to extremist recruitment, and more so, if the prisoner ‘blamed’ society for their incarceration (Anti-Defamation League, 2002; Trujillo et al., 2009). When framed as an ongoing struggle against unjust oppressors, this perceived conflict between the West and Islam (Wilner & Dubouloz, 2011), or the risk that multiculturalism was perceived to represent to the purity of the white race (Blazak, 2001), the injustice was personalised and therefore attracted an unwarranted level of credibility. According to Ryan (2007: 999) “republicans, like Islamists, harvested past heroes and historical injustices to feed their contemporary campaign” and when coupled with the pious image that the radical is conducting God’s work, the attributed credibility is further reinforced in the minds of the impressionable (Blazak, 2001; Ryan, 2007). In the correctional environment, this was achieved through personal interaction between influential ideological recruiters including radical Imams, and vulnerable prisoners (Hamm, 2009; Veldhuis & Staun, 2009). Ryan (2007: 986) appropriately summarised this recruitment strategy, stating that, “when viewed through the prism of Islamic military history, the *Four Ps* are an intoxicating mix to sympathisers,” and its application can also be extended to various other ideologies.

TRANSFORMATIVE LEARNING THEORY

Building on the works of Mulcahy et al. (2013) and Wilner and Dubouloz (2011), the influence of *Transformative Learning Theory* in prisoner radicalisation was examined to gain an understanding of the development of susceptibility at the individual level. Transformative learning sought to explain the process of learnt adaption in response to an involuntary change of environment (Mezirow, 1991). Adapted by Mulcahy et al. (2013), it was used to determine the degree of vulnerability to radicalisation that newly incarcerated prisoners experienced because of their imprisonment. Mezirow (1991) argued that transformative learning commenced with meaning schemes and perspectives that formed the basis of our expectations and belief systems, and were fundamental to our problem-solving capability. That is, when an individual encounters a new experience, they rely on past experiences, knowledge, assumptions and biases to interpret that event.

A sociolinguistic distortion, or trigger event, occurs when the individual is unable to make sense of an occurrence based on past experiences, which prompts a process of critical reflection. Mezirow (1991: 6) argued that “reflective learning becomes transformative whenever assumptions or premises are found to be distorting, inauthentic, or otherwise invalid.” This confusion compels the individual to seek new meaning schemes or perspectives and results in the individual undergoing a process of psychological or cognitive transformation to adapt to their new environment.

When applying this framework to prison radicalisation, specific contextual influences emerged. The experience of incarceration, particularly for the first time, was considered to represent a distortion which had the potential to trigger transformative learning. Sykes (1958: 79) referred to this as the “pains of imprisonment” that were defined as “frustrations or deprivations which attend the withdrawal of freedom, such as the lack of heterosexual relationships, isolation from the free community, the withholding of goods and services, and so on.”

Arguably, this deprivation extends to one’s inability to continue the criminal lifestyle that many prisoners are accustomed to. The change in personal circumstances, which were outside the individual’s control, was viewed as a “serious psychological assault upon the self” (Riley, 2002: 444), including the

loss of liberty, identity, and personal security (Dhami, Ayton, & Loewenstein, 2007; Joly, 2007). According to Wilner and Dubouloz (2011: 423), it is at this point that the “individual comes to realise that the old reality simply no longer exists and a new one must be established. This realisation facilitates the process of identifying with the newly internalised reality and encourages an exploration of new roles.” Mulcahy et al. (2013) referred to this experience as a state of emotional trauma that left new prisoners in a condition of vulnerability and which was often exploited by extremist recruiters (Anti-Defamation League, 2002).

The outcome was a process of self-reflection whereby the prisoner begins to question their identity and preconceptions (Mezirow, 1991; Wilner & Dubouloz, 2011). Joly (2007) postulated that this reflective process results in the prisoner regaining a social identity and developing a new personal identity that was relative to their new environment and circumstances. In many cases, this provided the motivation for prisoners to seek religion (Hamm, 2009) with a noteworthy majority (reported to be approximately eighty percent in the United States) of prisoners in western jurisdictions favouring Islam (Jones, 2014; McGilloway, Ghosh, & Bhui, 2015; Mulcahy et al., 2013).

While mainstream Islam was observed to represent a behavioural stabiliser (Hamm, 2009; Silke, 2014), more extreme versions of prison Islam (referred informally as *Prislam*) were found to have the opposite effect (Silke, 2014). Concerningly, of the many prisoner converts who sought guidance from Islam, the majority demonstrated only a superficial knowledge, if any at all, of the religion, rendering them vulnerable to the influence of radical peers and extremist doctrines (Awan, 2013; McGilloway et al., 2015). Equally, some prisoners with underlying racist sentiments were known to identify with right-wing ideology that validated their existing bigotry and prejudices (Anti-Defamation League, 2002).

Gang membership was another common occurrence during critical reflection, particularly when redefining one’s personal identity. Silke (2014, p. 52) argued that “when individuals become incarcerated, the quickest way to establish their identity is through affiliation with a gang,” which represented an important intersection between individual and social influences.

Wilner and Dubouloz (2011) explained that radicalisation occurred during this reflective process where new knowledge is sought and personal identity is

reassessed. The final stage of Mezirow's theory focused on the process of transformation. According to Wilner and Dubouloz (2011: 433), the transformative process "is marked by an individual reflecting on the psychological, social and spiritual issues they encounter when dealing with a disorienting dilemma and with the restructuring of meaning perspectives as they learn to adapt to new realities."

In the context of prison radicalisation, the transformative process resulted in a common set of traits including social isolation resulting from a lack of engagement with pre-existing social networks such as friends and family on the outside (Joly, 2007; McGilloway et al., 2015; Silke, 2014; Veldhuis & Staun, 2009), favouring a peer group of like-minded prisoners (Jones, 2014; Mulcahy et al., 2013; Sykes, 1958; Wilner & Dubouloz, 2011) and legitimising the use of violence in response to perceived wrongs against the in-group that they identify with (Dugas & Kruglanski, 2014; Hamm, 2009; Liebling & Arnold, 2012; Trujillo et al., 2009). These conditions constituted a potentially conducive environment for the newly radicalised prisoner to remain distanced from elements of their previous identity such as social networks and continue to be ideologically saturated with extremist narratives and propaganda, thus strengthening their newly radicalised identity which normalised the use of violence.

CONCLUSION

Experience shows that while most prisoners are unlikely to succumb to extremist doctrines, a minority will. This paper explored the factors that explain why some will radicalise, while others will not. It offers insight into the interplay between environmental, social, and individual factors that when operating collectively, produce conditions that are conducive to radicalisation. It presents a cogent argument for an alternative approach to the use of a phase model for dealing with prison radicalisation. That is, correctional administrators should be aware that the psychological strain on newly incarcerated prisoners can represent a transformative trigger—prison subcultures fuelled by volatility and uncertainty can present a pathway to radicalisation. The interpersonal relationships formed in prison, particularly with radicals, adds further to this transformation.

It could be concluded that radicalisation is best achieved in overcrowded facilities where prison gangs can exert influence and offer protection to vulnerable prisoners. Those who are re-establishing an identity relative to their

incarceration are likely to be most susceptible to these environmental and social influences, and thus, will demonstrate a heightened response to these precursors. It follows that early identification is an important aspect in any intervention because it offers the opportunity to divert a vulnerable prisoner. This could help avoid the production of a violent and ideologically driven person who is equipped with the desire, skills, and hatred necessary to commit acts of serious harm.

DISCLAIMER

No representation is made on behalf of any correctional institution. The views expressed in this paper are those of the author.

ACKNOWLEDGEMENTS

I offer my sincere thanks to Jon Evans and Bill Kelsey for their valuable feedback on my earlier work on this topic.

ABOUT THE AUTHOR

Nathan Thompson, AssocDegCrimnlgy&Just, is completing studies in security, intelligence and counterterrorism studies at Edith Cowan University, Western Australia, where he is majoring in organised crime. He has worked in several Australian correctional jurisdictions where he focused on prison security and risk management in relation to prison radicalisation.

REFERENCES

- Aly, A., & Striegher, J. L. (2012). "Examining the Role of Religion in Radicalization to Violent Islamist Extremism," in *Studies in Conflict & Terrorism*, Vol. 35, No. 12, 849–862.
- Anti-Defamation League. (2002). *Dangerous Convictions: An Introduction to Extremist Activities in Prisons*. New York, NY: Gorowitz Institute.
- Awan, I. (2013). "Muslim Prisoners, Radicalisation and Rehabilitation in British Prisons," in *Journal of Muslim Minority Affairs*, Vol. 33, No. 3, 371–384.
- Bartlett, J., Birdwell, J., & King, M. (2010). *The Edge of Violence: A Radical Approach to Extremism*. Retrieved 1 June 2016 from www.demos.co.uk

- Blazak, R. (2001). "White Boys to Terrorist Men: Target Recruitment of Nazi Skinheads," in *The American Behavioral Scientist*, Vol. 44, No. 6, 982–1,000.
- Borum, R. (2011). "Radicalization into Violent Extremism II: A Review of Conceptual Models and Empirical Research," in *Journal of Strategic Security*, Vol. 4, No. 4, 37–62.
- Box, D. (2015). "Muslim Jailhouse Converts on the Rise," in *The Weekend Australian*, June 20.
- Counter-Terrorism Legislation Amendment (Foreign Fighters) Act (Cth), (2014).
- Dhami, M. K., Ayton, P., & Loewenstein, G. (2007). "Adaption to Imprisonment: Indigenous or Imported?" in *Criminal Justice and Behavior*, Vol. 34, No. 8, 1,085–1,100.
- Dugas, M., & Kruglanski, A.W. (2014). "The Quest for Significance Model of Radicalization: Implications for the Management of Terrorist Offenders," in *Behavioral Sciences and the Law*, Vol. 32, 423–439.
- Exit-Deutschland (2014). *We Provide the Way Out: De-Radicalisation and Disengagement, Revised Second Edition*. Berlin, Germany: exit Germany, 1–19.
- Hamm, M.S. (2009). "Prison Islam in the Age of Sacred Terror," in *The British Journal of Criminology*, Vol. 49, No. 5, 667–685.
- Harris, L., & Phelps, J. (2016). "Muslim Prisoners Threaten Others: Convert or be Bashed," in *The Sunday Telegraph*, May 14.
- Joly, D. (2007). "Race Relations And Islam in the Prison Service," in *The International Journal of Human Rights*, Vol. 11, No. 3, 307–326.
- Jones, C.R. (2014). "Are Prisons Really Schools for Terrorism? Challenging the Rhetoric on Prison Radicalization," in *Punishment & Society*, Vol. 16, No. 1, 74–103.
- Liebling, A., & Arnold, H. (2012). "Social Relationships Between Prisoners in a Maximum Security Prison: Violence, Faith, and the Declining Nature of Trust," in *Journal of Criminal Justice*, Vol. 40, No. 5, 413–424.
- McGilloway, A., Ghosh, P., & Bhui, K. (2015). "A Systemic Review of Pathways to and Processes Associated with Radicalization and

