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Original Citation

Synnott, John, Canter, David V., Youngs, Donna E. and Ioannou, Maria (2016) Variations in the Journey from Crime: Examples from Tiger Kidnapping. *Journal of Investigative Psychology and Offender Profiling*, 13 (3). pp. 239-252. ISSN 1544-4759

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Variations in the Journey from Crime: Examples from Tiger Kidnapping

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Abstract

The current paper explores the journey offenders make after their offence through a series of tiger kidnap offences from the north and south of Ireland. Tiger kidnap is the abduction of a person of importance to a victim (generally a bank manager) in which that person is used as collateral until the victim complies with the requests of the offenders. Data were provided by the Police Service of Northern Ireland and An Garda Siochana. Three stages of the offences were highlighted: (1) the journey from the abduction location to the hostage location; (2) the abduction location to the robbery location; and (3) the robbery location to the money exchange location. Analysis found significant difference between offences in the north and south for stages 1 and 2 but not for stage 3. This is due to the type of offenders committing the offence, for example, offences in the north being committed by ex-paramilitary offenders. Further study should focus on understanding complex tiger kidnap offences.

Key words: tiger kidnap; geographical offender profiling; criminal spatial movements; journey from crime

INTRODUCTION

Although a large literature exists in regard to our understanding of criminal spatial behaviour, there are still aspects to this understanding that remain unexplored. An example of this is the influence of the context of the crime on the observed distances that offenders travel. This 'contextual backdrop' (Canter, 2008) is essential to advancing our understanding of criminals and can offer important implications for how we conceptualise criminal movement.

What is known about criminal spatial movements is based on the same principles of what is known about non-criminals spatial movements. Lundrigan and Canter (2001a) hypothesised the manner in which an individual interacts with the environment will be influenced by various spatial processes that are generic to both criminals and non-criminals alike. The rationale behind locations at which criminals commit their crimes is not arbitrary but relates to specific experiences of the criminal (Brantingham & Brantingham, 1981; Rengert & Wasilchick, 1985; Canter & Larkin, 1993). This implies some form of location selection on the part of the criminal even if the foundation of the selection is not always apparent (Lundrigan & Canter, 2001a). A murder, rape, or armed robbery might involve extreme acts of violence as a requisite of the crime, although this extreme behaviour is not necessarily transferred on to their spatial behaviour. The spatial influences that play a role in deciding the locational potential of a disposal site, for instance, have been noted as the psychological importance of the home (Canter & Larkin, 1993), familiarity with surroundings (Brantingham & Brantingham, 1981), individual representations of the environment (Downs & Stea, 1973), rational choice considerations (Cornish & Clarke, 1986), and the obvious need to evade the risk of detection.

One core principle that has been established through the investigation of offenders'

spatial movements is the finding that offenders do not travel far from their home or a significant base to offend. This is incorporated under the concept of a Journey-to-Crime, which is essentially the movement of the offender, prior to, or in the build up to, committing the offence. This consistent empirical finding—differing in range between crime types—is known as the distance decay function, garnering its name from the negative exponential relationship between distance from a base and the frequency for a sample (Van Koppen & De Keijser, 1997). The most logical reasoning behind this decay function is that offenders are indolent and are not willing to stray too far from their home base.

Although there currently exists a large literature that explores the Journey-to-Crime that offenders take prior to committing an offence, there are very few, if any, that have attempted to explore the journey that offenders take during or after crime. One of the central reasons why this area of research has lacked any meaningful scientific focus is down to the difficulty in acquiring accurate information, relating to where an offender travels during or after they commit an offence. Many crime types, by their very nature, do not allow researchers to explore this phenomenon, although this excludes the initial work of Lu (2003), who in a sample of auto thefts found that trips from theft location to disposal location of stolen vehicle are local in nature and biased in direction of travel, and Tonkin, Woodhams, Bond and Loe (2010) who found, in a sample of auto theft to disposal locations, support for distance decay (the drop off in offences the further the offender is away from their residence) but not domocentricity (the distribution of crime being in and around the offenders residence). The reason behind this lack of research rests on the difficulty in acquiring appropriate data. Tiger kidnap (TK), however, lends itself perfectly to the possibility of being able to investigate these processes further.

