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THE JOURNAL OF HOMICIDE AND MAJOR INCIDENT INVESTIGATION

The aim of *The Journal of Homicide and Major Incident Investigation* is to encourage practitioners and policy makers to share their professional knowledge and practice. The journal will be published twice a year by the National Policing Improvement Agency (NPIA) on behalf of the Association of Chief Police Officers (ACPO) Homicide Working Group. It will contain papers on professional practice, procedure, legislation and developments which are relevant to those investigating homicide and major incidents.

All contributions have been approved by the Editorial Board of the ACPO Homicide Working Group. Articles represent the operational experience or research findings of individuals which may be of interest to Senior Investigating Officers. The views expressed in each article are those of the author and are not representative of the NPIA, nor of ACPO. Unless otherwise indicated they do not represent ACPO policy. Readers should refer to relevant policies and practice advice before implementing any advice contained within *The Journal of Homicide and Major Incident Investigation*.

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Crimewatch Explained

Sharon Reid

Investigative Practice Team, National Policing Improvement Agency

Abstract

Crimewatch has been helping the police solve crimes for over 24 years and has an impressive track record. This article explains the history of the programme, the process of having a case featured and how it can be a useful investigative tool for SIOs. It also features two case studies that highlight this usefulness and some of the issues involved.

The author would like to thank Michael Armit (Series Producer for BBC Crimewatch) and two senior investigators (who for reasons of confidentiality cannot be named) for their invaluable contribution to the production of this article.

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1 Introduction

Crimewatch was originally aired in 1984 and has featured nearly 4,000 cases. These include some very high profile cases such as the murder of Sally Anne Bowman and Operation Minstead¹. The programme is aired live every month and aims to help the Police Service tackle serious unsolved crimes (including cold cases). The programme is watched by approximately five million people attracting the most viewers of all the channels at the time it is shown and it is reported to be a very popular choice for prisoners².

The success rate of the programme is impressive. One in five cases featured on Crimewatch are solved in some way by the programme's involvement³. This success is primarily down to the viewers who provide the Police Service with potentially vital information that might not otherwise come to light. The cases that appear on the programme are all supported by the police. The SIO and the production team work closely together on each case. Reconstructions are at the heart of the programme and have proved to be an effective investigative tool.

The programme is also supported by its own website (www.bbc.co.uk/crimewatch) which contains amongst other things, information about all the unsolved cases it has featured and how to contact the police with information. This contact can be made directly to the police through their own incident rooms or via Crimestoppers. All cases that are featured on the programme and remain unsolved are automatically featured on this website. A case can be removed from the Crimewatch website at any time following a request from the police. The numbers of hits for the site are typically 100,000 per month.

2 Criteria

Any serious unsolved crime will be considered for inclusion on the programme. The only stipulation at this stage is that the SIO must agree to the case being featured on the programme. Previous cases include murders, serious sexual assaults and armed robberies. On occasion honour killings and cases of human trafficking have also been featured.

¹ Operation Minstead is the investigation into the prolific burglar and sex offender who has assaulted elderly victims for over a decade.

² BBC source.

³ BBC source.

3 The Process

Crimewatch has approximately fifteen full-time production team members who work on the programme. This includes a solicitor whose job it is to consider all the legal implications as they relate to the BBC and the SIO.

Perhaps the most important job in the early stages of each programme is the Forward Planning Producer. They act as the single point of contact for Crimewatch and anyone who contacts the programme, including the SIO. It is the job of the Forward Planning Producer and the SIO to discuss a particular case in detail and decide whether it would benefit from being featured on the programme. The final decision about what is featured is made by the Series Producer.

ACPO has agreed that SIOs can contact Crimewatch directly about a case without referring to their own press office first. Once it has been agreed that the case will be featured on the programme then the relevant press office can be contacted.

The programme has the ability to deal with late requests from SIOs. This was demonstrated by the inclusion of the murder of Nisha Patel-Nasri⁴ with only a few days notice.

Once the decision has been made to include a particular case the directors and researchers will research the case fully. This normally includes visiting the scene/s of the crime (which always involves a member of the investigation team), talking extensively to the SIO and reading the relevant case papers⁵. The aim is to produce an accurate reconstruction of the crime in order to aid the viewers' memories and elicit their help.

The programme also has a number of other features that can help an SIO with their investigations by asking the public for their help. The advantage of these features is that they are usually less time consuming for the SIO. These are:

- Wanted Faces – each programme features eight people who are wanted by the police. All that is needed by the programme is a photograph and details of the person and an explanation of why they are wanted.
- CCTV – usually this involves showing an unsolved crime taking place.

⁴ Nisha Patel-Nasri was a Police Community Support Officer in the Metropolitan Police Service. Her husband has recently been convicted of her murder.

⁵ All case papers are returned to the SIO after the programme and can be anonymised if required.

- Studio appeals – usually this involves a pre-recorded interview with a victim's family.

It is also possible to have an appeal featured on the website only.

The programme is regulated by a number of different agencies, such as:

- OFCOM – the independent regulator and competition authority for the UK communications industries (this includes television, radio, telecommunications and wireless communications services);
- The BBC Trust – the BBC's governing body which works on behalf of licence fee payers to ensure that the BBC provides high quality output, good value, and independence;
- The BBC Editorial Guidelines – the standards the BBC expects of all BBC productions (this includes TV, radio and online services).

Typically there is no formal agreement or contract drawn up between the SIO and Crimewatch, although such agreements can be used if required (see Case Study 1). Instead this interaction is based on trust. This informal system has worked very well so far and there has never been a breach of confidentiality or confidence.

4 Considerations

The SIO should consider the media strategy very carefully and ensure that it is adequately resourced and properly documented in their policy book. The resources required to feature a case on Crimewatch need to be considered by the SIO prior, during and after the programme has been aired. Different resources may be required at each stage.

4.1 Prior to the show

The SIO will normally be required to front the reconstruction and will need to be available for this. The cost of the reconstruction is normally met by the programme. Any additional costs, such as the use of a helicopter to film a scene from a particular view, will be discussed with the SIO at the time. Ideally, the reconstruction is filmed two weeks before the show is due to be aired. The reconstruction will always be shown to the SIO for their approval.

Although the SIO (or a nominated officer) will need to liaise with the production team

throughout the life of the programme, the initial stages may require additional liaison time to discuss amongst other things:

- The SIO's press strategy;
- What can be released to the general public ahead of the programme being aired;
- What can and cannot be discussed during the programme;
- What images should or should not be used during the programme;
- The SIO's strategy during the programme.

4.2 During the show

Although a small part of the programme may be pre-recorded the majority is aired live. The SIO will normally⁶ be required to answer questions about their case during the programme. These questions are agreed in advance with the SIO and rehearsed several times before the live programme. They may also have to provide a small team, usually two or three officers, to answer the telephones during the live show. There will undoubtedly be resource implications back in the force area, such as staff to answer telephone calls to the incident room. Additionally the SIO may also need to put officers on stand by to react immediately to any information gathered during the programme.

Rehearsals start in the early afternoon on the day the programme is going to be aired. Participants are required to be at the studio from approximately 3pm. The time leading up to the live programme is used to ensure that everyone is fully briefed and for rehearsals.

The live show is aired at 9pm on BBC One and the update show is aired at 10.35pm. After the show there is a debriefing session where all the SIOs have an opportunity to discuss their cases with each other and the production team.

4.3 After the show

Crimewatch may continue to receive information about a particular case for a long time after the programme has been aired. This information may go straight to the incident room, or will be passed to the SIO via Crimestoppers. The SIO will have to make sure that adequate resources are available to deal with this information.

⁶ If the SIO is not able to appear on the programme alternative arrangements can be made.

Additionally Crimewatch must be kept informed about important case developments, especially if someone has been arrested or charged. Crimewatch has a legal obligation to ensure that the information contained on its website is correct.

Additional Resourcing Considerations

Where an investigation receives or anticipates it will receive a high volume of telephone calls and messages from the public, the SIO and ACPO should consider establishing an MIR call centre and Message Assessment Unit (MAU) as part of the incident room structure and process. To aid this process the following developments have been made:

- National Mutual Aid Telephony – this enables telephone calls to be received by one or more assisting forces;
- MIRWEB – a web-based message input facility directly linked to the HOLMES2 Incident Room Database which allows the remote recording of messages and their immediate transmission back to the host force.

For further information contact Dave Blackiston on 07849 005009 or dave.blackiston@npia.pnn.police.uk or see ACPO (2005) *Guidance on Major Incident Room Standardised Administrative Procedures* (MIRSAP).

5 Benefits

The major benefits for an SIO of using Crimewatch are the ability to:

- Access approximately 5 million households and directly ask the public for their help in a particular case. These benefits cannot be achieved easily without Crimewatch.
- Reconstruct the crime using the resources of the BBC.
- Target specific communities to gain maximum exposure for the case. For example, the programme has a very large prison audience. The website also has links to a number of social bookmarking systems (such as Stumbleupon, Digg, Reddit, Del.icio.us and Facebook). The website can also feature a reconstruction of a crime in languages other than English. For example, the reconstruction of the murder of two Chinese students in England was featured on the website in English, Mandarin and Cantonese.

- The ability to raise the profile of a case to a national level.
- Re-feature a particular case on the programme if required.
- Access other media outlets for the benefit of the case.

Crimewatch will consider most requests made by the SIO in relation to a particular case. Some requests have been very innovative and produced good results – these will be discussed in detail in the following two case studies. Some details of these case studies have never been released to the public. For this reason both have been anonymised. This allows the cases to be discussed in greater detail.

6 Case Study 1 – Armed robbery of a bank

In 2004 a gang of armed robbers forced a bank clerk at gunpoint into the back of a van while her colleague (who was later identified as another member of the gang) opened the bank vault for the gang. The robbers stole over £250,000. The case has been solved and the offenders are now serving a total of 42 years in prison. The SIO already knew the identity of the majority of the gang before he approached Crimewatch. He wanted the programme to help him to identify one member of the gang and to help recover the majority of the stolen money. To this end he utilised the resources of Crimewatch in an innovative way. This may prove useful for other investigators carrying out similar investigations.

The major differences between this case and most other cases featured on Crimewatch were that:

- Some of the suspects were surreptitiously made aware that the robbery would be featured on Crimewatch on a specific day.
- Covert techniques were used alongside the programme to ensure that the suspects were observed and monitored prior, during and after the programme was aired to capture any incriminating evidence.
- Crimewatch was fully aware of the SIO's strategy in relation to the suspects, therefore, all aspects of the reconstruction and questions to the SIO were designed to elicit a response from the suspects.

The SIO ensured that all details of the investigation were accessible to members of the

production team. He ensured that a confidentiality clause was in place and documented in his policy book. This meant that all of the case material was strictly controlled.

To ensure that the suspects knew that the case was being featured on Crimewatch and to ensure that they were likely to watch it a number of tactics were used. Primarily the colleague (who did not at that time realise that he was a suspect) was informed in anticipation that he would pass this information on to the rest of the gang.