- Extremism Amongst Muslims in Western Societies,” in *International Review of Psychiatry*, Vol. 27, No. 1, 39–50.
- Merola, L. M., & Vovak, H. (2012). “The Challenges of Terrorist and Extremist Prisoners: A Survey of US Prisons,” in *Criminal Justice Policy Review*, Vol. 24, No. 6, 735–758.
- Mezirow, J. (1991). *Transformative Dimensions of Adult Learning*. San Francisco: Jossey-Bass.
- Mulcahy, E., Merrington, S., & Bell, P. (2013). “The Radicalisation of Prison Inmates: Exploring Recruitment, Religion and Prisoner Vulnerability,” in *Journal of Human Security*, Vol. 9, No. 1, 4–14.
- Mullins, S. (2011). “Islamist Terrorism and Australia: An Empirical Examination of the ‘Home-Grown’ Threat,” in *Terrorism and Political Violence*, Vol. 23, No. 2, 254–285.
- O’Toole, S., & Eyland, S. (eds.) (2011). *Corrections Criminology*. New South Wales, Australia: Hawkins Press.
- Palermo, George B. (2011). “Prisoner Misbehaviour,” in *International Journal of Offender Therapy and Comparative Criminology*, Vol. 55, No. 8, 1,183–1,185.
- Phelps, J. (2015). “ISIS Jail Gang War,” in *Sunday Telegraph*, 11 October.
- Riley, J. (2002). “The Pains of Imprisonment: Exploring a Classic Text with Contemporary Authors,” in *Journal of Criminal Justice Education*, Vol. 13, No. 2, 443–461.
- Rubinsztein-Dunlop, S., & Dredge, S. (2016). “Plan to Imprison Terrorists in Goulburn Supermax Prison ‘Backfiring’, Former Inmate Junaid Thorne Warns,” in *ABC News*, 16 October.
- Ryan, J. (2007). “The Four P-Words of Militant Islamist Radicalization and Recruitment: Persecution, Precedent, Piety and Perseverance,” in *Studies in Conflict & Terrorism*, Vol. 30, No. 11, 985–1,011.
- Sageman, M. (2008). “A Strategy for Fighting International Islamist Terrorists,” in *The Annals of the American Academy of Political and Social Science* [H.W. Wilson - SSA], Vol. 618, 223–231.

- Silber, M. D., & Bhatt, A. (2007). *Radicalization in the West: The Homegrown Threat*. New York: New York City Police Department.
- Silke, A. (ed.) (2014). *Prisons, Terrorism and Extremism: Critical Issues in Management, Radicalisation and Reform*. New York: Routledge.
- Smelser, N.J. and Mitchell, F. (2002). *Discouraging Terrorism: Some Implications of 9/11*. Washington, DC: National Research Council.
- Sykes, G. M. (1958). *The Society of Captives*. New Jersey: Princeton University Press.
- Trujillo, H. M., Jordan, J., Gutierrez, J. A., & Gonzalez-Cabrera, J. (2009). "Radicalisation in Prisons? Field Research in 25 Spanish Prisons," in *Terrorism and Political Violence*, Vol. 21, No. 4, 558–579.
- Useem, B., & Clayton, O. (2009). "Radicalization of U.S. prisoners," in *Criminology & Public Policy*, Vol. 8, No. 3, 561–592.
- Veldhuis, T., & Staun, J. (2009). *Islamist Radicalisation: A Root Cause Model*. Netherlands Institute of International Relations Clingendael. Retrieved 1 May 2016 from http://subweb.diis.dk/graphics/_IO_indsatsomraader/Religion_og_social_konflikt_og_Mellemosten/Islamist%20Radicalisation.Veldhuis%20and%20Staun.pdf
- Wilner, A. S., & Dubouloz, C., J. (2011). "Transformative Radicalization: Applying Learning Theory to Islamist Radicalization," in *Studies in Conflict & Terrorism*, Vol. No. 34(5), 418–438.

- o O o -

WHAT'S IN A MARKING?: AERIAL IDENTIFICATION NUMBERING OF FIRE APPLIANCES

Vincent Hurley[‡]

ABSTRACT

Emergency vehicles worldwide have unique aerial identification numbering on the rooves for ease of identification for aerial support, particularly if the individuals crewing the vehicle need exigent assistance. Drawing on an actual event from the 2013 Blue Mountains Wildfire, this paper highlights how aerial support from a water bombing aircraft was unable to read the existing black aerial identification numbering of a fire appliance because the black identification number coalesced with the black plumes of smoke emitted by the wildfire. Given the extensive technological development in the application of high visibility markings over the past twenty-one years, the current black and aerial identification numbering used by the New South Wales Rural Fire Service on their fire appliances is far from adequate, doing little to provide optimum safety for fire ground crews in a wildfire. This paper concludes that the current black aerial identification numbering should be replaced with high visibility aerial identification numbering markings because these have greater visibility for aerial support in a wildfire particularly in the colours of red, lime, yellow, orange or blue.

Keywords: Aerial Identification Numbering, high visibility, vehicle marking, camouflage

INTRODUCTION

The use of high visibility markings on vehicles was formalised in 1958 under the United Nations (UN) international agreement of Uniform Provisions Concerning the Approval of Retro-Reflective Types for Two-Wheeled Vehicles, under Regulation 88 (UN 1958). Prior to this, there was no global agreement or manufacturing conformity for high visibility markings. The UN agreement standardised global manufacturing standards that included reflective qualities under the scientific references of colorimetric, photometric, and physical and mechanical requirements (UN 1958: 11).

[‡] Corresponding author: vincent.hurley@mq.edu.au

The adoption of these scientific attributes was premised on research carried-out by the International Commission of Illumination (UN 1958: 5). Part of its study comprised the ability of the retroreflective tape to be resistant to external agents, such as oil, fuels, dust, dirt, rain, washing, and fading. It had to maintain its qualities in extreme heat—up to 50°C—and cold, down -20°C. It had to be resistant to collision or impact with other objects, had to be seen at night and during the day (1958: 20), and once applied to a vehicle it could not be easily removed. In 1985 the same UN suggested that the colours of yellow, white, and red were good for day and night visibility. Australia is a signatory to this UN agreement.

Since the introduction of the UN agreement, the application of high visibility markings has become common place, now extending to *high-vis* vests in sport, school yards, and work places. High-vis markings are on children's tee shirts and workplace shirts and pants, even on running shoes for ease of detecting joggers running at night.

The origins of high-vis clothing stems from International Standard ISO20471 *High Visibility Clothing—Test Methods and Requirements*,” and the American National Standard ANSI/ISEA 207—*American National Standard for High Visibility Public Safety Vests*. Standards Australia adopted the international standard of using high visibility safety garments in risk-prone occupations to help reduce workplace accidents. The first regulated workplace in Australia to enact the wearing of high-vis clothing was under the *Perth Market By-Laws 1990—Regulation 13A (WA)*, whereby “High visibility clothing must be worn in certain areas of the market” (Australian Legal Information Institute 2016) to reduce fork lift accidents. The extent to which application of these high visibility markings are now used by-way of regulation or voluntarily in the workplace, at sporting events, on school grounds, or part of leisure apparel, could not have been foreseen in 1958.

BACKGROUND

Aerial Identification Numbers (AIN) are numbers, or a combination of numbers and letters, that are adhered to roofs or bonnets (hoods) of emergency vehicles that identifies them from aircraft. There are an estimated 40,000 emergency service vehicles in Australia, all of which have their own AIN. State and territory police forces, fire services, ambulance services, volunteer fire organisations, State Emergency Services, volunteer rescue associations, and

marine rescue organisations, all have their organisations' unique AIN. Add to this, other statutory bodies such as Australian wide correctional services 300 vehicles, national parks 15,000 vehicles, water authorities 210 vehicles, and state transit services 8,000, all have unique AINs. Moreover, if the private security sector vehicles, such as armoured trucks and night patrol vehicles, road and construction plant/machinery are included—approximately 70,000 nation-wide—the total number of vehicles on Australian roads with AIN could be in the order of 133,510.¹

AIN are all black in colour and are non-reflective. Their importance does not become apparent until an emergency vehicle needs exigent aerial support and the only way to locate and identify the correct vehicle is by their unique AIN. There has been no research into the effectiveness of the existing black AIN's. Notwithstanding, there are four studies that have examined the high visibility markings.

The first study into high visibility colour and design high visibility markings occurred in Canada in 1979. It centered on the value of high visibility markings (or *brandings*, as they were known then) on railway cars. After a spate of accidents, some fatal, in Canadian rail shunting yards, a trial was undertaken to find an effective method to reduce these workplace accidents (Volpe 1998: 9). To reduce shunting accidents, freight rail cars had highly visual white squares applied. These measured 36 x 36 inches (91cm). The squares had to be conspicuous from a minimum distance of 800 feet (243m) during the day and night. To gain optional high visibility, the squares were placed on each side of the rail car. The study resulted in a reduction of shunting yard accidents (the amount was not cited in the paper) because the visibility of the carriage was increased due to the “visual medium” (Wilson & Giese 1977: 1,178). That is to say, the introduction of an object that was vastly different from its background. This study was replicated fifteen years later by the United States Department of Transportation.

In 1994, the United States Department of Transportation undertook a study to improve safety of highway railroad crossings where there were no boom gates. To increase the high visibility of bulk grain wagons, they adopted the 1979 Canadian research findings and placed reflective rectangle markings of 24 inches (61cm) x 48 inches (122cm) on the side of grain wagons. However, rather than adopting white as the only coloured rectangle, they trialled nine different colours and colour combinations comprising yellow, red, and white. To

this, they also applied two different marking designs. The first were long narrow unbroken high visibility strips running the entire length of the grain wagons. The second were long narrow, but broken, strips running the length of the wagons.

After trialling the nine different colour combinations and designs at 136 sites across the United States, the study found that the quickest mean recognition time for colour and design was the unbroken yellow high visibility strip, which was seen from 3,500 inches (88.9m) (Volpe 1998: 100). The long narrow unbroken yellow high visibility strips and rectangle markings ensured that the entire train could be seen at night—there were no visual blackspot while the wagons passed through the crossing.