Tiger kidnap

Tiger kidnap is a term used to describe the abduction of one or more individuals in which the abduction forms part of a robbery. A person of importance to the victim, typically a family member or loved one, is held hostage and used as collateral until the victim has complied with the requests of the offender. The victim that forms the part of the robbery will be instructed to attend their place of employment, typically a bank or financial institution, and withdraw a quantity of cash. This is accomplished by using a picture of the victim's loved one(s) under gun point, or through the desperate persuasion of the victim to get the assistance of their colleagues, which may be necessary to complete the act. When the money has been secured, the victim is then told of a location in which to meet the criminals to hand over the cash. TK has proven to be extremely successful for criminals over the past 7 years in Ireland.

Research on TK is lacking; at present, only one published academic piece (Noor-Mohamed, 2014) addresses the offence of TK, but only as part of a larger discussion of kidnapping generally. The paper serves as an introduction to what the practice is but does not offer any form of analysis. As such, to the authors' knowledge, no published empirical study analysing a dataset of TK offences exists at present. Therefore, this study pertains to be the first academic investigation into the offence of TK.

One of the hallmark features of this crime is the vast number of individual locations that are incorporated within the offence. As a consequence, these features facilitate the possibility of a systematic analysis into the locations used and the spatial processes inherent to them, which will be the basis of the current paper.

Contributions to geographic profiling

Geographic profiling has by its definition a restrictive remit, that being the analysis of a series of crime(s) and the systematic analysis resulting in a prediction of the

likelihood of the residential base of an unknown offender. The current authors are of the position that geographic profiling extends beyond that, to a study of criminal geography generally, for example, understanding where offenders travel to after crime and why they might choose one location over another. Understanding criminal geography in all its forms will naturally contribute to any prediction-based models on the residential location of offenders and beyond. As such, applying academic focus to the crime of TK can have significant implications for the geographical profiling literature. Aside from gaining insight into a crime type that has lacked any meaningful exposure, studying TK opens up a new avenue for exploring previously difficult to acquire material, such as locational information on where offenders travel during and after their crimes.

The central contribution of studying TK can be considered through three main points. First, the offence is highly planned, which makes previously important geographic considerations, such as 'friction effect', the resistance to movement over space (Canter, 2005), insignificant. Furthermore, routine activity theory, the need for a motivated offender, a suitable target, and the lack of any meaningful guardian for crime to occur (Cohen & Felson, 1979), is also irrelevant to a certain degree. Second, TK as a study focus contrasts with other studies in the geographical profiling literature because of the quantity of locations that occur within the same offence. Therefore, a number of issues can be explored because of the geographical properties of the offence in comparison with other types of crime and the geographic restrictions inherent to those crimes. Finally, the present sample of TK cases from the north and south of Ireland allows the current researchers to explore the concept of contextual aspects to geographical profiling. For instance, the current sample of TKs comes from two independent police forces on the same small land mass of Ireland with broadly similar socio-economic backgrounds; therefore, issues relating to context, and the nature of these contextual factors, if any, can be adequately examined. As a result, the current study explores a range of developmental issues in geographical

profiling, by exploring the same crime in two comparable locations, which share a number of similarities. This makes exploring the nature of spatial movement a direct study of offender's planned decision-making, which provides a more fluid and accurate picture of how offenders choose to engage with the physical environment before, during, and after crime.

The key issue for consideration in TK is the active learning of the environment, which is a by-product of the structural nature of the offence, and also the interaction with the environment, which is observed in the numerous locations used. Furthermore, the offence of TK somewhat goes against the influence of the home as being directly related to offending locations, via defined propinquity, but leans more towards the theory of a 'mental map', which is a mental representation of how an individual appreciates their external environment (Canter & Youngs, 2008).