On the day the programme was aired the SIO and three members of the investigation team travelled to London to the programme's Manchester Studio. The SIO nominated a member of the investigation team to appear on the programme on his behalf so that he could keep abreast of all the information being received (not only by the programme but also by the investigation team) and make decisions based on it. He also had to manage approximately 200 people who were working on the case at the time.

To generate interest in the case the SIO arranged for a reward to be given for specific information. This was featured heavily on the show. A member of the public did identify the unknown suspect and a large proportion of the stolen money was recovered. Without the involvement of Crimewatch this information would not, in all probability, have been given to the police.

7 Case Study 2 – Cold case murder review

A cold case murder review was carried out to try and identify the killer. From the beginning of the investigation a male known to the victim was regarded as the prime suspect. The SIO approached Crimewatch in order to help him find further evidence. As with Case Study 1 he also utilised the resources of Crimewatch in an innovative way.

As with most other cases featured on Crimewatch the SIO was keen for the public to help with specific objectives, in particular:

- To identify other similar incidents;
- To ask the general public to identify the suspect from local CCTV footage.

The major differences between this case and most other cases featured on Crimewatch were that:

- The suspect was surreptitiously made aware that the murder would be featured on Crimewatch on a specific day.
- Covert surveillance techniques were used alongside the programme to ensure that the suspect's reaction to it was observed.
- Crimewatch was fully aware of the SIO's strategy in relation to the suspect. All aspects of the reconstruction and questions to the SIO were, therefore, designed to elicit a response from the suspect.
- The update programme was able to react to information received by the SIO from the covert surveillance operation. For example, the reconstruction was later shown again in slow motion in response to information gained through surveillance.

Before the SIO agreed to take part in the programme he ensured that the CPS was fully supportive of his plans so that any future legal proceedings would not be jeopardised. He also ensured that most details of the investigation were accessible to members of the production team. Some unusual aspects of the murder and the details of particular individuals were not. The SIO ensured that the information that was passed on would not have a detrimental effect on any future legal proceedings.

Parts of the process leading up to the programme being aired were very time consuming. On top of running a murder investigation the SIO also had to ensure that Crimewatch was given all the information it required and understood and supported the SIO in what he was trying to achieve. In hindsight the SIO would have liked to have appointed a liaison officer to deal with the routine parts of the process that did not necessarily need his involvement.

The SIO ensured that he was available to speak to the director and the researcher about the case and took them to the crime scene/s. This was a good opportunity for both sides to build rapport and confidence in each other. The SIO was heavily involved with the reconstruction to ensure that his views and strategies were incorporated into the final product. The SIO was also able to help the production team gain access to certain areas such as the murder scene and provided resources that were not readily available elsewhere. This close interaction helped to make the reconstruction accurate, reflected the SIO's strategy and made the process as efficient as possible.

The SIO ensured that uniformed officers were present when the reconstruction was being filmed. Their primary objective was to answer any questions from the general public, ensure

that the SIO and the production team were not unduly disturbed and capture any information from witnesses that may further the investigation.

To ensure that the suspect knew that the case was being featured on Crimewatch and to ensure that he was likely to watch it a number of tactics were used. Firstly the local newspaper featured the case prior to it being shown on Crimewatch – a copy of which was posted through the suspect's letterbox. Local news stations also featured the case. The SIO ensured that the safety of the suspect's family and the general public was a consideration throughout this process.

On the day the programme was aired the SIO and two members of the investigation team travelled to London. The process for appearing on the programme has already been described in Section 4.2 During the Show. There were a number of issues that needed to be considered and dealt with by the SIO prior to the show being aired. These included the following:

- The SIO was away from the incident room for two complete days, therefore, it was important that the investigation carried on effectively without him.
- A call centre was set up in anticipation of the calls the public would make directly to the incident room as a result of the programme being aired.
- An officer was nominated to receive information about the covert operation while the programme was being aired and the SIO was out of contact. This person was given authority to react to this information on behalf of the SIO.
- Ensuring that a Family Liaison Officer supported the victim's family, especially in light of the programme.

The programme generated a lot of information from the public, most of which was received in the studio at the time of the programme. This material, alongside information from the covert operation, was given to the SIO after the programme and was used to inform the strategy for the update programme.

The programme elicited additional information about the suspect and identified further lines of enquiry, eg, other incidents which featured similar unusual elements. Without the involvement of Crimewatch this information would not, in all probability, have been given to the police.

8 Conclusion

As this article has demonstrated, Crimewatch can be another useful tool in the SIO's investigative toolbox. It can help close down expensive lines of enquiry and help target the real criminal. It can also put you in touch with other SIOs who are willing to talk about their experiences of the programme.

If you are interested in having your case featured on Crimewatch it is better to make contact as early as possible. For all enquiries please contact Crimewatch on 020 8752 4415.

Crossing the Line: An international case study

DCI David Cunningham
Major Incident Team, PSNI

Abstract

This report concerns the murder of a Chinese woman in Belfast in 1998 and details how the investigation progressed from a terraced house in East Belfast to Hong Kong and back.

For the Police Service of Northern Ireland (PSNI) this became an example of how investigators could manage an investigation which took a decade to complete and involved suspects and witnesses from around the globe using the latest in modern technology to bring the case to trial.

DCI Cunningham was on the investigation team from the beginning; as a CID trainee investigator in 1998 progressing through the ranks until he became the SIO in 2007.

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1 Introduction

Northern Ireland experiences homicide just as any other force in the United Kingdom. As investigators we are well used to dealing with incidents involving terrorism, domestic fall outs, drunken brawls and stranger attacks, usually committed from within our own shores. International contract killings, however, are few and far between.

In 1998 I was a uniformed seconded in a CID office in Belfast. I was called upon to respond to a report of a suspicious death in East Belfast. A woman had been found in her living room and it appeared she had been strangled. Little did I know that I would be involved in the investigation of this case for the next ten years, ultimately becoming the Senior Investigating Officer.

2 Background

The victim, Ho Mi Yi, a 29 year old single Chinese woman worked as a waitress in a local Chinese restaurant and had done so for some years. She had not turned up to work and had subsequently been discovered lying dead in the living room of her mid-terraced house in Isoline Street. It appeared she had been strangled soon after arriving home. Her handbag and mobile phone were lying on the floor just inside the front door and there was evidence of the house having been searched. Forensic examination of the scene yielded nothing of significance other than fibres around her neck and on several surfaces around the house.

Miss Ho was single but was having an affair with a married Chinese man who lived and worked in Belfast. It was he who discovered her body when he went to her house on Tuesday 9th June 1998. Initial enquiries into this man, Mr Yuen, revealed that he had been involved with Miss Ho for a number of years and that she was in fact 18 weeks pregnant by him. It was also established that she was under examination from the Immigration authorities and was appealing deportation back to Hong Kong. Also of note was that Mr Yuen's wife was also pregnant.

3 The Investigation

3.1 Suspect identification

Further investigation into her lover, Mr Yuen, revealed that he had received telephone calls from Terminal 3 and then Terminal 1 at Heathrow airport on 5th June and the same in

reverse on 8th June 1998. This suggested that someone known to Mr Yuen had entered the country and left again a few days later. Checks also revealed that he had made calls to a man called Wong Siu Ching in Hong Kong on 2nd and 4th June 1998. When spoken to as a witness Mr Yuen failed to mention any of this.

Enquiries were made with the Hong Kong Police through an International Letter of Request (ILR) to locate Mr Wong and confirm his identity at which point the Hong Kong Police Interpol Liaison Bureau became involved. It was established that he was living in the Ho family home and he was known to police having been convicted of robbery and offensive weapon offences some years earlier. The fingerprints on record were sent to Northern Ireland and comparison against marks found on the flight tickets established we had our man.

Mr Wong's movements could be checked on a regular basis as records are kept of the movements of people in and out of Hong Kong. We were regularly updated and learnt that he was crossing the border into China and returning to Hong Kong quite frequently. This assured us that he was not evading arrest but going about his daily life.

Meanwhile house-to-house enquiries in Isoline Street had uncovered several witnesses who described a distinctive looking man in Isoline Street that weekend. He was seen walking up and down the street apparently paying attention to the victim's house. He was ultimately seen letting himself into the victim's house using a key approximately two hours before she returned home from work on Sunday night.

Mr Yuen was arrested after several days and when questioned about his movements over that weekend he gave an alibi over the time of the murder. He still did not mention Mr Wong and it was not discussed with him. He was released on bail as our enquiries continued.

Armed with the description of the suspect from the witnesses in Isoline Street officers travelled to Heathrow Airport to view the CCTV images to see if we could get a match. These images, together with passenger manifests, confirmed the flights on which Mr Wong had travelled into and out of the country at the time of the murder. He had purchased his ticket in Hong Kong, initially as an open-ended ticket. On arrival at the airport in Hong Kong he booked a return date of 10th June. This became a key issue in the investigation.

Examination of the CCTV images in the Immigration area of Terminal 3 on 5th June initially failed to locate Mr Wong in the group of passengers coming off the Hong Kong flight at 5am as he had taken a considerable time to come through the gate. Further checks

revealed that this delay was due to him having been stopped by Immigration. Doubts over his reasons to visit the UK led to his documents being copied and a formal interview taking place. As part of this interview Mr Wong said he knew no-one in the UK and was only visiting London for five days shopping and sightseeing. He handed over a letter purporting to come from his employer in Hong Kong, which was designed to back up his story. When a call was made and this was verified (falsely) he was granted entry.

The immigration officer explained that they would not have kept any of the papers in the case as the man was 'landed'. However, we then had a real stroke of luck as the individual responsible for disposing of the papers had been on rest days and so had not yet destroyed the original contemporaneous notes of his interview and proof of his identity.

Further detailed examination of CCTV footage around both terminals and the airport in Belfast identified Mr Wong wearing the clothing described by witnesses and being collected by Mr Yuen at Belfast Airport. It appeared that Mr Wong had travelled to Belfast, stayed for the weekend and left on the day of the murder. He was clearly known to both Mr Yuen and Miss Ho but had not been mentioned by Mr Yuen when spoken to by officers. Did this man come to Northern Ireland to kill Miss Ho on behalf of Mr Yuen?

Detailed examination of telephone records and CCTV images suggested a link between Mr Wong and calls made to Mr Yuen's phone from public call boxes around Belfast City Centre over that weekend. Guest registers identified the B&B where Mr Wong had stayed and further CCTV images of him wearing the clothes described by the witnesses in Isoline Street were discovered in the city centre and, crucially, linked him to a phone box from which Mr Yuen had been called 40 minutes after the murder.