The third study on high visibility markings was by the UK Home Office. In 2004 the Home Office's Police Scientific Development Branch undertook the world's first research into high visibility markings of police vehicles. The study looked at the questions of how to create a highly visible police vehicle (Harrison 2004).

The study was motivated by the need for a motorway police vehicle (highway patrol) to reduce traffic accidents by being 'detected' by passing motorists (Harrison 2004: 1; Langham, Hole, Edwards et.al, 2002: 167). The project resulted in what has become known as *battenburg livery* high visibility (i.e. fluorescent or retro-reflective colours) markings of blue, red, white, lime, yellow, and orange in combinations and designs of solid strips, chequered tartan patterns, rectangular patterns, and other designs and permutation of the same. This mix-and-match of colours and designs make vehicles visible throughout the day and night; in rain, fog, and mist, from a minimum viewing distance of 500 meters (Harrison 2004: 3).

The high visibility markings in Australia that have become standard identification of the police is the chequered tartan pattern of blue and white on their vehicles, as well as their uniforms. The common high visibility markings that denote fire and rescue agencies are the colour combinations of red, white, and yellow. For ambulance services, it is red, white, blue and/or green. The State Emergency Service is orange and white chequered tartan, and in the case of the New South Wales Rural Fire Service (NSW RFS) it is red and white stripes. These high visibility colour combinations and designs are now instantly recognisable to the casual observer.

The final study that is considered relevant to this issue was carried-out by the United States Fire Administration (USFA). In 2009, the USFA examined the suitability of high visibility markings in the form of coloured stripes or patterns for day–night visibility for fire appliances. Maintaining the historical significance of red as the dominant fire department colour, high visibility markings of red and white, and/or red and yellow coloured stripes or patterns, were recommended to US fire departments premised on their ability to stand-out not only in rain, fog, and mist, but night and day. These are important qualities in a fire environment. The purpose of the high visibility markings was not to prevent collisions between fire appliances or other emergency agencies at a fire scene, but to increase a fire appliance’s prominence to road users, thus reducing collisions between fire appliance and road traffic (Brady 2014: 25).

Despite the USFA study, and the previous research by the United Kingdom Home Office, United States Department of Transport, and the Canadian study into freight wagons, the application of high visibility markings for AIN remains unexplored.

PROBLEM IN CONTEXT

All New South Wales Rural Fire Service (NSW RFS) vehicles have unique AIN that are located on the roofs of its appliances. The purpose of the AIN is to provide aircraft with the identification of fire ground crews. This is useful in three general situations. The first is when the vehicle is used as a reference point for aerial support; that is, to locate a specific nearby fire, and then extinguish it by dropping water. Second, AINs are used by aircraft to locate mobile command posts (e.g. a firefighting vehicle). The final, and arguably the most critical reason AIN are used, is to locate a crew in a fire appliance who, as a last resort, are using their vehicle as a safe-haven because they have been trapped by the fire.

As a case study, take the October 2013 Blue Mountains wildfire. In this blaze, 205 homes were destroyed (NSW Parliamentary Research Office, 2014), and hundreds of fire crews extinguishing structural (building) and bush fires over a 30-square kilometre area. During the wildfire, a water bombing aircraft was requested by a fire ground crew to extinguish a fire. To gain a visual bearing as to where to drop water, air support requested the crews’ AIN. But, because of the thick plume of smoke being generated by the fire, the helicopter was unable to locate the vehicle’s AIN. The black roof AIN of the fire appliance was

camouflaged, coalescing into the environment created by the black smoke. The air observer was not able to distinguish the number in the smoke, so the water bombing never occurred.

RATIONALE

The black AIN regime used by the New South Wales Rural Fire Service has not changed its design or colour since it was introduced in 1995. However there appears that the subject literature provides little guidance; a search shows that there have been no publicly available studies that explored the feasibility of having an AIN that is highly visible for the Australian wildfire environment. In contrast, there have been important developments in high visibility markings, design, and colour combinations over the same twenty-one-year period in other contexts that could be applied to AIN of NSW RFS vehicles. An event during the 2013 Blue Mountains wildfire exposed a serious deficiency in the ability of aircraft to see the AIN of a NSW RFS fire appliance. Given that there are an estimated 133,510 vehicles with AIN, the implications for operational safety, the findings of this assessment could not only apply to the NSW RFS, but other services.

METHOD

To weigh-up the factors in the debate about high visible AIN markings, a plus-and-minus analysis was used. Using the structure of this for-and-against approach allowed the factors, or pressures, that support the status quo (termed *restraining factors*) and those pressures that support a change (*driving factors*) (Cronshaw & McCulloch 2008: 90). This analytic method makes the assessment transparent.

The data used to identify the opposing forces came from publicly available sources—i.e. secondary data—relating to the October 2013 wildfire. Further, data regarding the 2014 bushfire at Warrimoo in the Blue Mountains, and four hazard reductions in 2015, and three hazard reductions in 2016, all in the Blue Mountains, were also used.

The fires in 2014, 2015, and 2016 were within 30 square kilometres of the October 2013 Blue Mountains wildfire. All fires were between 2–15 square hectares in size, all on clear sunny days with no cloud cover or significant wind. The vegetation burnt in the October 2013 wildfire was of the same type that was

subject to the 2014, 2015, and 2016 fires; eucalypt-dominated vegetation including wet and dry sclerophyll forests.

RESULTS

Driving Factors for Change

Size of AIN. A weakness of the black AIN on the cabin rooves of NSW RFS vehicles is their size, being very small only 30cm x 10cm. Their size does not exploit all the available roof space of the fire appliance to facilitate ease of aerial identification. Currently the AIN can be increased by ‘three’ to maximise its aerial visual effect that is, locating and reading the AIN. The increase in size is critical when it comes to urgent vehicle identification. The size of the AIN needs to be tailored to the worst-case scenario (environment) as was the situation during the October 2013 wildfire where a fire appliance AIN could not be seen due to the dense black smoke. The larger the AIN the greater the chance of it being identified, standing out for aerial identification.

A case in point is the vehicle AIN marking regime of the New South Wales Police Force. The NSW Police AIN numbers and/or letters consume the entire bonnet and/or most roof space for optimal and rapid identification. The “recognisability” (Chidlow 2012: 6) is of utmost importance for emergency vehicles because it needs to immediately catch the eye of the person scanning the environment for it. As Thomas and Williams (2012: 2) point out when referring to police vehicles operating on roads or at the scene of a crime, “vehicle detection through its high visibility of markings is critical for officer safety as police and their cars are frequently placed in dangerous situations where they may need rapid backup.” Presumably the same can be said for fire crews particularly should they need to take refuge inside a fire appliance if they are to be overrun by wildfire. Rapid aerial identification of the correct fire appliance is paramount, but the need for changing the existing small NSW RFS AIN is also premised on their operating environment, in bushland that can have very limited light.

New South Wales Police vehicles operate in an environment that is urbanised, well-lit by street lights as well as residential and commercial building lights. Therefore, their work environment is open, luminous and is, from an aerial perspective, relatively visually unrestricted. Despite operating in this bright and unobstructed environment, their vehicle AIN are and have remained very large for decades now. Why? For the sole purpose of rapid aerial

identification by police aerial support (PolAir) for officer safety. This is not the case with the small black AIN that exist on NSW RFS appliances, appliances that operate in an environment that is frequently dominated by opacity. The larger the AIN, the greater the ability to locate, recognise and decipher it. This is not the situation with NSW RFS AIN.

The lead combat agency response for wildfires in New South Wales is the NSW RFS and their operating environment is commonly in topography that is dominated by escarpments, valleys, gorges and/or in eucalypt forests that have average height of 60m and with a canopy density up to 80% of ground coverage (Givnish, Wong, Stuart-Williams et.al 2014: 5 and Peeters and Butler 2014: 2). This is the type of topography that could be representative of many mountainous regions in Australia. The purpose of the AIN in a bush environment is not only to identify the fire appliance from the air, but more importantly to maximise fire fighters' safety on the fire ground. Just as workplace signage warn staff of potential dangers or hazards on a factory floor or on a building site, so AIN is essential for ensuring fire fighters workplace health and safety in their work environment. Valleys, gorges and tree canopy coverage will vary in density and depth, therefore the degree to which sunlight can penetrate a valley floor will also differ. This divergence will hinder the ability of aerial support to locate and render assistance to a fire appliance and the crew with the existing small black AIN. Very large AIN markings that consume maximum cabin roof space will be easier to locate by aerial support than the existing NSW RFS AIN marking regime.

Size of AIN. The existing design of the NSW RFS AIN is realistic and is a true representation of number identification that it denotes. The numbers are all one dimensional, that is, there is nothing abstract about them, they are all balanced in appearance, and they do not overlap. They are identifiable by aerial support, as has been demonstrated over the decades in fires. Furthermore, across NSW not all fire appliances fight bushfires in topography that has the physical features or vegetation that is found in valleys, gorges or under thick tree canopy. In fact, most of NSW's topography is open and relatively flat plains or grasslands. It does not always consist of thick tree canopy. Given this, it is not necessary for the existing AIN to be altered purely premised on the argument of topography.

Colour of the AIN. Over the past twenty-one years there has been enormous scientific development in retro-reflective high visible algorithms (Yong Xu et.al 2015:2 and Singh, Dhawale & Misra 2013: 355) that now give rise to a host of

different “threshold of visibility colours” (Wilson & Giese 1977: 1177) or high visibility markings.

The NSW RFS AIN are black and have a flat black pigmentation that is ineffective in a wildfire because their black colouring coalesces with the black plume of smoke emitted from the fire. In contrast the highly fluorescent or retro-reflective high visibility colours of lime, yellow or orange have proven to be effective in snow, fog, rain and cloud cover (Thomas 2004: 10). The USFA (2009) examined the suitability of day-night time high visibility markings on fire appliances not only in rain, fog, mist and at night but also the chromaticity within a fire environment. Their research validated earlier studies finding that high visibility markings on fire appliances resulted in their greater luminosity. The USFA recommended that fire authorities across the United States should apply retro-reflection markings to their fire appliances for ease of attracting the observer’s eye to the fire vehicle in the colours of yellow, lime, orange and red.

Organisational Policy. The policy for the design, size and colour of the current New South Wales Rural Fire Service AIN was established in 1995. This policy is twenty-one years old, and has not been revised. While there have been improvements in engineering of fire-fighting appliances (e.g. roll bars, radiant heat shields inside cabins, vehicle safety sprinkler systems, and improvements in personal protection equipment), the design, size and colour of the AIN has not been subject to policy review.