The active learning of the environment and how this influences active engaging within this environment is important for our understanding of the psychological process associated to spatial learning. Furthermore, the contextual backdrop to the locations used by offenders is another important area where understanding is paramount. How the context of the offence influences choice and thus spatial opportunities, or more appropriately, spatial restrictions on a given location, is important to appreciate.

Complexities of studying serious crime in Ireland

When examining serious crime in Ireland, specifically in the north of Ireland, the likely backgrounds of the offenders must be understood.¹ However, this is an incredibly difficult issue to assess as it relates to the possible ex-paramilitary backgrounds of

¹ For a review of kidnapping and politics, see Turner, M. (1998) 'Kidnapping and politics'.

specific offenders. A number of reports that suggest offenders of serious crime in the north of Ireland are ex-paramilitary offenders are based only on anecdotal evidence; however, it is not to suggest that this is inaccurate, as confirming involvement in a paramilitary group is extremely difficult. Therefore, reports that suggest anecdotal, or other, that the majority of serious crime in the north of Ireland is committed by offenders with these backgrounds must be taken seriously. Briggs (2001) makes reference to this in her work when discussing the issues that the insurance industry had as a result of paramilitary threat in the north of Ireland. Furthermore, reports by the House of Commons Northern Ireland Affairs Committee (2006a, 2006b) and *The Cost of Crime in Northern Ireland* (2010) both loosely offer up paramilitary involvement in all serious organised crime in the north of Ireland. As noted in *The Cost of Crime in Northern Ireland* (2010) report, 'Incidents of blackmail, kidnapping and hijacking were also noted by the House of Commons, again often said to be linked to the actions of ex-paramilitaries' (p. 18). This reflection goes some way towards highlighting the difficulty in conclusively proving paramilitary involvement in specific offences. However, this also emphasises the general appreciation from various related committees that all serious crime in the north of Ireland has some paramilitary element, or sanctioned approval, to it. Therefore, a number of rational assumptions have to be made in relation to examining a sample of offences from the north of Ireland when conviction and background details of offenders are not readily available. First, it can be considered that the offenders involved in organised crime offences have a paramilitary background and possess related training. Second, this paramilitary background will be evident in the planning and undertaking of an offence.

Military training and serious crime

The role of military background or training and how that relates to criminality is important to consider. According to Bouffard and Laub (2004), historically, military training and service have been viewed as an effective corrective tool. However, very little research has been undertaken to explore the relationship between military background and criminal behaviour. In their study, Bouffard and Laub (2004) found that military service may provide desistance to crime especially for the most serious offenders. There is, however, conflicting reports; for example, a study by Galiani, Rossi and Schargrotsky (2011) found that in Argentina, conscription increases the likelihood of developing a criminal record. An additional study by Bouffard (2005) found that although some groups with military service do become involved in violent offending, military service was found to reduce the risk of violence for certain ethnic groups, such as African Americans. Castle and Hensley (2002) explored the role of a military background in serial killers and found that although military background was evident in a number of the sample, military background or training alone could not account for all cases of serial homicide. Castle and Hensley discuss at length the way in which the American military train their soldiers by highlighting significant increases of the level of service men willing to shoot to kill from the American Civil War to the Korean War. Grossman (1996) notes the various methods that the military use to increase the killing rates of service men, techniques such as brutalisation, classical conditioning, operating conditioning, and role modelling. The theory is that killing outside of the military then becomes a learned behaviour and a natural response when faced with conflict. However, research to back up this assertion is lacking.

These studies highlight the significant contextual issues that influence offending behaviour when military background is considered, such as location, ethnicity, type of military training, and seriousness of offence. However, the context for the offenders in the north of Ireland offers a unique challenge to understanding the relationship between

criminality and military training or background. The offender in the north is committing these crimes as per his or her duty as a paramilitary member. Therefore, service to a particular group may not be viewed as criminal behaviour but as part of their requirements of being a member of a paramilitary group. This makes comparisons between military experience and training and criminal behaviour in the context of the north of Ireland a difficult matter to unravel.