The original flight ticket coupons were recovered from the airlines, some of which bore Mr Wong's fingerprints. The original landing card filled in by Mr Wong and presented to Immigration on his arrival was sought as evidence. We were informed that the cards are routinely scanned and archived and the originals destroyed and that was so in this case. I asked to speak to the person whose job it was to destroy the cards to be sure. When I spoke to this person he told me he hadn't got round to this card because of a backlog. It was identified, located and removed for safe keeping pending the arrival of detectives.

3.2 Identifying witnesses abroad

Little was known about the victim as she was an only child whose parents were both deceased. Very few people in Northern Ireland had any information about her so, in an effort to find out more, we examined the download of her mobile telephone and obtained

subscriber details of the local and international numbers listed. We then made an application to the Hong Kong Police using an ILR to carry out subscriber checks in Hong Kong. Once the names were known we requested the Hong Kong Police arrange interviews with these individuals. Detectives from Northern Ireland flew to Hong Kong where they briefed and accompanied Hong Kong Police officers for the interviews in order to advise on the incident and ensure all information was gathered.

Examination of the murder scene had revealed various documents which proved that the victim knew Mr Wong as Mr Yuen had introduced him to her when she returned to Hong Kong in 1997 to deal with her father's funeral. When she returned to Northern Ireland Mr Wong occupied the Ho family flat at Miss Ho's request.

Evidence was required from the Hong Kong Housing Authority to support this. Telecommunications information and records from the Hong King Housing Authority were gathered by officers from the Hong Kong Police and presented as witness statements. These were exhibited in a format that was acceptable for UK courts. Some of the statements were in Chinese, which were translated by Hong Kong Police translators, and both handed to us. The Hong Kong detectives supplied statements detailing their interaction with the witnesses.

3.3 Interviewing and managing witnesses

All eyewitnesses and friends and family of Mr Yuen, Mr Wong and Miss Ho were interviewed either by or in the presence of a PSNI officer. The Chinese witnesses in Northern Ireland were interviewed by non-Chinese speaking police officers through interpreters. One unexpected thing became apparent when obtaining evidence this way. The use of interpreters led to comparatively short statements dealing only with the matters raised by the detective. In contrast the Chinese witnesses in Hong Kong were interviewed by Hong Kong police officers who spoke their own language, following a briefing by the investigators who remained present throughout. The Hong Kong police obtained more detailed statements apparently because the shared language allowed them to make full use of their interview skills, build up a rapport with the witness and extract more information through conversation management.

This issue was raised when I delivered a presentation to the Northern Ireland Council for Ethnic Minorities (NICEM) and is recognised as an issue worthy of further examination when considering how best we capture evidence from non-English speaking witnesses to serious crime.

We agreed that the Hong Kong Police would be responsible for maintaining contact with the Hong Kong witnesses, not only for language and cost reasons but because of the seven hour time difference.

Close contact was maintained with the Hong Kong Police by establishing a single point of contact with each force. In the early days we spoke regularly by telephone and exchanged information by fax. Thankfully the introduction of email made this much easier and cheaper. Our enquiries over the years that followed involved officers travelling to Hong Kong on several occasions providing an invaluable opportunity to meet face to face.

3.4 Arrest and trial of Mr Yuen

Clearly by this stage Mr Yuen and Mr Wong were suspects in this murder and it was our intention to deal with them together. Unfortunately one was in Northern Ireland and the other in Hong Kong. The Department of Public Prosecutions (DPP) was consulted and directions sought to extradite Mr Wong and prosecute him jointly with Mr Yuen.

In the meantime Mr Yuen had left Northern Ireland to go to Hong Kong for the Chinese New Year in 2000. When we discovered he was returning in May to finalise his affairs and leave Northern Ireland for good we decided to arrest him on arrival in Belfast. He still did not mention Mr Wong and only when all of the evidence was put to him did he mention Mr Wong who he then blamed for the murder. Mr Yuen still maintained that he himself had no involvement in the killing and that he had not mentioned Mr Wong's visit as he had not wanted to get his friend into any trouble.

Mr Yuen was charged with aiding and abetting Mr Wong to murder Miss Ho. He stood trial in September 2001 and following an application for no case to answer by the defence the trial judge directed the jury to acquit him. This was quite a set back for the investigation but none the less we continued with our efforts to arrest and extradite Mr Wong.

In preparation for the trial of Mr Yuen in 2001 we looked at the issue of the interview translations. The transcripts represented what the interviewers asked and the reply that came via the interpreter in English. Due to the nature of the case we decided to quality assure the translations of the police questions put to the suspect and the answers given in Chinese. We supplied the transcripts on disc and copies of the tapes to an independent translator. She translated the Chinese spoken by the interpreter and the suspect and typed it between the English already in the transcripts. This was a useful exercise in showing the accuracy of the translations and dealing with anticipated defence submissions in relation to the accuracy of the evidence.

A considerable amount of work was done to review, record and retain all of the case papers and exhibits in anticipation that we may have to go back to court at some point in the future.

3.5 Extradition of Mr Wong

Directions were sought and obtained from the DPP to prosecute and extradite Mr Wong and the case papers passed to the Crown Solicitors Office (CSO). Further time passed as the CSO read what was a complex circumstantial case and arranged for up to 80 witnesses to swear depositions in Belfast. This meant bringing 26 witnesses from Great Britain and the Republic of Ireland. The CSO sought confirmation that we still had all of our witnesses available and that they would still give evidence. A huge amount of effort resulted in a substantial formal extradition request containing witness, documentary and CCTV evidence being submitted to the UK Central Authority and through the appropriate channels to the Department of Justice for the Hong Kong Special Administrative Region (DOJ HKSAR).

An interesting feature of this process was that the DOJ HKSAR could use more material from the case to request the extradition than we were able to use at trial. For example, the interviews of Mr Yuen, which would not be admissible at trial in Northern Ireland, were admissible in the extradition hearing as was the discovery, by a witness who wished to remain anonymous, of a number of torn photographs of the victim found near to where the suspect had stayed.

Throughout this process close contact was maintained with the Hong Kong Police Interpol Liaison Bureau and Organised Crime and Triad Bureau who were responding to numerous requests to support the investigation by obtaining evidence and carrying out enquiries.

In August 2006 detectives from PSNI travelled to Hong Kong where they briefed local officers about the intended arrest and search operation. This briefing was done by PowerPoint, which featured slides in both English and Chinese. This was advantageous, as some of the Hong Kong Police officers did not speak English. Our officers accompanied members of the Hong Kong Police Liaison Bureau when Mr Wong was arrested at his flat in Hong Kong. He was remanded in custody in a Hong Kong prison. At this stage he had the choice of consenting to extradition or mounting an appeal against it. In this case he chose to appeal.

Lawyers from the Department of Justice in Hong Kong then used the papers and material supplied to them in our request to present the case. The case was presented to a magistrate and had to satisfy him that there was a prima facie case against the suspect. Following a

three-day extradition hearing in April 2007 the magistrate directed that there was a prima facie case in existence and ordered the suspect's removal.

At this stage the suspect had a right of appeal, which he could invoke right up to the point when the order for removal was served on him. In the meantime the order from the magistrate had to go to the Chief Executive in Beijing for his approval. This took six weeks. The suspect lodged no appeal. We then had 30 days from the date of the Chief Executives decision to remove the suspect to Northern Ireland. In June 2007 he was brought back to Northern Ireland by officers from the PSNI to stand trial.

Transportation of the prisoner created its own issues. It caused us to look at our procedures for escorting high-risk prisoners on passenger aircraft over long distances. In consultation with the Criminal Justice Department (CJD) of PSNI and speaking to a number of other UK police forces we designed a comprehensive risk assessment and undertook training on the handling of prisoners while on aircraft. We did have a small number of trained officers within CJD but realised we needed far more across the force. We have adopted this training into the PSNI and train our own officers when required to carry out these type of escorts.

3.6 The trial of Mr Wong

Presenting the evidence at trial was the next challenge. Early consultations took place with Crown Counsel and the decision taken to upload the case onto Return to Scene Software (R2S). This is a Windows-based software package which allows you to upload the evidential material and present it, via the internal technical system, in the court. I believe this had a positive impact on the case as it brought the material forward to the present day and delivered it in a modern format. Use of spherical images taken at key locations ten years after the incident allowed the jury to put themselves at the scene and understand the context of the evidence given by witnesses, particularly in Isoline Street.

This case was now almost ten years old and it had been quite a task keeping witnesses on board. Many of these witnesses had already given evidence in the trial of Mr Yuen in 2001 and we had asked them to attend court in 2004-05 to swear depositions. Despite the passage of time we managed to keep track of all of the witnesses who were scattered across the globe. There were 19 witnesses in Hong Kong, one in Finland, one in New Zealand, one in Pennsylvania, one in the Republic of Ireland, 26 in Great Britain and the rest in Northern Ireland.

It was calculated that it would cost over £30,000 to bring the witnesses to Northern Ireland and accommodate them while giving evidence. In consultation with Crown Counsel and the

Public Prosecution Service (PPS), which replaced the DPP, we decided to make an application to the court to allow these witnesses to give their evidence via live video link from their respective countries. This application was made under Article 31 Criminal Justice (NI) Order 1983, which creates the new Article 80a Police and Criminal Evidence (NI) Order 1989.

Close liaison was required with the international section of the PPS to request mutual legal assistance from the relevant judicial authorities in these countries. I discovered that each country has its own way of approaching this issue, which varied widely. Thankfully most of the international evidence was agreed except those witnesses in Hong Kong.

Hong Kong required an ILR and definite dates to book their court. They then made application to their court to allow the witnesses to give evidence in this way. The evidence was given in court in Hong Kong in the presence of a magistrate. The US authorities did not require an ILR but simply required a notarised letter. The evidence would be given from a college in the relevant state. The situation was the same with the New Zealand authorities except they did not require a notarised letter. Exploring this whole issue has established one of my detectives as an expert in setting up such links.

Liaison with the DOJ HKSAR identified that it would be necessary to have officers in Hong Kong to maintain responsibility and coordinate while the live video link was underway. It was agreed that it was the responsibility of the Hong Kong Police and DOJ HKSAR to facilitate the live link but ours to deal with trial matters.

It was important to deal with any issues on a one-to-one basis between the court in Belfast and that in Hong Kong. One example of this related to changes in the order of witnesses at short notice and maintaining communication in the event that the link went down. Another issue arose around the content and understanding of a piece of documentary evidence.

Witness welfare was a big issue in this investigation, not just because we were asking them to remain committed to an investigation over ten years but to submit themselves to robust cross-examination on a number of occasions. The investigation team and the Witness Service and Court staff dealt with the welfare of the witnesses in Northern Ireland. It occurred to me that some of the witnesses in Hong Kong had not had any real contact from police since their statements were taken in 2001 and would be somewhat concerned about giving evidence over a live video link to a court in NI.