Restraining Factors

Colour of the AIN. There are three arguments that suggest there should be no change. First, there has been no research into high visibility markings, so the hypothesis that a high visibility AIN is superior to a black small AIN has no basis in evidence. Second, the existing black against the white colour that RFS vehicles is an effective contrast for aerial identification. This colour-pairing does not detract from either pigmentation and therefore brings into question the need for any retro-reflective high visibility markings.

The final argument is the insufficient colour contrast of a green AIN. A retro-reflective green AIN could compromise the safety of a fire appliance and its crew because a green AIN colour could meld into a green tree canopy or undergrowth. This could result in insufficient colour contrast to make the AIN identifiable from the air within a bush environment. This problem was highlighted by Neider and Zelinsky (2006: 2,233) regarding the effects of target-

background similarity. They established that a similar coloured background to the primary object prevented the process of identifying objects of the same or similar colours. Like findings were found by Wolf, Oliva, Horowitz, et.al (2002) Hess, Wismer, Bohil, et.al (2013) and Heinrich and Selj (2015).

Organisational Policy. The existing AIN complies with NSW RFS policy, *Circular 152/97*, on commonly accepted AIN standards for all Rural Fire Service vehicles. Further, the AIN complies with the United Nations guidelines on the *Uniform Provision Concerning the Approval of Marking for Vehicles*. Therefore, the AIN conforms to existing Service Standard benchmarks at organisation and at global level. The justification for organisational change is minimal under the circumstances.

DISCUSSION AND CONCLUSION

Density of the black smoke emitted from the 2013 Blue Mountains wildfire merged with the black AIN on the NSW RFS appliance making aerial identification impossible. This melding is like what occurs with military units in combat. The military use tactics on the battle field to shroud military personnel and vehicles from the enemy and one technique is activating obscurant pyrotechnic smoke to screen and protect vehicles and infantry in combat (Pulpea, 2015: 732). Another method of shrouding military personnel or vehicles from the enemy is the application of paint or camouflage to counter object detection (Elias, 2011; Singh, Dhawale & Misra 2013: 351). In both cases the purpose of hiding personnel and vehicles is to “mask the object with the foreground to appear as the background or vice versa so it cannot be seen” (Singh, Dhawale & Misra 2013: 352). This is what occurred with the black AIN in the 2013 wildfire; it merged with the environment. The background of the black AIN appeared as the foreground of smoke. To break this visual relationship, de-camouflaging is applied.

De-camouflaging relies on the theory that intensity of colour and shape can be used to disrupt the foreground, background, and filter response (Elias, 2011; Galun, Eitan, Ronen, et al., 2003: 1; and Schaefer & Stobbe 2006: 2,427). Premised on research, the luminosity of high visibility markings on rail cars, police vehicles and fire appliances of lime, yellow, blue and orange, at night, during the day, in snow, fog, rain, and of particular note, in smoke, the high visibility achieves this interference by fracturing the common hue and/or pigment relationship between the two objects, the smoke and high visibility AIN.

Chidlow (2012: 6) pointed-out that once there is this disconnect recognisability, the capacity to catch the eye of the person scanning the environment will be maximised because the image is enhanced.

Given research findings, it is reasonable to suggest that the application of highly visible AIN in lime and/or yellow or orange are likely to provide optimum attraction to aerial support. The choice of these colours is premised on USFA recommendations that these colour markings stood-out best in a fire environment. Juxtaposed to this was use of the colour of blue to contrast or have a de-camouflaging effect within a bush environment. What research does not support is the existing use of black AIN because the black foreground of smoke blends with the black AIN background.

The research into the use of highly visible AIN markings since 1979, the 1958 and 2010 *UN Agreement Concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval from Motor Vehicles Equipment and Parts*, the adoption of high visibility markings on emergency vehicles around the world, and on work and sporting apparel, demonstrates the importance of highly visible markings.

The current size of the AIN on the roofs of fire appliances has also been questioned. The existing practice of having small AIN that fails to take advantage of the entire cabin roof and does little to enhance the ability of aerial support to identify a specific fire appliance in a wildfire. The entire space on the roofs of NSW RFS fire appliances should be exploited, not the mere portion as is the currently the case.

The arguments for change out-weight those for the status quo. So, the question for policy makers is: Would it not be timely to consider these arguments with the view to re-examine the currently AIN policy?

ENDNOTE

1. The figures cited are only estimates. The numbers validating them were arrived at from the relevant State and Territory Government Agency cited via their websites. Websites of Volunteer Rescue Organisations across each State and Territory were also interrogated. Private Corporations such as Armguard, Chubb, ADT, G4S, Wormald web sites and construction companies of Brookfield Multiplex, John Holland, Downer EDI Works,

Fulton Hogan, Thiess, Leighton Contractors, Lend Lease, BHP Billiton and Laing O'Rourke were also used to arrive at these numbers.

ACKNOWLEDGEMENTS

To the journal's reviewer(s) for their time and constructive recommendations. To Macquarie University Dean of Law, Professor Natalie Klien for her guidance; and to Detective Chief Inspector Greg Judkins, Operations Manager, New South Wales Police Aviation Branch for his feedback on my early draft.

ABOUT THE AUTHOR

Vincent Hurley, BSocSc, MBA, is an associate lecturer in geo-political policing and criminology at Macquarie University, Sydney. Outside of academia, he has an interest in bushfires. He has been a volunteer member of the New South Wales Rural Fire Service for twenty years, assigned to the Faulconbridge Brigade, Blue Mountains.

REFERENCES

- Australian Government Bureau of Meteorology (2016). *Blue Mountains weather October 2013*. Retrieved 15 June 2016 from <http://www.bom.gov.au/climate>
- Australian Legal Information Institute (2016). *Legislation Western Australia*. Retrieved 15 June 2016 from <http://www.austlii.edu.au/databases.html>
- Brady, N.R., (2014). *Evaluation of the Effectiveness of Alternative Lighting, Paint, and Retroreflective Material Schemes on First Responder Vehicles* (Doctoral Dissertation, Ohio University).
- Chidlow, E., (2012) *The Colours, Visibility, High Visibility and Recognisability Factors of Emergency Vehicles and Workplace Signage*. Research Project. South Australia: Flinders University.
- Cronshaw, S.F. and McCulloch, A.N. (2008). "Reinstating the Lewinian Vision: From Force Field Analysis to Organization Field Assessment," in *Organization Development Journal*, Vol. 26, No. 4, 89.
- Elias, A. (2011). *Camouflage Australia: Art, Nature, Science and War*. Sydney: Sydney University Press.

- Galun, M.; Sharon E.; Basri, R.; and Brandt, A. (2003). "Texture Segmentation by Multiscale Aggregation of Filter Responses and Shape Elements," in *Computer Vision, 2003. Proceedings. Ninth IEEE International Conference*, October, 716–723).
- Givnish, T.J.; Wong, S.C.; Stuart-Williams, H.; Holloway-Phillips, M.; and Farquhar, G.D. (2014). "Determinants of Maximum Tree Height in Eucalyptus Species Along a Rainfall Gradient in Victoria, Australia," in *Ecology*, Vol. 95, No. 11, 2,991–3,007.
- Harrison, P. (2004). *High-Visibility Livery for Police Vehicles*. Hertfordshire: Home Office, Police Scientific Development Branch.
- Heinrich, D.H. and Selj, G.K. (2015). "The Effect of Contrast in Camouflage Patterns on Detectability by Human Observers and Camaleon," in *SPIE Defense Security*, May, 947,604–947,604.
- Hess, A.S.; Wismer, A.J.; Bohil, C.J.; and Neider, M.B. (2013). "On the Hunt Visual Search for Camouflaged Targets in Realistic Environments," in *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, Vol. 57, No. 1, 1,124–1,128.
- Langham, M.; Hole, G.; Edwards, J.; and O'Neil, C. (2002). "An Analysis of 'Looked but Failed to See' Accidents involving Parked Police Vehicles," in *Ergonomics*, Vol. 45, No. 3, 167–185.
- Neider, M.B. and Zelinsky, G.J. (2006). "Searching for Camouflaged Targets: Effects of Target-Background Similarity on Visual Search," in *Vision Research*, Vol. 46, No. 14, 2,217–2,235.
- New South Wales Parliamentary Research Office (2014). "Issues Backgrounder. Bushfires in NSW," in *Timelines and Key Sources*. Number 6/June.
- New South Wales Rural Fire Service (2015). *New South Wales Annual Report 2014–2015*. Sydney.
- Peeters, P.J. and Butler, D.W. (2014). *Wet Sclerophyll Forest: Regrowth Benefits Management Guideline*. Brisbane: Department of Science, Information Technology, Innovation and the Arts.
- Perth Market By-Laws 1990—*Regulation 13A* (Western Australia).

- Pulpea, G.B. (2015). "Aspects Regarding the Development of Pyrotechnic Obscurant Systems for Visible and Infrared Protection of Military Vehicles," in *International Conference Knowledge-Based Organization*, Vol. 21, No. 3, 731–736.
- Schaefer, H.M. and Stobbe, N. (2006). "Disruptive Coloration Provides Camouflage Independent of Background Matching," in *Proceedings of the Royal Society of London Biological Sciences*, Vol. 273, 2,427–2,432.
- Singh, S.K.; Dhawale, C.A.; and Misra, S. (2013). "Survey of Object Detection Methods in Camouflaged Image," in *IERI Procedia*, Vol. 4, 351–357.
- Thomas, M.D. and Williams, C. (2012). "Police Car Visibility: Detection, Categorization, and Defining Components," in *The Journal of Law Enforcement*, Vol. 2, No. 3.
- United Nations (1958). *Agreement Concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval from Motor Vehicles Equipment and Parts. Regulation 88*. Geneva: UN.
- United Nations (2010). *Agreement Concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts Which Can Be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of These Prescriptions. Regulation 104*. Geneva: UN.
- United States Fire Administration (Federal Emergency Management Agency), Department of Homeland Security and United States of America, (2009). *Emergency Vehicle Visibility and High Visibility Study*. Washington, DC.
- United States Department of Transportation, Federal Rail Administration (1994). *Rail-Highway Crossing Safety Action Plan Support Proposals*. Washington, DC.
- Volpe, J.A. (1998). *Evaluation of Retroreflective Markings to Increase Rail Car High Visibility*. Washington, DC.
- Wilson, H.R. and Giese, S.C. (1977). "Threshold Visibility of Frequency Gradient Patterns," in *Vision Research*, Vol. 17, No. 10, 1,177–1,190.