In addition to an understanding of offender backgrounds, there are also some important psychological barriers that may play a role in influencing the geographical movement of offenders in both the north and south of Ireland. In 1925, a physical border was formally put in place between the north of Ireland and the south or the Republic of Ireland. This was to distinguish the jurisdictions under different rule, the Republic of Ireland, which is the Irish Free State to the south, and the north of Ireland, which was under British rule. This border was physically occupied by military forces up until 2005 when it was fully dismantled in conjunction with the 1998 Good Friday Agreement between the Irish and British governments. Although the border has now been removed, it still represents what the present researchers term a psychological barrier between the north and south of Ireland. Furthermore, it will be of significant interest to establish whether there are any offenders who cross over the border in the process of committing an offence. This would give weight to the notion of psychological barriers to movement, something which is particularly difficult to explore in offending behaviour.

Current study

The current research explores the variation in distance travelled between TK offences in the north and south of Ireland. In addition, the current research explores a number of pertinent issues relating to offenders' backgrounds and their influence on movement as well as the role of psychological barriers to movement. These two countries exist on the same island and share very similar characteristics, relating to population density, geographic landscape, and ethnic background. However, the two countries do differ significantly in relation to geographic scale with the south of Ireland covering 70,283 sq. km and the north of Ireland covering only 14,148 sq. km and the historical landscape of each region—specifically relating to 'the troubles'.² Therefore, it will be interesting, for a variety of reasons, to note whether the conflictual background of the north of Ireland has any significant role in the travel patterns of offenders. The central aim of the current paper is thus to investigate the variation in travel patterns of a sample of TK offences from the north and south of Ireland.

METHOD

Data collection

The cases used in the current study were collected with the full assistance of An Garda Síochána (Republic of Ireland Police Force) and the Police Service of Northern Ireland (PSNI). Having been cleared and vetted by both police forces, the current researcher was independently assigned a liaison office from both forces. Meetings were then held where the basic outline of the study and the information that was required were discussed. All details relating to the geographical features of TK were requested along with other information relating to the temporal aspects of the attack as well as the presence of a vehicle. A total of N = 70 cases that fitted the required criteria were identified. The PSNI had a total of n = 47, and An Garda provided a total of n = 23 cases. However, a number of the cases from both police forces had to be excluded from the study either because of incomplete or

²The troubles' refers to the period of political conflict in the north of Ireland from the 1960s to the 1990s.

inaccurate information or because it was not clear whether the offence was in fact a TK. Following exclusion, a total of N= 51 cases were left—An Garda (n= 15) and the PSNI (n=36). The current sample reflects all known offences of TK over the last 10 years in the republic and the last 5 years in the north of Ireland.³ Finally, it must be noted that this is not a sample of TK offences in Ireland; it is the total population of offences minus those that did not have the requisite information available for the reasons previously outlined.

Interviews

Supplement to the aforementioned data, interviews with a number of prolific armed offenders from the south and north of Ireland were also undertaken. These interviews were carried out at prison facilities throughout Ireland and were secured with the prior permission of the director general of the Irish Prison Service and the Prisoner Based Research Ethics Board Committee. Participants were informed that any details regarding their criminal history that they may convey during the interview would be kept strictly confidential; they were also informed that they could opt out at any time during the interview. The interviews lasted just under an hour and were recorded by a pen and paper in most cases; however, some interviews were recorded electronically, with the prior permission of the participants. The interviews took place during August 2012 at Limerick Prisons, Mountjoy Prison, Wheatfield Prison, Castlerea Prison, and Portlaoise Maximum Security Prison, all in the Republic of Ireland. The researcher contacted the governors at each institution in advance to provide onsite clearance and to arrange for a liaison officer to provide assistance. In total, there were 32 interviews conducted with 31 male and 1 female participants. At the end of the interview, participants were informed of the details of the current study, and any questions that they had were addressed. All names used in the current paper are pseudo names; the identity of the participants is protected at all times throughout the present study. The current purpose of these interviews is to offer brief supplementary support for the arguments made in the present paper.