Enquiries with the Hong Kong Police revealed that they had no Witness Service. In consultation with the NI Witness Service and Crown Counsel we put together information

packs which included all relevant papers and useful information. Officers travelled to Hong Kong and, using the internet, assembled the witnesses and delivered a presentation around the interactive NI Court Service Website. This gave witnesses information on how NI Courts operate and how their evidence would be given. They were also shown a video on giving evidence via live video link. This contact and attention was key in gaining the trust and confidence of these witnesses and was vital for dispelling their fears and worries. As a result all gave a commitment to give evidence despite some initial reluctance.

Witnesses in Hong Kong included several detectives from the Hong Kong Police who had provided statements in relation to obtaining evidence from the telephone companies and housing association. For these witnesses we had to ask the court in Belfast to sit from 9am to 12 noon, which in turn required the prisoner to be produced early and the judge and jury to be present and ready to take the evidence. The court in Hong Kong had to sit between 4pm and 7pm to take account of the seven hour time difference. Everything said in the trial had to be translated into Chinese for the benefit of the defendant and for the Hong Kong witnesses via the video link and likewise into English for the benefit of the court. All of the witnesses gave evidence except the detectives whose evidence was agreed once the link was underway.

A particular difficulty in the case was, as previously referred to, the request from the Hong Kong authorities to book the court in Hong Kong in advance for the use of the live video link. This was quite difficult, as we all know how hard it is to predict the pace of an ongoing trial. Nevertheless we booked the Hong Kong court for week three of the trial. However, for legal reasons we lost the first jury after the first week, which meant we had to start again in week two. This brought the Hong Kong witnesses forward one week in the sequence of the planned prosecution case and required some careful adjustments.

Another issue to consider was raised by the trial judge. The witnesses in the other country would be required to take our oath or affirmation before giving evidence. This was not a problem in this case as they were identical but would be a consideration in cases involving countries which use a different oath or affirmation.

The trial ran for six weeks and on 7th May 2008 Mr Wong was convicted by the jury and sentenced to life imprisonment. On 6th June 2008 he was sentenced to a minimum of 18 years by the trial judge.

4 Conclusion

When I travelled to the scene on 9th June 1998 little did I know how challenging this investigation would be. The discovery of a woman's body in an East Belfast terraced house took detectives around the globe in search of the killer who thought he could flee the jurisdiction and escape justice. Despite new and difficult challenges this case is an example of what can be achieved if you get the support of the public, particularly over a number of years and the co-operation of law enforcement agencies and Departments of Justice (DoJ) around the world. It is possible to bring a case to trial using modern technology and methods even when, at the time of the offence, these opportunities were not available.

The way that the videoed interviews and other witness and documentary evidence was collected, recorded and retained in 1998 was key to the success of this case. Having all the material available we used modern methods to present the case to the jury, which, in my opinion, brought the case back to the present day and only the date of the offence was a clue to the duration of the investigation.

The lessons learnt through such a challenging investigation are invaluable and have informed the force around international extradition procedures, high-risk long distance prisoner escorts and how to manage the associated risks and international witness welfare issues. The collaboration of the PSNI, PPS, CSO, Hong Kong Police and NI Witness Service and the use of modern technology brought this case to trial ultimately resulting in a successful conclusion.

Some general hints and tips for SIOs who encounter such a case in the future would include:

- Obtain an understanding of the processes and requirements of extradition in the country concerned. Treat it as a separate judicial process and be patient. Cases can take several years to reach a conclusion.
- Be prepared to work closely with the Crown Solicitors Office in the preparation of the official request to supply material as required.
- Identify a single magistrate to take and swear depositions and work closely with the clerk of the petty sessions to arrange suitable times and venues.
- Ensure procedures are in place within your force in relation to prisoner escorts of this nature and that appropriate risk assessments and trained resources are in place.

- Be prepared to respond to short notice requests from the DOJ in the country concerned who may require more evidence and material to support your request.
- Appoint a single point of contact from the investigation team between the police and DoJ in the country concerned.
- Establish a direct working relationship between investigators and the CPS/PPS to assist in drafting and preparing ILRs to request and respond to requests for information.
- Be prepared to travel to the country concerned to brief police and DOJ lawyers around the facts of the case and to give advice at the extradition hearing.
- Make enquiries with relevant countries well in advance to establish their requirements for setting up video links to allow you time to put the necessary measures in place.
- Consider liaising with the British Consulate in the relevant country to assist liaison with local authorities.
- Identify your local technical expert in your courts and involve them in your plans early on. Have them assume responsibility for setting up and testing links in advance.
- Anticipate time differences and the likely effect on the trial. Ensure the Judge deals with any early starts for the jury when swearing them in to avoid availability issues arising.
- Identify the measures in place in the relevant country to deal with witnesses' welfare at trial and if necessary develop your own strategy.

Managing Cross-Border Single Homicide Investigations

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Abstract

The NPIA Specialist Operations Centre has received a number of calls in the last couple of years regarding primacy in cases where a person has been reported missing in one force area and their body recovered in another. It is clear that forces are encountering difficulties with some such investigations as they try to establish their lines of responsibility.

The following article aims to introduce some clarity to decision making in this area. It is a culmination of consultations with members of the ACPO Homicide Working Group and a number of SIOs with experience, both good and bad, of such cases.

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1 Introduction

When a homicide victim has been reported as a missing person to one force area and their body has been discovered in another there is a need to decide who should take the lead in the investigation.

There are a number of ways in which such cases may present themselves. In some instances a person is reported missing and, at a later point, a body is discovered in a neighbouring force. Searches conducted during a missing person investigation may lead directly to the discovery of a body. Alternatively a body may be identified as someone who had not previously been reported as a missing person. On occasion enquiries may be instigated by the discovery of a murder site, or a report of a homicide, without a missing person report or a body. As with all homicide cases, other forces may become involved due to the victim's lifestyle or the location of suspects, witnesses or key scenes, including the murder site.

The aim of this article is not to dictate who should take the lead in these investigations. For many investigations this is self-evident from the beginning and the enquiry progresses with no further need for discussion. Some investigations, however, are substantially more complex or contentious. Complications may arise from the outset or develop over the course of the enquiry. The aim of this article is to draw on the advice of officers experienced in this kind of investigation to offer a decision-making framework around which forces can develop a management strategy suitable to the individual enquiry. This management strategy will include how the lead force should be identified, their responsibilities and the need for joint working in the majority of such cases.

1.1 Previous advice and considerations

Due to the variety of ways in which such cases may present themselves it is difficult to define prescriptive policy around investigative primacy. Conventional police wisdom is that the investigation should be led by the force 'best placed' to identify the offender.

In some instances it is clear from the outset which force this should be: senior investigators and their senior officers are in agreement and the investigation is able to progress without further debate. A number of cases, however, lack such immediate clarity, particularly in the early stages of the investigation when forces may have to make this decision with relatively little information as to the true circumstances of the death.

On one hand the need to work alongside the Coroner in the area where the body was found suggests that the force local to the body deposition site should be ultimately responsible for

the outcome of the investigation. This position is also supported by the possibility that the deposition site may also be a murder site and, where that is the case, a site on which criminal activity has occurred. Regardless of this, it is most certainly a site around which there will be much investigative activity.

On the other hand, lines of enquiry relating to the location of the last sighting, the victim, their lifestyle and their associates are also likely to produce a large number of lines of enquiry. This suggests that the investigation may be best managed by the force with the missing person report.

Previous ACPO advice on cases involving abductions, was very clear, stating that:

Where a person has been abducted in one force area and abandoned in another, particularly following homicide then, unless there are cogent reasons to the contrary, the force in whose area the abduction took place should be in command of the investigation.

ACPO (1992) *Cross-Border Murder and Abduction Investigations*: p1

This advice, however, is somewhat limited in both detail and scope: cases which begin with abduction represent only one of several ways in which cross border single homicide may come about. It was also written more than 15 years ago and so is arguably out of date.

Recent thinking on this subject has not been quite so absolute. The advice regarding cross border cases in ACPO (2005) *Guidance on the Management, Recording and Investigation of Missing Persons* does cite the ACPO advice quoted above but also states that ‘consideration should be given to where the bulk of these enquiries are to be conducted’ (p52). This latter point was reinforced in the 2007 update to this document:

The key issue is to consider where the bulk of the enquiries are and where is the greatest opportunity of locating the missing person. It is important that there is ownership and responsibility for the investigation with the focus being on achieving a satisfactory outcome for the missing person. It is not appropriate to have ongoing arguments about who should own the investigation.

ACPO (2007) *Update to the Guidance on the Management, Recording and Investigation of Missing Persons 2005*: p1

This advice would seem to be in keeping with the convention of the force ‘best placed’ but fails to identify precisely how forces should make this decision. On the basis of enquiries received by the NPJA Specialist Operations Centre it seems that forces often encounter difficulties in this area.

The purpose of this paper is to explore how this decision might be made, the various factors at play and the operational considerations for the continued management of such investigations.

2 Strategic Considerations

2.1 Identifying the lead force

The lead force is expected to fulfil three main obligations:

1. To identify and provide an SIO to manage the investigation;
2. To establish an MIR from which such an investigation may be run;
3. To set, through the SIO, the investigative strategy.

This does not, however, preclude the involvement of senior detectives from other forces, nor the setting up of secondary or satellite MIRs if this meets the needs of the investigation.

As stated in the opening section, in many instances the lead force will be readily identified with little need for extensive debate. There will always be, however, instances where this decision is not so straightforward and where forces may benefit from some assistance.

The force from whose area the body is recovered should retain the lead for the investigation in the short term. Once the body has been identified there needs to be a joint evaluation of the information available to both forces and attempts made to reach an agreement as to who should take the lead.

The decision as to which force should take the lead should be made as a result of an examination of the logistical and investigative considerations of the case in question. It should not be made solely on the basis of financial or political arguments. Nor should the lead force be assigned according to dogmatic preconceptions along the lines of 'the force with the body/the missing persons report/the murder site has to take it'.

In each case different features will be particularly salient to the decision-making process. Some of the more common considerations include, but are not restricted to:

- The progress made by existing investigative teams;

- The likely location of major lines of enquiry;
- Logistical issues, including information sharing between existing MIRs;
- Location of crime scenes;
- Location of lifestyle enquiries;
- Location of any strong suspects;
- Forensic opportunities at the deposition site;
- Previous intelligence on the victim and any potential suspects;
- Likely location of criminal activity;
- The timeframe within which criminal activity is suspected to have occurred;
- Connections with other offences or investigations;
- Relevant experience of similar investigations;
- Availability of suitable resources (including MIT work load and access to forensic services).

The Head of CID (or equivalent) for each force, informed by information from the SIOs, should then make a recommendation to ACPO officers who will make the final decision and formally agree the working arrangements.

It should be considered good practice to inform ACPO officers as early as possible. ACPO officer ratification of the decision may initially appear over zealous in some cases but it should provide protection against any challenges to the decision at a later date. It is not appropriate to delay investigative actions while financial arrangements are being settled and the needs of the investigation should be at the forefront of any decisions made in this area.