- Wolfe, J.M.; Oliva, A.; Horowitz, T.S.; Butcher, S.J.; and Bompas, A. (2002). "Segmentation of Objects from Backgrounds in Visual Search Tasks," in *Vision Research*, Vol. 42, No. 28, 2,985–3,004.
- Xue, F.; Yong, C.; Xu, S.; Dong, H.; Luo, Y.; and Jia, W. (2016). "Camouflage Performance Analysis and Evaluation Framework Based on Features Fusion," in *Multimedia Tools and Applications*, Vol. 75, No. 7, 4,065–4,082.

- o O o -

POLICE BODY CAMERAS: SEEING MAY BE BELIEVING

Noel Otu[§]

ABSTRACT

While the concept of body-mounted cameras (BMC) worn by police officers is a controversial issue, it is not new. Since in the early-2000s, police departments across the United States, England, Brazil, and Australia have been implementing wearable cameras. Like all devices used in policing, body-mounted cameras can create a sense of increased power, but also additional responsibilities for both the agencies and individual officers. This paper examines the public debate regarding body-mounted cameras. The conclusions drawn show that while these devices can provide information about incidents relating to police–citizen encounters, and can deter citizen and police misbehavior, these devices can also violate a citizen’s privacy rights. This paper outlines several ramifications for practice as well as implications for policy.

Keywords: police, body-mounted cameras, liability insurance, deterrence

INTRODUCTION

After several high-profile civilian deaths that recently occurred at the hands of American police officers—forty-three-year-old Eric Garner in July 2014, twenty-five-year-old Ezell Ford in August 2014, and Walter L. Scott of North Charleston in April 2015, to name a few—Americans have demanded that it should be mandatory for the police to use body-mounted cameras (BMC)¹ as a means of curbing police misconduct and providing clear accounts of an officer’s actions. US President Obama proposed a budget of \$US75 million to be applied over three years as a fifty-percent matching program to fund the purchase of 50,000 body-mounted cameras (Henderson, 2014).

A body-mounted camera is a video recording device used by law enforcement officers to record citizen interactions (Mason, 2015). In 2005, the first testing of body-mounted cameras in England was conducted by Devon and Cornwall police officers (Associated Press, July 13, 2007). Sir Bernard Hogan-

[§] Corresponding author: noel.otu@utrgv.edu

Howe, the Commissioner of the London Metropolitan Police, said, “video was a ‘compelling piece of evidence’ and would help record situations that were previously ‘really hard to capture in writing,’ such as a frightened child at the scene of a domestic violence incident,” while on other occasions, “the mere presence of this type of video can often defuse potentially violent situations” (BBC, 8 May 2014).

Stanley (2015) pointed out that, “The August 2014 shooting of Michael Brown in Ferguson, Missouri and the subsequent protests focused new public attention on the problem of the possibility that body-mounted cameras might be part of the solution to police misconduct.” In December 2014, “a grand jury’s decision not to indict an officer in the videotaped chokehold death of Eric Garner in New York City further intensified discussion of the technology” of BMCs (Henderson, 2014).

In the Nineteenth-Century, Sir Robert Peel, a British prime minister, statesman, and often called the father of modern policing, introduced the “Peelian Principles” (Mayhall, 1985), which became the framework and foundation for modern ethical policing (Feeney, 2015). The fourth Peelian Principle posits that police should “recognize always that the extent to which the co-operation of the public can be secured diminished proportionately the necessity of the use of physical force and compulsion for achieving police objectives” (Lentz and Chaires, 2007). As this proposition was true during the time of Robert Peel, 190 years ago, so is the Peelian Principle true and applicable today. It is arguable that police officers need to know that good policing brings the citizen and the police closer while reducing the need for excessive physical force.

On 20 May 2015, the United States Senate subcommittee hearing reached a consensus admitting that there is unlikely to be a “silver bullet” that could restore the public’s confidence in the police after so many high-profile cases of police killing citizens; the lawmakers from both parties, and the witnesses who testified, concurred that police officers should wear body-mounted cameras (Ludwig, 2015). Considering public opinion on police misconduct and the introduction of BMCs as a mandatory policing device, it is timely that the issues involving body-mounted cameras is examined.

PUBLIC DEBATE

Much of the interest in, and research examinations for, reducing police–citizen violence in the United States stem from the fact that in 2011 alone, police officers killed 404 in the United States; there were also six people in Australia, six in Germany, and two in England (Stanley, 2015). But, when we examine the literature regarding the effect that body cameras have on the behaviour of police and citizens, it presents us with several advantages as well as disadvantages.

According to a study conducted by Farrar and Southerland (2015), fifty-four randomly selected patrol officers were requested to trial body-mounted cameras on a combined total of 988 shifts. The officers were instructed to turn on their cameras for all interactions with citizens, except for dealing with confidential informants and cases that dealt with the sexual assault of minors. The study revealed that excessive force incidents and complaints dropped by fifty-percent, and of the twenty-five excessive force complaints that occurred during the trial period, seventeen occurred when body-mounted cameras were not used, and only eight occurred when the cameras were used. The authors of that study stated that “we do not know on which party in an encounter the cameras have had an effect on, or how the two effects—on officers and on suspects—interact” (Feeney. 2015: 3).

Despite these statistics, scholars still question the merit of camera technology. Take for instance the case of Mr Eric Garner, a forty-three-year-old black man, was suffocated by police officers while being arrested for allegedly selling untaxed cigarettes. A grand jury acquitted the officers even though the incident was recorded and the footage showed the officers administering an illegal “chokehold” on Garner. Yet, oddly, Garner’s death was ruled a homicide by a medical examiner (University of Cambridge, 2014).

Russell Beckman, who teaches social studies to at risk youth in Milwaukee, pointed out that cameras are an emerging technology just like DNA evidence, and argues that cameras will revolutionize policing just as DNA evidence did, and ultimately bring us closer to the truth. For example, 325 people who had been convicted of crimes in the United States were later exonerated by DNA evidence (Derby, 2015). Others state that “transparency is not accountability,” and point to the incident of Rodney King in 1991. Video

footage captured King being beaten by police officers, and yet some of them were acquitted of all charges (Derby, 2015; Otu, 2006).

US Senator Lindsey Graham asked, “If you could get the right protocols to protect privacy and make sure the officer is using the camera in an appropriate manner, do you think it's best for the nation to go down this road?” (Ludwig, 2015) The United States Senate subcommittee hearing witness Wade Henderson told the committee that “there is a real risk that these devices could become instruments of injustice instead of accountability.” (Ludwig, 2015)

According to Elinson and Frosch (2015), a body-mounted camera clipped to an officer’s uniform may “increase police transparency and may even improve police behaviour,” but the problem remains that “police departments and prosecutors are struggling with how to sift through, preserve, and share the visual evidence,” and how to best create “policies and personnel to respond to formal requests from both journalists and the public to release video footage” while still complying with laws concerning freedom of information. In the case of *Riley v. California* (2014), Chief Justice John Roberts stated, “The fact that technology now allows an individual to carry information in his hand does not make the information any less worthy of the protection for which the founders fought.”

After a meeting between President Obama and United States police executives, Boston mayor Marty Walsh declared that police body cameras may not, in fact, be the right thing for Boston police officers (Enwemeka, 2014). Mayor Walsh told the *Boston Globe* that cameras, “aren’t going to help with the fundamental problems between community and police;” he went on to say that “I’m not going to be distracted by having a conversation about whether or not police have body cameras” (Enwemeka, 2014: 2). Walsh also stated that, “we have to have a lot more discussion around race and racial issues—it’s not one that people want to have and people would rather forget about, but we’re not going to forget about it in Boston. I made a commitment to have that conversation, and we’re going to have it” (Enwemeka, 2014: 2).

Although Mayor Walsh did not see the need for police body cameras, Mr Ned Merrick, the Chief of Police for Plainville, and former president of the Massachusetts Police Chiefs Association, saw the issue differently. Mr. Merrick stated that, “from a management point of view, it makes all the sense in the world,” and added that most of the resistance to body cameras results from the

“big brother syndrome,” since nobody wants to be watched twenty-four hours a day, seven days a week, (Johnson and Murphy, 2014). According to Malkia Cyril, who was a witness at the United States Senate subcommittee hearing, the police body camera is an unproven technology device used to collect evidence and it “can’t be relied upon to ensure police accountability that we, as a nation, have failed to implement” (Ludwig, 2015).

Missouri representative Mr Jeff Roorda, a law maker, who does business for the St. Louis Police Officers Association and who is vice president of a charity organization, told the *Los Angeles Times* that police officers who have experienced the use of body-mounted cameras are uncertain about the benefits of them; instead of using the cameras to protect the officers, those in authority often use them to monitor, and administer punishment for, petty things such as officers violating uniform codes and stop sign infringements. Roorda also said that “that’s one of the hottest issues for my guys. They’re tired of the nitpicking, and that’s what the cameras have been used to do” (Pearce, 2014: 4). Above all, there have been arguments for and against police body cameras for a very long time and has been the biggest police reform issue currently in the United States.

It is common knowledge that those in support of body camera technology have said that both police officers and citizens behave better when they are aware of the presence of cameras. In many of these instances, complaints against the officers have decreased (Sproull, Subramani, Walker, Kiesler, & Waters, 1996; Lovett, 2013). Interestingly, “with proper design and effective use of the build environment (body cameras), for example hardening of security devices on windows and doors can lead to a reduction in the fear and incidence of crime, and improvement of the quality of life” (CPTED, as defined by the National Crime Prevention Institute).

PRO ET CONTRA OF POLICE BODY CAMERAS

Positive Aspects

Body-mounted cameras are intended to increase police accountability, trust, and transparency (Gibbs, 2015). In August 2015, camera recordings “led to the indictment of University of Cincinnati Police Officer Ray Tensing for the murder of unarmed Samuel DuBose” (La Vigne, 2015).

We do not have the empirical evidence to support the increased transparency and accountability of police officers, although some random control

trial studies have found a decrease in use of force by police when cameras are being worn. It is not clear, however, if the decreases will be lasting, since the possibility that officers' cognitive awareness of the cameras will fade overtime is a realistic consideration (Barak, William, & Southerland, 2015; Steinbery, 2012).

According to Jarrod Bruder (Ludwig, 2015), another witness at the United States Senate subcommittee hearing, "body-mounted cameras can increase protection for both police officers and the public, but policy makers should not put 'too much trust' in the technology. It cannot 'magically' prevent tragic situations like the death of Walter Scott, the unarmed black man who was fatally shot in the back by a police officer in Charleston, South Carolina, after attempting to flee a routine traffic stop."