Route distance verse crow flight

It is a convention in the geographical profiling literature to use what is referred to as the crow flight distance. The crow flight distance measure is the A to B distance between two locations. It does not take into consideration landmarks or road networks; it is the direct distance between points A and B. Although this is a standardised measure to use when studying geographical data, it was felt that in the current study, it was not applicable to use the crow flight measure as the makeup of Irish road networks considerably distort the distance actually travelled. Although there has been some academic comment within the literature on the topic of the appropriateness of the crow flight as a reliable distance measure (Larson & Odoni, 1981; Kind, 1987; Rossmo, 2000; Canter & Youngs, 2008), the key issue remains, that route distance will always underestimate the distance travelled by an offender. In fact, in a direct test of this, it was found that there was nearly a third of an error difference between route distance and crow flight distance (Synnott, 2012). Therefore, considering this, certain assumptions could be made on the data in relation to the offence that is under investigation. It was determined that it would be best to use the route distance in favour of the crow flight measure. This is one of the few studies to use the route distance, as the preferred methodology, over the crow flight distance. As a result, it adds to the reliability of the distance measures under analysis as they will be more reflective of the journeys travelled by offenders.

³Because the PSNI only formed as a police force in 2001, they have a number of difficulties in relation to historical data on crime; this accounts for the short time period for the north of Ireland crimes

Data coding

Each case was assessed independently, and all of the geographic locations available were extracted from the files. In general, this consisted of the following:

- (1) home location,
- (2) robbery location,
- (3) hostage location,
- (4) money exchange location, and
- (5) disposal location (not available in the majority of TK in the north).

The disposal location was not used in the current study as the sample from the PSNI had very few incidences of reported vehicles being recovered after the offence. Each location was plotted on Google Maps (Google, Mountain View, CA, USA), and then the route distance was calculated between certain locations using the GOOGLE software(Google). For example, the route distance from the home to the robbery location was established in addition to the route distance between the home and the hostage location. However, the distance between the hostage location and the robbery location was excluded from the calculation because the offence locations within TK are self-serving, meaning that each location exists within its own template; therefore, the two stages mentioned earlier have no functional relationship between them, although they do have a relationship with other locations within the offence. All distance measures were measured as kilometres recorded once they had been established.

RESULTS

Variation between the north and south of

Ireland

In order to explore the difference between offences in the north and south of Ireland, a descriptive analysis was initially conducted to establish what, if any, differences existed for the following three identified stages:

- (1) The home location to the robbery location.
- (2) The robbery location to the money exchange location.
- (3) The abduction location to the hostage location.

The results from the descriptive analysis (Table 1) showed the differences in the distance travelled between offences in the north and offences in the south. The range of distance was calculated for three separate stages within the offence. The median scores for both north and south were calculated, and the p-values are reported in Table 1.

The distribution of the distances revealed that they were not normally distributed. Therefore, as the data were non-parametric, a Mann–Whitney U test was conducted on the three locations. The analysis found a statistically significant difference in the distance travelled between offences in the north and offences in the south during the home location to the robbery location ($U = 161.00$, $N_1 = 36$, $N_2 = 15$, $p < .05$). It was found that offenders in the north travelled considerably less than offenders in the south between the home location to robbery location. A statistically significant difference was found in the distance travelled between offenders in the north and offenders in the south

of Ireland during the hostage abduction stage of the offence ($U = 47.00$, $N1 = 36$, $N2 = 15$, $p < .001$). The analysis revealed that offenders in the south travelled considerably further to the hostage location than offenders in the north. There was no statistical significance between distance travelled by offenders in the north and offenders in the south during the money exchange stage of the offence ($U = 204.00$, $N1 = 36$, $N2 = 15$, $p > .05$).

Table 1. Range and median scores for both north and south and p-values for three TK offence stages

	Range (km)		Median (km)		p-value
	North	South	South	North	
Home loc to robbery loc	0–50	0–100	8.7	4.05	$p = .024$
Abduction loc to hostage loc	0–43.8	0–61	32.4	0.00	$p = .000$
Robbery loc to money ex	0–9.7	0–16.3	1.70	0.20	$p = .165$

TK, tiger kidnap.