Regardless of how this decision is made, in all but the most unusual of cases, the investigation will generate a number of actions that are best performed by the secondary force.

Ultimately both forces will need to remain involved if all the information relevant to the investigation is to be utilised effectively. Therefore, best practice would dictate that forces focus less on the issue of primacy and think more in terms of collaborative working.

2.2 Collaborative working arrangements

Both missing person enquiries and homicide investigations attract, as a whole, greater levels of public concern and attention than some other crimes. Failure to ensure the best investigative outcome possible may leave the public at risk, reduce the likelihood of a successful investigation and leave the Police Service vulnerable to criticism or legal challenge. Both forces, therefore, have a responsibility to ensure that the investigation proceeds as quickly and efficiently as possible.

As stated in the previous section rarely, if ever, will all investigative actions be located exclusively in one force area. While the lead force may be considered to be ‘best placed’ to lead the investigation, individual actions may be best managed in a collaborative manner. Scene guarding, cordon management, house-to-house enquiries, media involvement and community liaison are only a few examples of the kind of activities that are best conducted with significant input from the local force.

Refusal to adopt a collaborative approach can make the investigation unnecessarily difficult for the SIO and may compromise the likelihood of a successful conclusion. Furthermore, lack of cooperation can damage inter-force relationships and reduce the likelihood of operational assistance in the future.

The precise nature of the working relationship will need to be agreed at an operational level by the SIO(s) and at a strategic level by ACPO officers or Heads of CID. Where appropriate those agreeing the working arrangements may wish to apply the principles of any local mutual aid arrangements. Once agreed, the details of the working arrangement should be outlined in a Memorandum of Understanding (MoU) and signed by ACPO officers, Heads of CID and SIOs. The production of a written agreement, however, should not disrupt the progress of the investigation (see section 2.3 MoUs and financial arrangements).

Where the joint working arrangements are particularly complex or when an SIO and MIR have previously been established in the secondary force senior officers may wish to consider applying some or all of the procedures associated with linked enquiries¹. See section 3 Operational Considerations for further advice on managing a joint investigation.

¹ See Section 11 of the ACPO (2005) *Major Incident Room Standardised Administrative Procedures (MIRSAP)*; and Section 2.6.5 of the ACPO (2006) *Murder Investigation Manual*.

2.3 MoUs and financial arrangements

SIOs and their senior officers should consider it best practice to have a written MoU. This may seem overly bureaucratic, particularly when the identity of the lead force seems, initially, to be very straightforward. Investigations can, however, develop in unexpected directions: they may take longer than anticipated or require more resources. Senior officers and SIOs may change or the investigation may require the use of additional, specialised resources in the secondary force, such as undercover officers, CHIS handlers or specialised equipment. In all of these instances a written agreement will help ensure that the investigation continues to progress as smoothly as possible.

The MoU need not be particularly lengthy and a verbal agreement may be sufficient in the earliest stages of the investigation when the pressure on the investigating officers is at its highest. If joint working arrangements have been agreed verbally then forces should ensure that the written document is produced at the earliest convenience.

The document itself should be tailored to suit the individual needs of the investigation and may include details of the working arrangements between forces, the identity and location of the SIO and financial arrangements. While it may not be necessary in the first 24 hours of finding a body, it may be wise to consider the worst case scenario at a fairly early stage of the enquiry. If the bulk of the enquiry becomes located in the secondary force, for example, or the investigation runs on longer than anticipated.

The information contained in the MoU will vary according to the needs of the investigation and the amount of detail available in the early stages of the enquiry. It may include, but may not be limited to:

- The identity of the lead force and the SIO;
- Overall roles and responsibilities of each force;
- The extent and longevity of provision of resources for particular tasks (such as cordon management) and specialised equipment up to and including any court proceedings;
- Use of existing lines of communication and contacts in the secondary force such as CHIS handlers, local media or community liaison groups;
- Location of MIR(s);

- How information gathered in both force areas will be managed and communicated;
- General briefing and debriefing processes;
- Secondment arrangements;
- Responsibilities regarding RIPA authorisations for any covert actions;
- Officer and witness safety;
- Financial arrangements;
- Exit strategy.

Financial disputes between forces run the risk of impacting on the progress of the investigation. It may also be damaging to the public perception of the police if inter-force disagreements become apparent to the victim's family or to partner agencies. It is, therefore, critical that ACPO officers ensure that any disputes regarding the lead force, including those of a financial nature, are resolved fairly, as quickly as possible and that the decision-making period does not slow the progress or effectiveness of the investigation. This is particularly important in the early stages of the inquiry when investigative opportunities may be lost as a result of delay.

In most cases forces will pick up the bill for the overtime of their own officers, although this may need to be reviewed if the secondary force is incurring particularly large costs. Given the extensive opportunities available at many crime scenes Chief Officers may need to discuss who will finance the testing of material collected at scenes within the secondary force area.

It is not the intention of this document to prescribe how Chief Officers should agree the financial arrangements. Such financial considerations, however, should not determine who takes the lead in the investigation. Chief Officers need to take a practical view in order to reach an agreement and to help build a team approach to the investigation.

2.4 Changing primacy

There will always be cases in which the lead force is agreed according to the best principles and logical decision making but where, as the investigation progresses, it becomes apparent that the bulk of the enquiries are located elsewhere.

When such changes occur it may be useful to consider changing the lead force. There are, however, significant risks attached to a change in leadership which need to be balanced against any potential investigative benefits. The interruption to the investigation caused by the change may compromise the likelihood of success and result in cases being passed repeatedly between forces. In addition, such a change can present technical difficulties regarding the MIR and HOLMES systems.

As a result, forces may find that, in the majority of cases, it is more beneficial to alter their working arrangements to allow for the change in circumstances. Investigations where officers are working as a joint team across both forces will be better able to adapt to the changing needs of the investigation and reduce the likelihood of a change in lead force becoming necessary.

The decision to change primacy should only be undertaken by ACPO officers, with input from each SIO and the Heads of CID where appropriate. It should only be driven by the needs of investigation. A new joint working arrangement should be signed and a copy of this should be included in the SIOs' policy files. See section 3.6 Handovers for more information.

3 Operational Considerations

The management of cross-border inquiries can present specific challenges to the SIO, particularly during fast-paced phases of the investigation. This can be heightened when lines of enquiry are very active in both force areas and the forces are geographically far apart. Depending on the technical and geographical arrangements, information and intelligence can take longer to reach the lead MIR, leaving the SIO feeling that they need to be in more than one place at one time. A good team approach across staff in both forces is essential to the successful running of the investigation although this may be achieved a number of ways.

3.1 Managing local enquiries

It is good practice to consider assigning particular officers from the secondary force to the investigation, particularly in the initial stages of an investigation. The number of officers allocated to the enquiry from the secondary force may vary over the course of the investigation, ranging from only one or two officers to a significant proportion of the entire team.

As a minimum, officers need to be ring-fenced locally to assist with local enquiries, particularly for activities such as guarding scenes, providing a link to the Coroner and house-to-house enquiries. In order to ensure speedy communication between the SIO and officers from the secondary force a single point of contact should be appointed in the secondary force. The SIO may also wish to consider using the SPoC to assist in the leadership and management of any local enquiries. Officers from both forces should be perceived as part of a joint team, with the SIO as the principle decision maker.

In some cases a senior detective with their own team may have been established in the secondary force at an earlier stage in the enquiry. Alternatively they may be assigned specifically to manage local enquiries on behalf of the SIO. This arrangement can be resource-intensive but may be particularly useful in investigations where a high number of key lines of enquiry are being pursued in both locations or where the demands on the lead MIR are such that additional support is required.

Where the investigation leads to the majority of the enquiries being located in the secondary force, it may be beneficial for the lead force to consider running a satellite team on the secondary force's premises with a strong presence from the lead force. In long-running investigations the SIO may also wish to consider the potential benefit of relocating the lead MIR to temporary premises in a more geographically appropriate location.

While the SIO should always be the principal decision maker, they should consider who, across both forces, is best placed to lead on a particular task. In some instances the secondary force may be better placed to lead actions which will benefit from local knowledge or for which they have specialised resources unavailable in the lead force. In the majority of cases managing and staffing cordons or liaising with communities may be best led by the local force. Other actions, such as the arrest of a suspect may be best performed under the leadership of the SIO with some input or support from the local force.

3.2 Specialised investigative activity

The specialised nature of many investigative examinations and the volume of material that will be generated in both force areas, particularly in and around crime scenes, make the need for joint working and cooperation even more acute. In the technological age this maybe include passive data such as CCTV, ANPR or phone records as well as more traditional forensic examination of physical material.

Where examinations are being, or have previously been, progressed in both force areas, it is advisable to include any advisers or lead officers from these specialisms from both forces in

any decision making in order to ensure that all opportunities are exploited.

If examinations are being conducted by outside agencies, such as forensic service providers, then SIOs should be aware that the billing process may vary. Therefore, if the lead force is in receipt of bills for testing conducted by a service with whom they are unfamiliar, the SIO may wish to establish a named account manager in the service to whom any queries regarding invoices may be directed.

The force receiving a report of a missing person may have a significant period of time in which to develop the investigation before a body is recovered. Where this leads to a 'no body murder' investigation with a number of active lines of enquiry, it is quite likely that the material gathered and hypotheses generated by this prior investigation will have a significant impact on the way in which actions may be prioritised in the event that a body is found.

Where this is the case the SIO, together with lead officers such as their crime scene manager, may want to consider developing a draft investigative strategy in preparation for a body being found beyond their force borders. This strategy will, almost certainly, require some adjustment once a body is actually found. It is, however, likely to provide a useful starting point and can help focus the initial gathering and testing of material from the scene at an earlier stage than would otherwise be possible. It may be useful for lead officers to discuss the investigation thus far with relevant expert advisers such as forensic archaeologists, search advisers or pollen specialists. This will help establish what material they might need and what they may be able to achieve under different conditions.

In the past, this has been particularly useful for crime scene management but need not be limited to forensic examinations and could be equally applicable to any aspect of the investigative strategy.

3.3 The Major Incident Room

Where material is being gathered in more than one location the SIO will need to consider the technical challenges that may ensue. The best method of ensuring that relevant information is being transferred and updated to the lead MIR would be via remote access to the lead force HOLMES2 server to input the data. There are various options of achieving this depending on the individual circumstances of the incident. A 'spur' from the lead force network, to the secondary force, for example, will assist input from those locations. Best practice would indicate that the SIO should seek advice from both the software company (Unisys) and the NPIA HOLMES team.

Although not technically sophisticated, a last resort method may be a paper-based MIR in the secondary force. This will allow paper records to be delivered to the lead force at regular intervals to be added to the central HOLMES account. If secure enough, this may be achieved by email and attachments or fax machine, depending on the specific incident and the volumes involved.