Mr. Wade Henderson, also a USS subcommittee witness, said: "There is a temptation to create a false equivalence between these citizen-recorded videos and body-worn cameras operated by law enforcement" (Ludwig, 2015: 2). "I urge the committee not to give into this temptation, because body-worn cameras won't be operated by concerned citizens and won't be recording officers. They will instead be directed at members of the community" (Ludwig, 2015: 2).

Body-mounted cameras may increase the possibility that police officers will behave in an ethically and approved procedural manner, as humans tend to behave better when they know they are being watched. Some scholars have already jumped to theorising a 'civilizing' effect for community members and police officers in life interactions due to the presence of cameras (Lawrence, 2015). It is important to remember the Hawthorne effect, also called Observer effect as coined by Henry A Landsberger in 1958, which states that human subject change their behaviour because they being studied (Munger, Shelby, 1989).

This is nothing new to the research arena, although promising studies on officers' behaviours while wearing cameras during interactions with citizens have, in the majority, resulted in respectful, polite, and ethical action. To confirm the positive effect of body worn cameras, scholars hold that we must survey and interview the community members who have had interactions with police who were BMC equipped and that, until then, it is too early to conclude one way or another about the true impact of a BMC (Lawrence, 2015).

One of the primary benefits of a body-mounted cameras is that it will capture whatever is in front of it. Cameras will never misrepresent what happens

within the reach of the lens, and they are subsequently one of the best objective witnesses in the court of law (Buchner, 2015). This fact is supported by CPTED theory of territorial reinforcement, which BMC complement other evidence used or discovered by law enforcement officers in a particular case (Crowe, 2000).

Sir Bernard Hogan-Howe stated that “our experience of using cameras already shows that people are more likely to plead guilty when they know we have captured the incident, and that the BMCs have sped up the criminal justice process and puts offenders behind bars more quickly and protects potential victims” (BBC, 8 May 2014).

Drawbacks

A body-mounted camera does have its limitations. A single BMC may not capture all the activities that occur during an interaction between a citizen and the police, which creates a challenge for an investigator and/or police department to properly interpret and evaluate it as evidence. The point here is the potential for misinterpretation of the recordings of a BMC (Buchner, 2015).

Additionally, we must be aware that video footage could produce misleading pictures of events, such as a suspect reaching for a weapon who is outside the camera’s view. This type of situation could very plausibly be interpreted by a viewer as an officer acting without justifiable reason. However, in cases of night activity, image enhancing capabilities may reduce a distorting glare, and low-light correction may show more clearly the footage of an activity, thereby either verifying or countering what the officer claims to have seen during the encounter (McClure, 2015). Here also, BMCs complement CPTED where weather may become a problem by distorting surveillance measures (Crowe, 2000).

It is a universal policy that police officers must file a report after an encounter with a citizen. BMCs allow officers to review footage of each encounter before filing a report so that their documented statements are accurate. In April 2015, the Los Angeles Board of Police Commissioners voted in favour of a policy that allows its officers to review recordings of fatal encounters prior to being interviewed by investigators (McClure, 2015).

Police officers are legally allowed to use deadly force if they have reason to believe that there is risk of danger to themselves or other persons present, or that there is the potential for serious bodily injury by a suspect. If officers are

allowed to view the footage from BMCs before speaking to investigators, or before writing a report, officers may use this opportunity to either fabricate or create reasonable suspicion regarding the encounter. In such cases, their statement would not be the correct recollection of the encounter (McClure, 2015). According to Klepper & Nagin (2006), “Getting caught doing something morally or socially wrong is often registered as behavior that can potentially lead to negative consequences, which is an outcome rational individuals tend to avoid.”

The Police Executive Research Forum surveyed 500 police departments obtaining 254 responses. The survey found that the majority of respondents approved of an officer’s ability to view BMC recordings before making a statement to investigators (Miller & Toliver, 2014). Some officers claimed “that it is better for an officer’s statement to reflect what he or she perceived during the encounter, rather than what the camera footage revealed” (Miller & Toliver, 2014). However, others respondents stated that body-mounted cameras should be treated like other video recording devices; that is, if police activity is recorded by, say, a store camera, the officers involved are generally not given the opportunity to review those images before making their statement (McClure, 2015).

The legal standard for the use of force is that the officer must first evaluate the perceived type and level of danger to themselves, other officers, and/or people present. A body-mounted camera has the ability to ‘see and capture’ things that an officer may not be aware of, or have the opportunity to observe; these factors may be influenced by the technology of the camera and the environment in which the officer is maneuvering (e.g. adverse physical or environmental conditions, stress, fear, etc.). Straub (2015) pointed out that because such factors may colour an officer’s memory of an encounter, reviewing footage of the incident from the camera before writing a complete and accurate report should be allowed.

Officers are often required to make a split-second decision about using force; if they can review the footage and then reflect, they can write a more accurate statement, but also learn from what the camera ‘saw’ and, with hindsight, learn from experience.

DISCUSSION

Body-mounted cameras can be a double-edged sword when an officer attempts to explain their decision to use force. Before the deployment of body-mounted cameras, investigators relied primarily on ‘my word against his/her dead body’ and ‘my word against his/hers as the only options for weighing-up what took place. The use of BMCs provides a third point of reference to validate the events. If officers can review the camera’s vision before writing their report, the prospects of it changing their account of the encounter are increased. In this way, justice may not be guaranteed or even possible, since reports influenced by the viewings minimise the writing of an impartial statement (McClure, 2015).

It is possible that the reaction from BMC recordings can be a positive influence on how officers interact with the communities they serve, and it has been demonstrated that BMCs can help decrease the number of complaints against officers regarding allegations of unnecessary force. BMC video feedback may be used in training scenarios, such as observational techniques for writing reports and interpersonal skills, as well as to reinforce appropriate behaviour and procedure, and improve police-community relations skills (Lynch, 2015).

In the case of *Scott vs. Harris* (2007), the US Supreme Court watched footage from an in-car dash-mounted camera and “ruled 8–1 that the police officer who had run a speeding car off the road had in fact behaved reasonably, and did not violate the driver’s Fourth Amendment rights” (Feeney, 2015). The same video was shown to a diverse sample of Americans from varying ideological and cultural backgrounds and the resulting opinions varied concerning the blameworthiness of both the driver and the officer. Because a group of individuals viewing the same video can interpret the details of the footage differently, the perceived accuracy of footage from a body camera should never be based solely on what the officer saw at the time of the incident (Feeney, 2015).

Many courts in the United States have ruled that the police should not have an expectation of personal privacy while in public and while on duty. Perhaps BMCs will help remind the police of this principle and might in some ways serve to ‘police the police.’ Many organisations, including the American Civil Liberties Union, which always opposes the use of omnipresent cameras implemented by the government, have supported BMCs so long as officers are allowed limited authority on when to turn them off. In an investigation of a domestic crime (in a two-party consent state), the husband may want the camera

turned on while the wife might want it off. Because the officer's decision may violate the right to privacy of one of the individuals present, "it's vital that this technology not become a backdoor for any kind of systematic surveillance or tracking of the public" (Sledge, 2013). Lindsey Miller, another witness at the USS subcommittee hearing, commented that it is important to make sure that people who are in a moment of vulnerability do not end up on *YouTube* (Ludwig, 2015).

Ramifications for Practice

Citizen Privacy. While it has been confirmed that equipping police officers with a camera can possibly decrease civilian complaints regarding the use of excessive force, the issue of personal privacy must not be disregarded. A body camera should be a device that assists in providing accountability, not an instrument to scan every person that the officer encounters (Ludwig, 2015). "Although, any redaction of citizen(s) actions for the sake of protecting their privacy removes critical context for understanding and interpreting the officer's action" (McClure 2015), reaction or inaction. There is also a privacy concern for a person captured in the footage who may have nothing to do with the incident. Further concerns about BMCs include how the video data will be produced, interpreted, handled, stored, the length of storage, and above all, how much this will cost taxpayers.

Occupational Liability Insurance. The presence of BMCs may not always settle a controversial police altercation, especially if the officer has 'forgotten' to turn on the camera, the camera malfunctions, or the officer turns off the camera before the interaction is recorded. One implication for practice is that police officers purchase their own BMCs; this might assist officers who take out occupational liability insurance with supporting their defense to any possible citizen allegations, and as a means of supporting any claim they bring against their employer for worker's compensation, or the like.

Reduction of Police Misconduct. From a citizen's point of view, body-mounted cameras are likely to continue to have a deterrence affect that was noted in Farrar and Southerland's (2015) study. According to the deterrence theory by Hirsch, Bottoms, Burney, Wikstrom (1999), "the greater the actual certainty, celerity and severity of punishment, the less the crime," hence, police officers do not commit crimes because they are afraid of getting caught by the camera (which does not point at them), and they will be dissuaded from committing a crime if the

punishment (anticipation of higher premium) is swift, certain, and severe (Akers, 1990). By applying the ideas of the rational choice theory and the deterrence theory, we assume that the actions or inactions of the police are based on rational decisions, namely, that they are aware of the consequences of that action. According to the deterrence theory, the rational calculus of the high insurance premium will offset the motivation for misconduct, and thereby deter police misconduct (Akers, 1990; Otu, 1999)

Policy Implications

Accountability and Transparency. Along with other efforts, BMC programs should include policies that provide for accountability and transparency. But, in some cities—Albuquerque, for example—reports show that officers’ compliance with the use of body cameras and video-storage rules and policies have been as low as thirty-percent (Guerin, et al., 2016). In these instances, and when a police officer interferes with the BMC video or fails to record an incident, the department needs to consider what policy options it has. Three suggestions follow:

- 1) Administer disciplinary action against the officer with consideration of the totality of the circumstances surrounding his/her action or inaction.
- 2) Consider the rule of exclusion—evidence obtained against a suspect in violation of the BMC policy should be well scrutinised or excluded from the case.
- 3) Allow the suspect the option to sue the individual officer involved (with good faith exceptions), and his/her liability insurance (not the employer’s) should handle the case with consideration of the totality of the circumstances that made compliance difficult or impossible.

ENDNOTE

1. They are also referred to as *body-worn video* (BWV) and *body-worn cameras* (BWCs), or simply, *body cameras*.

ACKNOWLEDGEMENT

I would like to pass on my appreciation to the anonymous reviewers who provided constructive criticism on my earlier draft of this paper.