Home location to robbery location

The mean distance between the home location and robbery location for TK offence is just under 10 km; however, when broken down to north versus south, the means drastically change from 4.5 km (north) to 22.8 km (south).

Abduction location to hostage location

The mean distance between abduction location and hostage location is just over 10 km; however, the difference between north and south is quite striking at 2.1 km (north) and 29.6 km (south).

Robbery location to money exchange location

The robbery location to money exchange location stage of the robbery showed the least amount of variance, and no statistical significance was observed at this stage. The total mean was less than 2 km (1.7 km north/5.2 km south); again, a shorter distance was observed for the offences in the north.

Psychological border

It is also important to note that out of all of the offences committed both in the north and in the south, none of them cross over where the military border used to reside. This is a rather interesting discovery and one worth exploring further. As highlighted previously, it was suggested that there might be what was referred to as a psychological barrier or border between the border regions. There are a number of reasons why offenders might not have crossed over the border during one of their offences, such as proximity to the various locations for the crime. However, it is still an interesting development in that all of the offences in the current sample were committed in a period after the removal of the border. Further rationale behind these suggested psychological borders to crime were generated and then developed in the prison interviews. When discussing the issue of offenders from Dublin travelling outside of Dublin to commit crime, some interesting issues were developed. Paddy, a convicted armed offender from Dublin stated, when asked during interview if offenders from Dublin would travel towards the north to commit crimes, that ‘No, it doesn’t happen. You would never travel into the north to do a job.’

Paddy's comment was based on the fact that he was not willing to engage in crime in the north because of the sociopolitical factors inherent to that location, specifically relating to the paramilitary organisations that are in operation in those areas. In support of this finding, there was not one single incident of a crossover between the north and the south for any of the stages of the offence. It is a particularly important discovery and gives weight to the notion of a psychological barrier that may still exist in the minds of the offenders, both north and south. Padraig, a convicted kidnapper from the border region, offers some powerful evidence as to why this might be the case:

'Well let's put it like this there is a barrier around the north the people that live on the border regions are players. They will have lived there for years since it all began. They would have been involved in smuggling guns and people since all this began. Therefore regardless of the removal of anything these people with these profiles, that no one knows, still exist there.... say something goes wrong. Someone breaks into the wrong house you know, that is unacceptable, that person will be found and they will be terrorized and something like that will never happen again.... In the old days of the provos (Provisional IRA) if you were involved in stealing cars or drugs you would be beaten. They didn't want the heat in the areas they were working in. People now still have that fear that respect is still there in areas. People still have the fear in the border areas, it's always there.'

This is observed through the current case of TK in that there was activity during the stages of the offence for both north and south in and around the border areas. Naturally, this could be accounted for through the location of the target's residence. Despite that, there are a number of locational opportunities within the offence of TK to expect, that in the absence of a border ever existing, that at least one of the locations would appear to have crossed over the border. As a result, this provides some initial evidence of a psychological barrier to movement.

DISCUSSION

The central issue under investigation in the current study was the variation in travel patterns of a sample of TK offences from the north and south of Ireland. Three stages were identified and explored: (1) the home to robbery location, (2) the abduction location to the hostage holding location, and (3) the robbery location to the money exchange location. Statistical significance was found for stage 1 and stage 2 of the robbery offence but not for stage 3. The current research supports the central principle of human geography that people live close to where they interact on a day-to-day basis, in this case where individuals work (Downs & Stea, 1973; Brantingham & Brantingham, 1981; Cornish & Clarke, 1986; Canter & Larkin, 1993). Because of the nature of the crime type under investigation and as mentioned previously that TK is a self-serving geographic template and the victims are sourced as oppose to being opportunistic attacks, this will distort the relationship between the offenders' home location and the locations of the attacks. Therefore, the current study explored the variation between two similar countries in the Journey-During-Crime and the Journey-After-Crime.