3.4 Secondments

Whatever the precise team arrangements forces should consider cross-resourcing their officers. Secondment of officers from the lead force into the secondary force helps to strengthen the link between them and alleviates pressure on the secondary force. This may be especially helpful in the first few weeks of the investigation or at any period of high demand on that force. It can also be of great assistance in identifying and addressing any procedural differences at an early stage, particularly around the recording of information and exhibits.

Independent of the secondment of other officers, the lead force may wish to consider seconding a senior detective officer to the secondary force to help lead and organise enquiries in that force. This has the added benefit of alleviating pressure on Major Incident Team staff, particularly senior detectives, in the secondary force.

Where the investigations in the secondary force were reasonably progressed prior to the identification of the lead force, or where there are a significant number of enquiries being pursued in the secondary force, it may be beneficial to second officers from the secondary force into the lead MIR. This will help to strengthen communication between the forces and allow for the input of local knowledge and intelligence at the seat of the investigation.

The SIO should consider any welfare issues for seconded officers. These may be particularly acute when officers are accommodated away from home or where additional commuting is required. It may be useful to consider switching seconded officers on a regular basis.

3.5 Communication

Frequent contact between SIOs and officers in similar roles is key if teams are to be kept up to date with relevant developments in fast-moving investigations. Communication between teams may be particularly important at certain points in the investigation, such as the discovery of an additional crime scene, the identification and arrest of a suspect, or the identification of new key witnesses.

3.6 Handovers

Once the lead force has been identified it will be necessary to conduct a handover between investigators. This will be particularly important when the investigations into the missing person and the body deposition have made some progress prior to the designation of the lead force.

The lead investigators, together with the lead officer for each discipline, should come together for a full, documented handover. This should cover each strand of the investigative strategy including:

- The initial strategy for each line of enquiry;
- Completed actions;
- Outstanding actions;
- Hypotheses;
- Intelligence.

This meeting may also include key decisions concerning the operational management of the investigation. For this reason forces may wish to consider whether it would be appropriate for Heads of CID or ACPO officers to attend.

Further advice regarding handovers can be found in section 2.6.4 Handing Over Existing Investigations in ACPO (2006) *Murder Investigation Manual*.

3.7 Media management and community reassurance

The report of a missing person and the discovery of a body are likely to generate a substantial amount of local attention and concern in both force areas. Together, both forces may wish to consider the need for critical incident management and the formation of a Gold Group with representatives from the relevant communities.

The management of the media and engagement with communities both require the input of local knowledge and connections. Therefore, it is highly likely that forces will need to work particularly closely on these issues.

When two force areas are involved in an investigation the SIO will have to be particularly aware of any complications which may arise around the management of information released to the public, be that through the media, community engagement or family liaison. If a Gold Group has been established then an agreement must be reached with them on the non-investigative information that may be released such as safety advice and warnings given to vulnerable communities. Information released in all force areas should be consistent with that provided to the family. With this in mind it is advisable for all information releases to be passed through a single point under the SIO's command.

Where an Independent Advisory Group has been established in one or more areas, the SIO should consider including members from each force area.

Information released through community liaison and to the media may prompt members of the public to contact the secondary force. The SIO will need to consider how this information will be captured and fed into the lead MIR.

4 Conclusion

Cross-border single homicides are one type of homicide investigation, among many, which may present particular challenges to forces, particularly when deciding which force should take the lead and how the investigation should be subsequently managed.

Many such investigations progress relatively smoothly but additional advice may be sought where forces encounter difficulties agreeing on the lead force or where enquiries are ongoing in both force areas. The experienced officers consulted in preparation for this article were unanimous in their assertion that, where this is the case, the investigation is best served by clear leadership from the SIO balanced against a collaborative approach by both forces. The way in which this is achieved will need to be formulated on the basis of the characteristics and needs of the individual investigation.

Acknowledgements

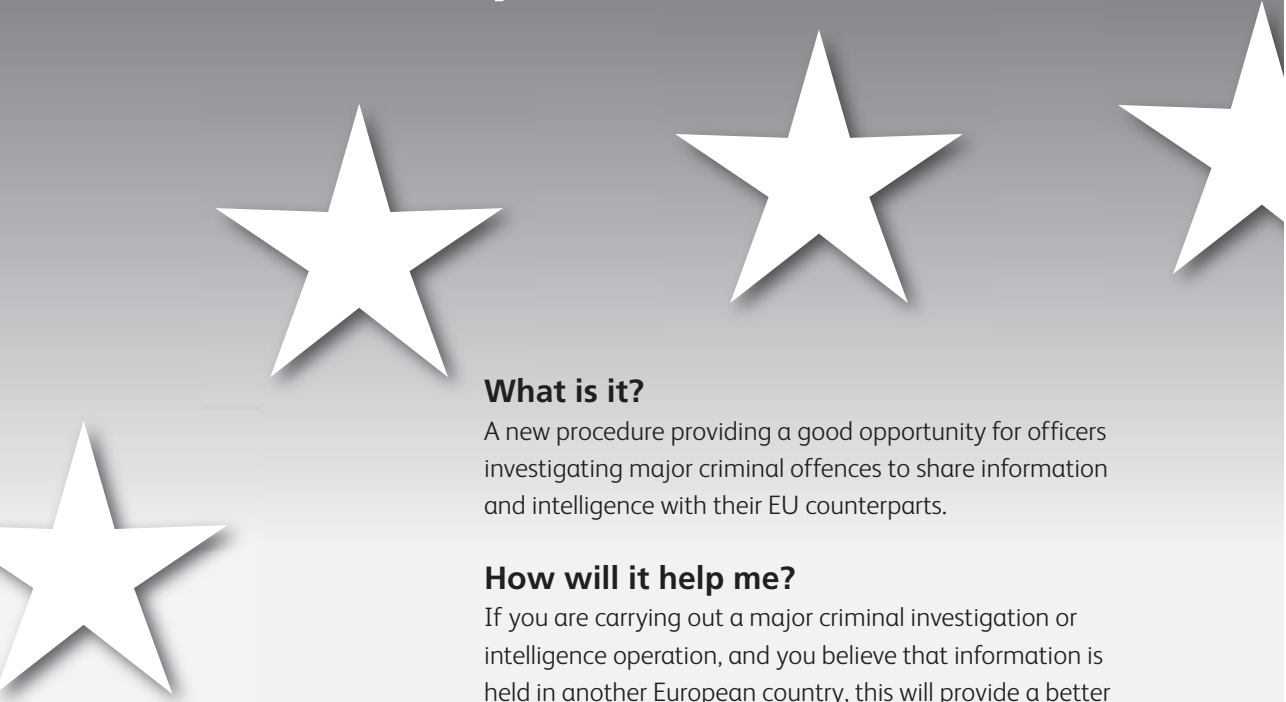
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References

- ACPO (1992) *Cross-Border Murder and Abduction Investigations*. London: ACPO.
- ACPO (2005) *Major Incident Room Standardised Administrative Procedures (MIRSAP)*. Wyboston: NCPE.
- ACPO (2005) *Management, Recording and Investigation of Missing Persons*. Wyboston: NCPE.
- ACPO (2006) *Murder Investigation Manual*. Wyboston: NCPE.

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Historical Analysis of Public Inquiries of Homicide Investigations

DCI Mark Roycroft
Investigative Practice, NPIA

Abstract

This article explores the themes from over 40 years of reviews and public inquiries into major murder enquires. Eight key themes emerge consistently from this research and are discussed in this article. The reviews and inquiries also reveal the skill set needed by the modern SIO and the need for careful phasing of the SIO's strategies and actions. The different phases in an enquiry are highlighted. A table of recommendations and themes identified from the inquiries is included.

The author is a serving DCI in the Metropolitan Police with 26 years service and is currently completing a PhD researching the solving factors in major homicide enquires. He is a Fulbright Scholar and has served on murder investigations.

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1 Introduction

There have been a number of official inquiries into high profile police investigations over the last 40 years. This article will look at the similarities between the findings of eight of the inquiries and how the main themes identified are often repeated.

1.1 Public inquiries

Sir Lawrence Byford's report into the Yorkshire Ripper case changed the structure and organisation of UK Major Incident Teams. This report and the Macpherson inquiry into the death of Stephen Lawrence mark cathartic moments in the history of homicide investigation in the UK. A large percentage of the problems identified over the last forty years of high profile major murder investigation were as follows:

- Clarity and leadership among senior officers;
- Skills of SIOs;
- Systematic failures;
- Phasing of enquires;
- The role of the Major Incident Room/ information management;
- Individual investigative strategy failures.

Looking across the historical pattern of inquiries, it does seem that at particular moments certain high profile major crime investigations come to be seen as problematic in some fashion. At such times, the conduct of the investigation itself is reviewed, either through a public inquiry, some other framework or internally, with the result that some reform in policing practice is recommended. The introduction of significant reform is not a continuous progression and development; rather it tends to occur in 'fits and starts'.

The frequency with which official inquiries into homicide are commissioned has increased over the last seven years. This phase started with the Macpherson report in 1999 into the murder of Stephen Lawrence and the review of the Damilola Taylor murder in 2002. The following year saw inquiries into the death of Victoria Climbié and Dame Janet Smith's inquiry into the murders committed by Dr Harold Shipman. In 2004 Sir Ronnie Flanagan of the HMIC published a report into the murders in Soham. The inquiries have changed in

their terms of reference from alleged miscarriages of justice, as in the Confait (1972) and Challoner (1964) investigations, to ones of alleged incompetence and racism (ie, the Stephen Lawrence investigation).

The selection of the cases reviewed by inquiries appears to be driven by a variety of sources from political pressure to media campaigns. Looking at high profile cases over the last 40 years there are a number of additional investigations that had potential as candidates for public inquiry. The recommendations from these inquiries threw up some unintended consequences for the police.

2 Themes from Public Inquiries

The skill base of the SIO features in all the inquiries and reviews. Table 1 shows some of the key skills mentioned in the various inquiries.

Table 1 Skills of the SIO

Skills of SIO	Relevant enquiry
Leadership	Byford/Macpherson/Soham/Shipman/Taylor
Effective decision making.	Macpherson/Soham
Planning, phasing and prioritisation	Climbié/Taylor/Byford
Scene management – initial response	HMIC Soham report/Climbié
Witness management	Macpherson/Taylor
Investigative awareness and management of the investigation	Macpherson/Shipman HMIC Soham report
Experience of major investigations	Shipman/Taylor
Management of the MIR	Macpherson/Byford/Climbié/ Cannock Chase

Each of these are discussed further together with the failures in systems and procedures that have been identified in these inquiries.

2.1 Leadership

A key theme running through the Byford Report and the investigations into Lawrence, Shipman, Taylor and Soham is one of leadership and, in some cases, the lack of clarity that obstructed stages of the investigations. Leadership is a key skill for SIOs and is crucial to the success of the investigation, yet it appeared to be problematic in the inquiries examined. The question of leadership was not confined to single investigations involving multiple victims but was subject to comment in single homicide cases such as the Damilola Taylor case. In both the Damilola Taylor case and the Yorkshire Ripper case the lack of a clear leader compromised the effective deploying of resources. One person cannot solve the case by themselves and it is the responsibility of all those who assume even partial leadership in key areas.