ABOUT THE AUTHOR

Dr. Noel Otu, BA, MA, Ph.D, is an Associate Professor of Criminal Justice at the University of Texas, Rio Grande Valley. His research interests include ethnic behavior, culture and crime, and police brutality. His publications have appeared in several leading criminological journals, including: *The Justice Professional*, *International Journal of Comparative and Applied Criminology and Criminal Justice*, *International Journal of Police Science and Management*, *The Police Journal*, *Journal of Nigerian Affairs*, *African Journal of Criminology and Justice Studies*, *Salus Journal*, and *Law Enforcement Executive Forum*.

REFERENCES

- Akers, R. L. (1990). "Rational Choice, Deterrence, and Social Learning Theory in Criminology: The Path Not Taken," in *Journal of Criminal Law and Criminology*. Vol. 81, No. 3, 653.
- Associated Press (13 July 2007). "Britain Straps Video Cameras to Police Helmets. *NBC News*, retrieved 1 July 2016 from http://www.nbcnews.com/id/19750278/ns/world_news-europe/t/britain-straps-video-Cameras-police-helmets/#.V1sIxI-cHIU
- Barak, A.; William, A.F; and Southerland, A. (2015). "The Effect of Police Body Worn Cameras on use of Force and Citizen's Complaints Against the Police: A Randomized Controlled Trail," in *Journal of Quantitative Criminology*, Vol. 33, No. 3, 509–535.
- BBC (8 May 2014). "Metropolitan Police Officers Start Wearing Body Cameras." British Broadcasting Corporation, retrieved 1 July 2016 from <http://www.bbc.com/news/uk-england-lon>.
- Buttar, S. (6 January 2015). "Police Violence? Body Cams are no Solution." *Truth Out*, retrieved 2 March 2016 from <http://www.truth-out.org/opinion/item/28357-police-violence-body-cams-are-no-solution>
- Buchner, B. (2015). "Conversation Moderated by Nancy La Vigne, Evaluating the Impact of Police Body Cameras." *Urban Institute*, retrieved 5 July

- 2016 from <http://www.urban.org/debates/evaluating-impact-police-body-camera>
- Crowe, T. (2000). *Crime Prevention Through Environmental Design: Application of Architectural Design and Space Management Concepts, Second Ed.* Oxford: Butterworth-Heinemann.
- Davis, M. (2015). "Conversation Moderated by Nancy La Vigne, Evaluating the Impact of Police Body Cameras." *Urban Institute*, retrieved 1 June 2016 from <http://www.urban.org/debates/evaluating-impact-police-body-camera>
- Derby, S. (2015). "Can Body Cameras Prevent Police Violence? Answer is Open to Debate." *Wisconsin State Journal*, retrieved 21 July 2016 from <http://host.madison.com/wsj/>
- Elinson, Z., and Frosch, D. (2015). "Police Cameras Bring Problems of their Own," in *The Wall Street Journal*. Retrieved 1 January 2016 from <http://www.wsj.com/article/police-cameras-bring-problems-of-their-own-1428612804>
- Enwemeka, Z. (2014). "Mayor Marty Walsh: Boston Doesn't Need Police Body Cameras," in *WBUR*. Retrieved 30 January 2016 from www.wbur.org/2014/12/02/boston-walsh-police-body-cameras
- Farrar, A., and Southerland, A. (2015). "The Effect of Police Body-Worn Cameras on Use of Force and Citizens' Complaints Against the Police: A Randomized Control Trial," in *Journal of Quantitative Criminology*, Vol. 31, No3, 509–535.
- The White House (1 December 2014) *Fact Sheet: Strengthening Community*. Office of the Press Secretary <https://www.whitehouse.gov/the-press-office/2014/12/01/fact-sheet-strengthening-community-policing>
- Feeney, M. (2015). "Conversation Moderated by Nancy La Vigne, Evaluating the Impact of Police Body Cameras." *Urban Institute*. Retrieved from 3 March 2016 from <http://www.urban.org/debates/evaluating-impact-police-body-camera>
- Feeney, M. (2015). "Watching the Watchmen: Best Practices for Police Body Cameras." *Cato Institute*. Retrieved 4 June 2016 from <http://www.cato.org/publications/policy-analysis/watching-watchmen-best-practices-police-body-cameras>

- Johnson, A., and Murphy, S.P. (2014). "Mayor Walsh, Area Police, Offer Mixed Response to Use of Body Cameras," in *Boston Globe*, December 2.
- Gibbs, T. (8 May 2015). "Durham Police Body Cameras Come with Pros, Cons and Cost," *ABC News*. Retrieved 6 June 2016 from <http://abc11.com/news/durham-police-body-cameras-come-with-pros-cons-cost/707300/>
- Guerin, P.; Cathey, D.; Pacheco, C.; Tonigan, A.; Adams, A.; Torres, S.; and Coleman, E. (2016). *City of Albuquerque Police Department on Body Camera System Research*. Albuquerque, NM: City of Albuquerque.
- Henderson N. (2014). "With Eric Garner, Obama's Body Camera Argument Just Took a Big Hit," in *The Washington Post*. Retrieved 3 March 2016 from <https://www.washingtonpost.com/news/the-fix/wp/2014/12/03/obamas-body-camera-argument-just-took-a-big-hit/>
- Hisch Von A.; Bottoms A.E.; Burney E.; and Wikstrom P.O. (1999). *Criminal Deterrence and Sentences: An Analysis of Recent Research*. Oxford, UK: Hart Publishing.
- Klepper, S. and Nagin, D. (2006). "The Deterrent Effect of Perceived Certainty and Severity of Punishment Revisited," in *Criminology*, Vol. 27, No. 4, 721–746.
- La Vigne, N. (2015). "Evaluating the Impact of Police Body Cameras." *Urban Institute*. Retrieved 1 June 2016 from <http://www.urban.org/debates/evaluating-impact-police-body-cameras>
- Lawrence, D. (2015). "Conversation Moderated by Nancy La Vigne, Evaluating the Impact of Police Body Cameras." *Urban Institute*. Retrieved 1 April 2016 from <http://www.urban.org/debates/evaluating-impact-police-body-camera>
- Lentz, Susan A. and Chaires, Robert H. (2007). "The Invention of Peel's Principles: A Study of Policing 'Textbook' History," in *Journal of Criminal Justice*. Vol. 35, No. 1, 69–79.
- Lovett, L. (21 August 2013). "In California, a Champion for Police Cameras," in *New York Times*. Retrieved 1 May 2015 from <http://www.nytimes.com/2013/08/22/us/in-California-a-champion-for-police-cameras.html>

- Ludwig, M. (2015). "Body Cameras are Not Pointed at the Police; They're Pointed at You." *Truthout*. Retrieved 16 June 2016 from [truth/item/30940-body-camera-are-not-pointed-at-the-police-they-re-pointed-at-you](http://truthout.com/items/30940-body-camera-are-not-pointed-at-the-police-they-re-pointed-at-you)
- Mason, P. (2015). "Do Police Body Cameras Protect the Police?" in *Silicon ANGLE*. Retrieved 7 February 2016 from <http://siliconangle.com/blog/2015/09/14/do-police-body-cameras-protect-the-public/>
- Mayhall, P.D. (1985). *Police-Community Relations and the Administration of Justice, Third Edition*. New York: John Wiley and Sons.
- Miller, L. and Toliver J. (2014). "Implementing a Body-Worn Camera Program: Recommendations and Lessons Learned," in *COPS*. Retrieved 12 June 2016 from <http://ric-zai-inccom/ric.php?page=detail>
- Miller, N.A. (2014). "Body-Mounted Cameras Offer Benefit Questions for Police Residents." *The Tribune*. Retrieved 19 June 2016 from <http://www.greeleytribune.com/news/12776688-113/cameras-officers-police-body>
- McClure, D. (2015). "Conversation Moderated by Nancy La Vigne, Evaluating the Impact of Police Body Cameras." *Urban Institute*. Retrieved 1 June 2016 from <http://www.urban.org/debates/evaluating-impact-police-body-camera>
- Munger, K. and Shelby, J., (1989). "Effect of an Observer on Hand Washing in a Public Restroom," in *Perceptual and Motor Skills*, Vol. 69, No. 3, 733–734.
- Otu, N. (2006). "The Police Service and Liability Insurance: Responsible Policing," in *International Journal of Police Science and Management*, Vol. 8, No. 4, 294–315.
- Otu, N. (1999). "Let Punishment and Treatment Fit the Culture," in *The Justice Professional*, Vol. 12, No. 3, 253–275.
- Pearce M. (2014). "Growing Use of Police Body Cams Raises Privacy Concerns," in *Los Angeles Times*, September 28.
- Riley vs. California, 573 U.S. (2014)
- Scott vs. Harris, 550 U.S. 372 (2007)

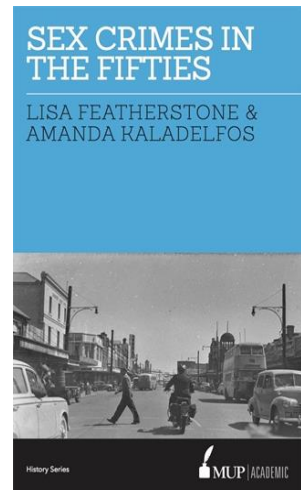
- Steinberg, J. (2012). "New Rialto Police Chief Stresses, Education, Technology as Key to Future Success," in *San Bernardino County Sun*. Retrieved 26 July 2016 from <http://www.sbsun.com/general-news/20120108/new-rialto-police-chief-stresses-education-technology-as-key-to-future-success>
- Stanley J. (2015). "Police Body-Mounted Cameras: With Right Policies in Place, a Win for All," in *ACLU*. Retrieved 27 May 2016 from <https://www.aclu.org/print/technology-and-liberty/police-body-mounted-cameras-right-/policies-place-win-all>
- Sledge, M. (2013). "Police Body Cameras Can Work with Privacy Protection, ACLU Says," in *HuffPost Politics*. Retrieved 8 March 2016 from <http://www.huffingtonpost.com/2013/10/09/police-body-cameras-n-4070935.html>
- Sproull, L.; Subramani, R.; Walker, J.; Kiesler, S.; and Waters, K. (1996). "When the Interface is a Face," in *Human Computer Interaction*, Vol. 11, 97–124, reprinted in Batya Friedman (ed.), (1997). *Designing Computers for People—Human Values and the Design of Computer Technology*, 163–190. Cambridge: Cambridge University Press.
- Straub, F. (2015). "Conversation Moderated by Nancy La Vigne, Evaluating the Impact of Police Body Cameras. *Urban Institute*. Retrieved 18 February 2016 from <http://www.urban.org/debates/evaluating-impact-police-body-camera>
- Lynch, M. (2015). "Conversation Moderated by Nancy La Vigne, Evaluating the Impact of Police Body Cameras. *Urban Institute*. Retrieved 11 May 2016 from <http://www.urban.org/debates/evaluating-impact-police-body-camera>
- University of Cambridge (2014). "First Scientific Report Shows Police Body-Cameras can Prevent Unacceptable Use-of-Force," in *Science News, Science Daily*. Retrieved 19 July 2016 from <http://www.science-daily.com/release/2014/12/1312241>

- o O o -

Sex Crimes in the Fifties

by Lisa Featherstone and Amanda Kaladelfos
Melbourne University Press
2016, hardcover, 265 pages
ISBN 9780522870176

Reviewed by Dr Susan Robinson



Many people would assume that the nineteen-fifties was an era that had a conservative and repressive approach to responding to sex crimes, but the book, *Sex Crimes in the Fifties*, by Lisa Featherstone and Amanda Kaladelfos, sheds new light on this. The authors painstakingly assess all the court transcripts of sexual assaults prosecuted in New South Wales in the decade of the fifties to show that despite there being a “good girl” versus “bad girl” mentality, the fifties was a time of progressive change in the way in which sex crimes were understood and responded to. They go further to suggest that the fifties was the decade that paved the way for how sex offences are dealt with by the criminal justice system in Australia today.