Home location to robbery location

These findings here confirm support for the basic principles of human geography and geographic profiling, which suggests human spatial movements are common to both criminals and non-criminals alike. Therefore, in this instance, people live in a relative vicinity from where they work. The observed difference between the north and south is

that in the south, we are dealing with much broader geography; therefore, it is logical to assume that in a larger country, people will live slightly further away from their place of work.

Abduction location to hostage location

This stage of the offence contains the most variation and therefore requires the most discussion. The central question for consideration at this stage of the offence is, why is there such variation between the same crimes? It would appear that this is due to factors related to the locations in which the offence is being committed. For example, offences in the north, according largely to police statements, anecdotal reports, and governmental research, are likely to have been committed by ex-paramilitary personnel; for example, the Northern Bank robbery in Belfast in 2006 (£26.5m) has been widely reported as being committed by the Provisional Irish Republican Army. The offences in the north differ to those in the south of Ireland where offences are, in general, committed by organised crime gangs.

A prerequisite for being able to undertake an offence of TK is that offenders must have a high level of organisation and group cohesion. They must also be skilled at managing hostages or hostile individuals, something that an ex-paramilitary group would be likely to excel at. As a result, it appears that the type of offenders committing such offences in the north of Ireland do not feel that they need to travel as far in order to reduce risk as they are fully capable of managing situations where hostages are present. Criminal gangs committing these offences in the south may feel that they have to travel further away from the hostage's home location to be more secure in managing the hostage situation. As suggested previously, the paramilitary background of offenders in the north should be observable in the geographic structure of their offences; this appears to be the case. It seems that offenders with paramilitary backgrounds undertake offences in a geographically different manner to offenders in the south. It is therefore logical to make the assumption that this is a direct reflection of their paramilitary training.

Furthermore, a number of the offences in the north of Ireland reported the hostage location as being the same as the home location, which means that the offenders held the hostages in their own home for the duration of the crime. This is something that would put them at a significant risk unless they were fully comfortable in holding a hostage(s) there. Offenders in the south, in all cases, moved the hostages to another location far removed from the abduction location. This is a clear representation of the type of offender that is being dealt with in these different locations and is the central finding of the present paper.

Robbery location to money exchange location

This stage of the offence offers the most investigative useful information as it is at this stage where all aspects of the offence merge: the victim, the offenders, and the money. The reason why the shortest distances and the least variance are observed at this stage may be that all offenders will (a) want to acquire the money as quickly as possible and (b) want to complete the offence once the victim has acquired the cash as the longer he or she travels with the money, the greater the risk of the victim or the offenders being intersected. In the interview with Seamus, one of the offenders, he offered support for this finding when he states that

‘The aim is to spend as little time in the car as possible so it will be driven no longer than 1 mile from the robbery to the predetermined second location.’

As Seamus notes, the distance is considered by offenders in the planning stage of the offence; this indicates that offenders actively consider the distance travelled during the offence, which can offer important investigative information. If

offenders do not wish to travel too far at this stage, this would be the key time for police to focus their search area as this would be a much smaller distance than they may previously have considered. It is reported by Michael, another offender who holds convictions for armed robbery, that offenders will actually drive the routes they travel and learn them: 'He (the driver) would do as they call it a reconnaissance run, this is where he drives down the streets and memorises them.'

Additional reports of something similar were noted by another offender, Nathan, who holds convictions for cash-in-transit robberies, and who says that they actively think about this in the planning of the offence: '...I was the enforcer but I picked the routes. I am not the best behind the wheel but I knew quick routes and what will work best like.'

Nathan even notes later on in the interview that his direction was predetermined in most cases. This provides additional insight into the level of planning that goes into routes used during crimes and how offenders develop their own styles of route-taking behaviour:

'...you see you always go back in a sort of, in a way back the way the van came because people think you won't go back the way the van came. That you go in the opposite to get away. Whereas I would drive back towards where he has come from.'