Smith and Flanagan (2000) mentioned leadership as one of their 22 skill clusters for SIOs. They state that an SIO has to be seen to take *“responsibility for the investigative process, providing direction”* (p52). The SIO also needs to have the ability *“to bring pertinent information out of the team”*. A good leader also has the ability to facilitate and maintain control and the ability to inspire the team.

The Yorkshire Ripper case highlights how the direction given by the SIO can influence the rest of the enquiry. Peter Sutcliffe was interviewed by police nine times between 1975 and his arrest in January 1981. Interviewing officers were influenced by the credence given to the letters and the tape sent by a hoaxter.

In his report on the Yorkshire Ripper case, Sir Byford commented they were *“...firmly of the view that in cross-border series there needs to be one officer in overall command of the investigation with authority to direct the course of the investigation in all the police areas directed”*. This was the advent of the principle of the Officer in Overall Command (OIOC). The Byford report further identified failings in the leadership from the ACC as having *“paved the way for the loss of confidence in and loyalty to his inquiry policies”*.

The Damilola Taylor Review (December 2002) commented that the primary investigation was well resourced. *“However, the structure of the oversight and support arrangements and the direct involvement of very senior staff with different roles and responsibilities did lead to a lack of clarity on occasions about where ultimate responsibility for the case as a whole lay”*. The review (recommendation 3.3.14) felt that the comprehensive nature of these arrangements and the involvement of so many senior officers may have created a false sense of reassurance about the progress of the investigation. This became *“...unhelpful when new problems were encountered in the secondary investigation after the suspects had been sent for trial”*.

In recommendation 3.3.16 the panel considered that the MPS should be commended for the scope and scale of Chief Officer involvement but that “...*certain lines of enquiry were implemented but not adequately resourced (i.e. cell confession evidence). It lacked overall direction and control. The analytical work that was commissioned at an early stage in the enquiry could have been dealt with in a more timely and effective way*”.

The panel recommended (recommendation 17) that “...*the use of Gold, Silver and Bronze command structures along with other support groups in difficult cases be continued but their nomenclature, purpose and accountability should be clear. The extent to which these types of command structure can be applied to homicide investigations needs to be clarified*”. It was further recommended that ACPO identify options and disseminate clear guidance on this issue. The lack of clarity resulting in blurred lines of responsibility can be one of the unintended consequences in critical incidents. This can lead to blurred lines of responsibility and can overcomplicate the line of command. In the Shipman case the normal police command structure caused confusion. There was a lack of clarity within the command structure and people with the right skills were not placed in the correct positions.

In the Shipman Inquiry, Dame Janet Smith commented that the primary reason the investigation failed was due to the Chief Superintendent’s decision to pass the investigation onto the DI without adequate supervision and management. The senior officer was further criticised for allowing a relatively inexperienced officer to make key decisions without supervision, including deciding when to close the case.

In the Soham case there was confusion in the first part of the investigation around the definition of critical incidents. Sir Ronnie Flanagan (HMIC) felt there could have been a “...*greater sense of urgency and that the good momentum achieved by the initial officer could have been consolidated*”. This is an unintended consequence of the creation of the term ‘critical incident’, everyone in the command structure has to use and understand the same definition. The report also comments on the difficulties involved in running a ‘twin track investigation’ where the SIO is considering the possibility of both abduction and a murder.

2.2 Effective decision making

ACPO (2005) *Core Investigative Doctrine* states that flawed decision making has been responsible for failed investigations (p72). The doctrine also mentions ‘verification bias’ where the detective allows their early assumptions in a case to determine their investigative strategy. Adhami and Browne (1996) stated that detectives lack inferential judgment and are prone to fundamental biases and consequently to errors of judgment. The failure to act

quickly, as in the Soham case, and the continuation of wrong decisions in the Lawrence case were real-life illustrations of the need for skilled decision making by SIOs.

Lord Macpherson stated that each bad decision was compounded. It would seem that the bad decision making that occurred at the beginning of the investigation continued throughout, with each decision maker failing to question decisions that had gone before and consequently making further erroneous judgements.

2.3 Planning, phasing and prioritisation

The selection of lines of enquiry and the current prioritisation and allocation of resources to support them is a key feature of a successful and cost effective investigation. The inquiries and reviews accentuate the need for careful phasing of the SIO's strategies and actions. The following examples show the need for planning:

- Recommendation 92 of the Victoria Climbié inquiry states that crimes involving children should be dealt with promptly and efficiently.
- Recommendation 3.3.16 of the Damilola Taylor Review stated that the investigation lacked overall direction and control. The analytical work that was commissioned at an early stage in the investigation could have been done in a more timely and effective way.
- In the Yorkshire Ripper case a major error was the excessive credence given to letters and tapes from a disgruntled police officer and, therefore, Peter Sutcliffe should have been arrested earlier.
- Post-charge management recommendation 4.5.3 of the Damilola Taylor Review states that a number of lines were incomplete at the time the defendants were charged. These included the examination of 86 shoes and pairs of trainers seized from suspects and the analysis of mobile phones.

2.4 Scene management initial response

In the Victoria Climbié report Lord Laming stated that an investigation should have begun straight away after police were notified of the original problems and numerous detailed investigative leads were not adopted by the investigators. They were criticised by Lord Laming for not taking the basic steps required in a major investigation and, therefore, vital evidence was lost.

In the Soham case the HMIC report stated that there could have been a greater sense of urgency and they commented that the “...*good momentum achieved by the initial officers dealing with the incident could have been consolidated*”. The report also stated that high priority leads were not acted on for more than one week. There was an inability to appreciate the golden hour’s value in terms of the information generated by the investigation. Senior officers failed to act on valuable evidential leads gathered by officers on the ground.

The HMIC report stated that the first SIO refused to deploy extra officers on the night the victims went missing and that “...*there was a lack of clarity around who was running the investigation*” which compromised the ability of the SIO to “...*maintain control and knowledge of the overall strategic direction of the investigation*”.

2.5 Witness management

Many witnesses are reluctant to cooperate with police enquires and the SIO has to draw up strategies accordingly. In many of the cases mentioned here witnesses were reluctant to come forward and this prompted the SIO to adopt a pro-active use of recruiting informants and seeking intelligence by other means.

In the Macpherson Report, Chapter 19 refers to the handling of witnesses. Paragraph 19.41 states that “...*there was an overriding need in this investigation to turn information into evidence and to turn reluctant witnesses into willing ones in order to obtain the fullest possible information and evidence. There is no doubt that the investigation team felt rightly that there were witnesses who were saying less than they actually knew. Most if not all of these witnesses were young people, sometimes with a basic antipathy to the police. In these circumstances a tactful and sensitive approach to witnesses was needed*”.

2.6 Investigative awareness and management of the investigation

The review panel looking at the Damilola Taylor case identified a number of issues with the way in which the investigation had been managed by the DI on the case. While most lines of enquiry had been properly pursued this was not always the case.

Similar issues were raised during the Harold Shipman Inquiry where Dame Janet Smith identified that there had been sporadic periods of activity over the course of the investigation. Added to this she identified that certain information was not considered with sufficient care nor tested adequately. This lack of consideration for certain lines of enquiry led Dame Smith to conclude that the management of the investigation, on an operational

level, was seriously flawed and that the DI concerned “...*never had a plan of action*”. This was seen to have serious consequences for the outcome of the investigation, including the failure to conduct an autopsy where one was, in retrospect, needed.

2.7 Experience of major investigations

The Damilola Taylor Review (recommendation 3.2.8) commented on the need to appoint people with the skills “*to do the job*”. This was echoed in Recommendation 20 of the Flanagan report. The Damilola Taylor review stated that in exceptional circumstances MPS managers should consider looking beyond immediately available staff before the appointment of an SIO and an investigation team is made. He went on to comment that the Chief Officer should “*take a view of the skills needed in a major enquiry and what skills the team actually have*”. (Pimlico lecture 12.1.05).

2.8 Management of the Major Incident Room (MIR)

In the majority of cases researched, there were shortcomings in the resourcing and cross-checking capability of the Major Incident Room (MIR). This applies to both pre- and post-HOLMES incident rooms. In the Cannock Chase murders of 1966 there was no coordination between MIRs as they were in two force areas and pre-HOLMES there was no obvious method of sharing information.

In the Yorkshire Ripper case Lord Byford criticised the amount of “*unprocessed information*” in the MIR. Bilton (2003) comments that the Byford team found “*major flaws in the inquiry and its management in total disarray*” (p302). The Byford team found a lack of “*standing back and reviewing evidence*” in the Ripper investigation. The Milgarth Incident Room became overwhelmed and this had the “*direct effect of frustrating the work of SIOs and junior detectives alike*”. The management of the flow of information into the MIR was the subject of concern in many of the inquiries. The Yorkshire Ripper case was the most glaring example of the failure to provide an adequate database or system to link cases or identify killers across force boundaries.

With the introduction of HOLMES and MIRSAP, the flow of information into the modern MIR is substantially better managed. It appears, however, that difficulties in information management still arise. The Lawrence report stated that the MIR was “*inadequately staffed*” (recommendation 46.14) and that the incident room was not supervised by responsible and trained staff. The report felt that this may account for the many delays apparent in the processing of information reaching the investigation team.

Lord Laming's inquiry into the death of Victoria Climbié made a recommendation (p104) that PITO must ensure that child protection teams have an effective child protection database and IT management system. This would seem to suggest that this is still an ongoing issue.

2.9 Systematic failures

Public inquiries into high profile cases, such as Stephen Lawrence and Damilola Taylor have exposed failures in police systems and in policy. The Home Office report 25/04 (Nicol, Innes, Gee and Fiest) on reviewing murder investigations noted that many of the serious failures that occur in modern day complex investigations *"need to be analysed and understood at a systematic rather than individual level"* (p13). The report suggests that the organisational culture of the police produces a situation where *"provided the investigation gets a result any problems, errors and mistakes can be glossed over"* (p15). The structuring of the organisational systems and processes can improve the reliability of the investigative process. One example of this is the impact of improvements made to MIR systems and procedures as a consequence of the Byford Report.

3 Conclusion

Past inquiries can help inform present or future investigative strategies by providing best practice and highlighting potential pitfalls. There is a need to retain organisational learning from past inquiries to assist future generations of investigators. Appendix 1 shows the systematic failures repeated over the last 40 years. In the majority of cases researched, there were shortcomings in the resourcing and cross checking capability of the Major Incident Room. This applies to both pre and post HOLMES incident rooms. The role of the MIR and HOLMES since the Yorkshire ripper case illustrates the progress that has been made but in the case of the Harper, Maxwell and Hogg murders the suspect was not within the system. In the report on the Stephen Lawrence case Lord Macpherson stated that the MIR was *"inadequately staffed"* (recommendation 46.14) and that the incident room was not supervised by responsible and trained staff.