The book opens with an over view of how deviance, and particularly, female deviance, was understood in nineteen fifties New South Wales. Women were still expected to hold predominantly domestic roles even though their position in society had been emancipated during World War II when more-and-more women were employed, and actively engaged, in paid employment. In the beginning of the fifties, it was not considered acceptable for a woman to walk alone, especially at night, and if they were sexually assaulted while doing so, it was generally considered that they had “asked for it.” Perpetrators of such an assault were likely to be acquitted by a jury on that basis. By the end of the fifties, this situation had changed and it was less about what the woman was doing at the time and became more focused on the issue of consent.

Featherstone and Kaladelfos set the scene for the book by explaining the social conventions and assumptions of this period that go some way to

explaining why police felt justified in filtering out all cases they thought would not win in court and only sent the more serious cases through to the prosecutors. It is a limitation of the book that only the serious cases have been able to be included, however this function of the criminal justice system says something important about how sex crimes were dealt with in New South Wales at the time.

Another important aspect that comes through in the book is the prosecution and sentencing practices involved in these cases and how the integrity and character of the female victims themselves were put on trial during the court cases even when physical evidence of assault (i.e. medical evidence) existed. Cases where there was no physical violence used were filtered out by police and were therefore not prosecuted. The behaviour and previous sexual experiences of the woman/girl weighed heavily in the decision making of the judge and jury in these cases. If a woman/girl had previous sexual experience, or was seen publicly with male friends, it could be enough to sway a jury to find the perpetrator not guilty. Moreover, medical evidence of assault was seen to be evidence of that the victim was not consenting to the sexual act. A lack of physical evidence left the issue of consent in doubt.

Featherstone and Kaladelfos also considered sexual assault against men, especially male children, and suggest that male sexual assaults tended to be prosecuted more successfully because perpetrators plead guilty and thus avoided an embarrassing court case. Homosexuality was not accepted during the fifties and many of the cases prosecuted, it is argued by the authors, were in fact consensual acts, but where the actors accepted the notion of sexual assault as charged by police in preference to being outed as homosexual.

Even where medical evidence existed to support the allegation of sexual assault, it did not guarantee a successful prosecution as the age of the victim came into play. A younger victim was considered to be pure and inexperienced in sexual matters, whereas the older the victim was not assumed to be pure nor inexperienced. In the latter case, it was therefore likely that defence lawyers could argue that medical evidence of sexual assault was caused by an alternative sexual partner to the accused. In the case of virginal victims, the broken virginity of the victim had to be medically established as evidence of sexual intercourse, and it was the job of the prosecutor to prove the sexual intercourse was non-consensual and perpetrated by the accused individual/s.

The transcripts used in the research for this book contained several cases of incest, but which were generally not prosecuted as such. They were most likely to be prosecuted as carnal knowledge (a lesser crime) with some rape charges finding their way to the high court. Cases involving children were the most difficult of all to prosecute in the fifties, which is not so different to today.

Despite these seemingly inequitable approaches to sexual assault, the authors indicate that rates of arrest and prosecution of sexual assaults on young girls rose dramatically during the fifties, due largely to shifts in the way in which these cases were approached and understood. In particular, offences that involved sodomy, whether on male or female victims, and assaults that resulted in pregnancy, were the offences that attracted the harshest response from the criminal justice system due to a focus on the perceived harm that was caused to the victim.

Featherstone and Kaladelfos provide an authoritative and rigorous research study on sexual assault in the fifties in a way that captures the lived experiences of the victims who were the subjects involved in the case transcripts. They bring to life the criminal justice processes that were in place in New South Wales during the nineteen-fifties and the social context in which it operated. They capture not only the gender biases of the time but also the racial and socio economic biases that existed to influence the decisions such as what cases would be charged and what charges would be laid in addition to prosecution and sentencing decisions. This book is useful for criminological, criminal justice, and feminist academics and students, or anyone else who has a general interest in Australian history and legal development.

ABOUT THE REVIEWER

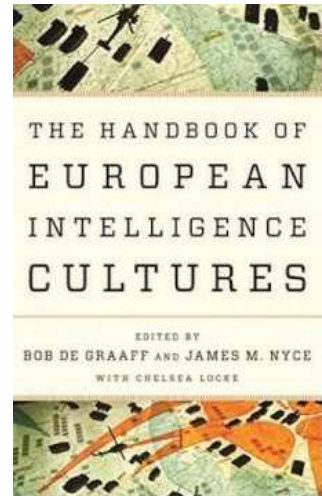
Dr Susan Robinson is a criminologist and lecturer in the School of Policing Studies, Charles Sturt University in New South Wales. Her research interests include social and criminal justice, child protection, corrections, and policing. She has researched and published in the area of women in policing and has a long standing interest in child protection having worked as a social worker in the child protection system in South Australia, New South Wales, and the United Kingdom.

- o O o -

The Handbook of European Intelligence Cultures

Edited by Bob de Graaff and James M Nyce, with
Chelsea Locke
Rowman & Littlefield Publishers: Lanham, NJ
2016, hardcover, 496 pages
ISBN 978-1-4422-4941-7

Reviewed by Dr Henry Prunckun



English texts on the topics of intelligence and counterintelligence are in plentiful supply. A search of the post-9/11 subject literature shows that books on these topics seem to have doubled, and doubled again. So, scholars are faced with, not the problem of finding relevant material, but finding so much that their ability to locate quality writings in amongst this explosion of publications has become an issue.

Of course, English publications relating to intelligence and counterintelligence are just a fraction of what is being published each year. One case to illustrate this point is *Savremene Obavjsetajne Teorij (Modern Intelligence Theories, 2013)*, which was published in Serbian by Dr Maid Pajevic. Unfortunately, this text is not accessible to English scholars who are looking for authoritative research. But, bilingual researchers do have an advantage, though it still limits them to two languages.

What De Graaff and Nyce have done is to bring together 32 European intelligence scholars and asked them about the most pressing questions facing the intelligence profession. The result is an exceptional text, in English, about national intelligence cultures in some of the most influential countries in Europe. This book is not only a relief for mono-lingual intelligence scholars, but a valuable resource for practitioners as well. It provides insights into intelligence issues in countries that would rarely be available to researchers unless they can read a score of foreign languages.

The countries surveyed in this unique compilation of essays include, Albania, Belgium, Bosnia and Herzegovina, Croatia, Italy, Lithuania,

Montenegro, Norway, Poland, Romania, and more. The text provides a single source that will be valuable for conducting comparative analysis about these countries' national intelligence apparatuses.

Rather than seek agency specific contributors, the editors have selected subject matter experts who discuss the intelligence communities in their country. In this way, the editors have provided insights into the ways intelligence is conducted in the different environments across Europe—an environment that has become intricately related in the same way that business intelligence, military intelligence, and national security intelligence have fused into an inseparable blend of related issues.

Key to understanding this environment is the ability to appreciate how these European intelligence agencies operate and to recognise the key national actors. De Graaff and Nyce have done this by encouraging the contributors to discuss the cultural as well as the ideological climate that underpins intelligence practice. By way of example, the chapter on Italy steps the reader through the historical context of Italian intelligence, then discusses the various reforms initiatives that have taken place, and why. Reforms such as those that shifted the view of an Italian secret service to one of intelligence, thus making the newly structured organisations' work global in nature and transparent. The chapter discusses the transnational threats Italian intelligence now faces—economic espionage, regional instability, terrorism, and the nuclear capabilities of Iran and Pakistan.

Handbook of European Intelligence Cultures provides a comprehensive coverage of European intelligence communities that is rarely seen in English language publications. It contains an exhaustive list of abbreviations and acronyms, chapter notes and lists of references cited. It makes an exceptional addition to the bookshelves of theoreticians and practitioners alike.

ABOUT THE REVIEWER

Dr Henry Prunckun is a research methodologist who specialises in the study of transnational crime—espionage, terrorism, drugs, and arms trafficking, as well as cyber-crime.

- o O o -

Call for Papers

Salus Journal is a peer-reviewed open access journal for the publication on law enforcement and security issues as well as research findings and discussion papers regarding emergency management and public safety. *Salus Journal* seeks to contribute to practice by inspiring discussion through an interdisciplinary approach.

The journal invites submissions of articles of between 3,000 and 5,000 words for double-blind peer-review that:

- focus on issues that have an impact on criminal justice, law enforcement, national security, or emergency management;
- engage with contemporary topical practice issues; or
- add to the understanding of complex management conundrums.

Submissions can use either qualitative or quantitative approaches, including studies that employ the use of exploratory or holistic approaches. The journal also accepts discussion papers, critical essays, and analytical papers if a clear position is stated and the argument is grounded in sound practice, or the subject literature.

Salus Journal is an accredited Australian Research Council (ARC) *Excellence in Research for Australia* (ERA) journal. *Salus Journal* is indexed in [EBSCOhost](#)'s research database, RMIT Publishing's [Informit](#), [Google Scholar](#), and the [Directory of Open Access Journals](#) (DOAJ).

Book Reviews

Salus Journal also accepts book reviews of around 750 words. Reviews should go beyond the descriptive account of the book's contents. Reviews that discuss the book's message in terms of practice or policy issues are sought for inclusion in future editions. Books can be either newly published or vintage editions where the book's thesis can be applied to a current situation or in an emerging context.

Submission Process

Visit the journal's submissions page to see a copy of the author guidelines and a summary of the refereeing process:

www.salusjournal.com/submissions