Reports such as these highlight the level of advance planning and decision-making that goes into route behaviour in organised offences. Nathan, for instance, has a directional bias in his travel patterns justified by what he thinks the expectations of others are: '.. it's not what people expect, it's not what the police expect.'

Implications and limitations

The theoretically significant issues to be drawn from this study are based on offender's active learning and advanced mental mapping, which develop further the conceptualisation of how we can map certain criminal offences when active environmental learning is evident. However, through understanding previous research on human and criminal geography, we can begin to further build on the role environmental learning has on offenders' spatial movement and how certain types of offenders can have considerably distorted variations in their travel patterns based on their backgrounds. This focuses on the context of the location under evaluation and brings forward the notion of a contextual geographic profiling, which should integrate the knowledge of previous studies (Brantingham & Brantingham, 1981; Rengert & Wasilchick, 1985; Canter & Larkin, 1993) that highlighted how location or target selection choices were based on the experiences of the individuals, whilst incorporating knowledge relating to the context of the offence. In order to understand the variations, we must be able to appreciate the story behind the locations certain offences are being committed in.

One of the strengths of the current paper, as mentioned previously, is the use of the route distance measure over the crow flight measure. By using the route distance, it was possible to acquire much more conclusive travel patterns, which give a better reflection of the actual spatial processes at play. The current study is also seminal in nature in that it is the first academic study into the offence of TK but more importantly, it is the first direct look into the role of the Journey-During-Crime and the Journey-After-Crime.

There are a number of limitations within the current paper. First, the current study relates to the geographic comparisons made between two countries of different size. Although this is an issue for concern, the position currently held is that the rationale behind why offences in the north have shorter travel distance between them than those in the south is that this is offender driven and does not fully relate to the size of the country in question. Second, the sample size is a cause for concern; however, it must be noted that this is a total sample of all TK offences in Ireland as previously stated. Third, a number of assumptions were

made in regard to the background of the offenders and the travel patterns that were made. Although these are limitations to the study, some plausible arguments have been put forward to account for this.

The implication of the current study relates to a contribution to understanding the role of locational context and how where a crime is committed can reveal much more than just information relating to the possible residential location of the offenders. Furthermore, there are also important operational implications concerning search parameters that are centred around the money exchange location. There are also a number of important issues that can be developed that can have direct implications for other crimes that are highly planned, involved a number of organised offenders, that incorporate a number of locations, involve a number of vehicles, and are target specific. An example, for instance, would be kidnap for ransom and forms of serial killing. Therefore, the current study not only opens up the possibility of further insight into a specific crime but has ramifications for how other offences may be appreciated. In relation to the role of a military background, further research should focus on exploring offending behaviour during service in order to unearth possibly links between offending behaviour during service and after service. However, this would be a particularly tricky area of study in relation to acquiring accurate information on soldier activities whilst on active service. Although the paramilitary offenders involved in the crimes discussed in the present research are not considered to be part of a legitimate military force, their levels of training and expertise should not be considered any different to that of any recognised military force. The fact that the various paramilitary organisations in north of Ireland have had very few incidences of defectors highlights the level and manner of the organisation being studied.

CONCLUSION

This paper introduces the unique crime of TK and the complexities that are associated to this offence. Furthermore, the study opens up a debate on the role that geographic context has on the journeys travelled by offenders but also the importance that understanding the context can have in terms of how we appreciate various other forms of offending behaviour. The core finding in the current paper is that travel distance relates to the context behind the offence, which in this instance relates to the type of offenders committing the act, for example, ex-paramilitary. As noted previously, all offenders in the south moved hostages to another location that was far removed from the offence; this finding has direct implications for the police not only in managing their resources but also accounting for search parameters. The complexities of the offence of TK, the geographic construct of crime and the sociopolitical factors involved are features that will require further exploration. However, further appreciating the context of the locations (type of offenders) enables us to interpret the variation in distances travelled. In essence, the context of the crime must be understood before investigation into the internal workings of the offence can begin; this should now be the case for all crime types.

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