Progress has, however, been made. The review panel in the Damilola Taylor case commented (recommendation 6.5) that there were *"...demonstrable differences..."* between the police handling of the investigation of this case and that of the Stephen Lawrence case.

The issue of leadership among senior management teams and SIOs was discussed in the inquiries researched. The Byford report on the Yorkshire Ripper case states that *“it was ACC Oldfield’s failure to lead effectively which paved the way for the loss of confidence in and loyalty to his inquiry policies”*. In the Damilola Taylor Review, the panel stated that *“the use of Gold, Silver and Bronze command structures along with other support groups in difficult cases be continued but their nomenclature, purpose and accountability should be clear”*. The creation of these command structures has had an unintended consequence in that they can lead to a lack of accountability.

Lord Byford, in his report on the Yorkshire Ripper case, stated that the skill base of SIOs, Superintendents and ACCs must be kept to a high level. Lord Byford stated that the *“career development, training and selection of senior detectives needs to be improved so that they have the management skills to meet the demands of an enquiry on the Ripper scale”*. Table 1 illustrates the breadth of skills needed by the modern SIO.

The management of information is paramount to the success of an investigation. Lord Laming’s inquiry into the death of Victoria Climbié made a recommendation (104) that PITO must ensure that Child Protection Team’s have an effective Child Protection database and IT management system. In the Soham case the HMIC report stated that high priority leads were not followed up for one week and valuable time was lost. Byford commented that the MIR in the Yorkshire Ripper case was *“overwhelmed by a welter of information”*. The HOLMES system was an advance following the Yorkshire Ripper case, but in cases such as the Soham investigation it could not cope with the volume of information generated in high profile cases. Recent developments, however, such as NMAT (National Mutual Aid Telephony), Casweb/MIRweb (the ability to deal with a mass volume of information remotely) and HVM (High Volume Messaging within HOLMES2) have addressed these issues. This new add-on technology was used most recently in the 2006 investigation into the murders of five women in Ipswich and will be commented on in the NPIA (2008) *Tactical Debrief: Operation Sumac*.

The phasing of enquiries, the selection of lines of enquiry and the current prioritisation and allocation of resources to support them is a key feature of a successful and cost effective investigation. The inquiries have shown consistent themes including the fact that the wrong people were in charge of investigations at critical stages of major enquiries. Bad decisions, as in the Stephen Lawrence case, were compounded. The Police Service must learn from these cases: the recurrence of the same themes over time causes concern. Similarly the unintended consequences shown must be monitored to ensure that the recommendations of inquiries do not become a burden in themselves.

References

ACPO (2005) *Core Investigative Doctrine*. Wyboston: NCPE.

Adhami, E. and Browne, D. P. (1996) *Major Crime Enquiries: Improving expert support for detectives*. Police Research Group Special Interest Series, Paper 9. London: Home Office.

Bilton, M. (2003) *Wicked Beyond Belief. The Hunt for the Yorkshire Ripper*. London: Harper Collins.

Byford, Sir L. (1981) *Report into the Yorkshire Ripper Enquiry*. London: Home Office.

Clark, H. and Johnston, D. (1994) *Fear the stranger*. Edinburgh: Mainstream Publishing.

Flanagan, Sir R. (2004) *A Report on the Investigation by Cambridgeshire Constabulary into the Murder of Jessica Chapman and Holly Wells at Soham on 4 August 2002: Summary of conclusions and recommendations*. London: HMIC.

Laming, Lord H. (2003). *The Victoria Climbié Inquiry*. London: HMSO.

Macpherson, W. (1999) *The Stephen Lawrence Inquiry: Report of an inquiry by Sir William Macpherson of Cluny*. London: HMSO.

Nicol, C., Innes, M., Gee, G. and Fiest, A. (2004) *Reviewing Murder Investigations: An analysis of progress reviews from six police forces*. Home Office Online Report 25/04.

NPJA (2008) *Tactical Debrief: Operation Sumac*. London: NPJA.

Sentamu, Rt Revd. J., Blakey, D. and Nove, P. (2002) *The Damilola Taylor Murder Investigation Review: The report of the oversight panel*. Presented to Sir John Stevens QPM DL Commissioner of the Metropolis, December 2002.

Smith, Dame J. (2003) *The Shipman Inquiry Second Report: The police investigation of March 1998*. London. HMSO.

Smith, N. and Flanagan, C. (2000) *The Effective Detective: Identifying the skills of an effective SIO*. Police Research Series, Paper 122. London: Home Office.

Appendix 1

Table of recommendations and themes identified from inquiries

Case Date of Murder	Name and Date of Inquiry or Review	Critical Issues	Main Recommendations	Themes Identified
Cannock Chase Murder 1966.	No public inquiry.	Failed to identify the suspect in 4 years of the enquiry.		Systematic failures.
Murder of Maxwell Confait 1972	Confait Inquiry by Sir Henry Fisher 1977.	Uncorroborated confession evidence from main suspect Lattimore who had a mental age of 8 years.	Tape recording of interviews. Introduction of appropriate adults – safeguards for vulnerable persons.	Accountability of the police. Treatment of vulnerable suspects. Skills of SIOs.
Murder of Sarah Harper, Susan Maxwell and Caroline Hogg murdered between 1983-1986.	No public inquiry.	Failure to identify suspect.	Catchem database introduced.	Systematic failures. Management of flow of information.

Case Date of Murder	Name and Date of Inquiry or Review	Critical Issues	Main Recommendations	Themes Identified
Murder of Stephen Lawrence murdered 22.4.1993.	Report by Sir William Macpherson of Cluny February 1999.	Failure to arrest suspects. Failure to keep victim's family informed.	FLOs introduced. Decision Logs introduced. Racial Awareness Training introduced. Murder Review Groups introduced.	Systematic failure Skills of SIO.
Murder of Victoria Climbié 25.1.2000.	Lord Laming's Public Inquiry 2001-03. Reported 2003.	Crimes involving children should be dealt with promptly and efficiently.	Managers from each service should be involved in the investigation. Police must take the lead in any joint investigation. Supervisory officers must take an active role in investigations.	Skills base. Phrasing. Lack of coordination within the command structure.

Case Date of Murder	Name and Date of Inquiry or Review	Critical Issues	Main Recommendations	Themes Identified
Damilola Taylor murdered 27.11.2000.	Taylor murder investigation. Review report of the Oversight Panel (Sentamu et al., 2002).	Post-charge strategy. Use of mobile phone evidence. Management of witnesses.	Evidential opportunities presented by new technologies. Amendments to the MIM on witness interview strategy, the management of cell confession evidence and the evidential opportunities presented by new technologies.	Lack of clarity among senior officers. Skills of SIOs. Phrasing.

Case Date of Murder	Name and Date of Inquiry or Review	Critical Issues	Main Recommendations	Themes Identified
Dr Shipman's murders.	Report by Dame Janet Smith July 2003.	Pattern of deaths not identified.	Standard of (behaviour) of lead investigators fell below the standard expected by the public. GMP should assign SIOs with "appropriate experience". Protocol should be established for low volume crimes. New medical coroner service to provide specialised advice. CPS to provide a solicitor with medico-legal advice.	Lack of clarity among senior officers.

Case Date of Murder	Name and Date of Inquiry or Review	Critical Issues	Main Recommendations	Themes Identified
Soham August 2002. Murders of Holly Wells and Jessica Chapman in Soham August 2002.	HMIC report 2004.	Suspect arrested but took 10 days. Lack of clarity among SMT. Misunderstanding of Critical Incident.	Understanding of Critical Incident. Systematic shortcomings due to amount of information. MIR not fully staffed. Confusion at Senior Management Level. “Golden hours allowed to slip by”. “Inability to appreciate the value of the information available”. Poorly focused investigation.	Skills of SIOs. Management of information. Lack of clarity among senior officers.

Reviewing the Reviewers: A tool to aid homicide reviews

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Abstract

Superintendent Dean Jones is a serving police officer who formerly headed Hampshire's Major Crime Team and has since set about trying to standardise the murder review process by the development of a Review Tool for use on homicide reviews.

This article describes an evaluation of the Review Tool devised by Dean Jones. A group of six investigators reviewed a murder using the Review Tool and comparisons were made with a matched control group conducting a review on the same murder without using the tool. The resultant analysis showed that the group using the Review Tool produced a significantly superior review report to that of the group who did not use it.

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1 Introduction

No greater honour will ever be bestowed on an officer or a more profound duty imposed on him than when he is entrusted with the investigation of the death of a human being. It is his duty to find the facts regardless of colour or creed without prejudice and to let no power on earth deter him from presenting these facts to the court without regard to personality.

(Baca, 2001, p.1)

Murder review has received little attention in terms of academic research. The review process can be complex and highly technical and so this research aimed to evaluate the Review Tool, designed to aid the reviewer and take them through the process in small stages, each benchmarked against nationally approved good practice or empirical academic research. The Review Tool was evaluated using Senior Investigating Officers (SIOs) to see whether its use would significantly improve the quantity and quality of good and bad practice identified within a formal murder review.

The research focused on ongoing and 'live' reviews of murder investigations rather than historical or popularly described 'cold case' reviews¹, although the principles can be ascribed to both. The purpose of a live review is to support the SIO and ensure that all proper lines of inquiry are being followed. There are several triggers for a review of a murder investigation: new legislation; new information becoming available; evolving scientific advances; complaints; the requirement in the Human Rights legislation to keep undetected homicides under review; and, more frequently in the case of this study, the fact that the murder inquiry is unresolved. It is important to differentiate between an investigation and a review.

A review is defined as:

A constructive evaluation of the conduct of an investigation to ensure an objective and thorough investigation has been conducted to national standards and which seeks to ensure investigative opportunities are not overlooked and that good practice is identified.

(Rogers, 2005, p.3).

¹ Cold case reviews, tend to be re-investigations of old undetected murders, whereas reviews of live inquiries run in parallel with the investigation actively being investigated. Cold cases may be re-opened due to the fact that new evidence comes to light and, therefore, only a part review may be necessary. The term 'cold' in this context is derived from the fact that the investigation has normally ceased and all identified lines of inquiry have been pursued and no detection has been obtained.

The investigation of a major crime, such as murder, is seen by the public as an index of police competence (Innes, 2003, p276). This was conceptualised by Sara Payne, the mother of murdered schoolgirl Sarah Payne, when at the Homicide Working Group SIO Conference (2006) she stated: “*If you put a step wrong in one of these big cases, you will be guilty for hell freezing over*” (Payne, 2006).

Advice from the Crown Prosecution Service (CPS) regarding the obligations of homicide investigation under Article 13² of the European Convention on Human Rights is that the SIO and investigators are trained and experienced, they are supervised, records are kept and that the inquiry is reviewed (ACPO, 2006, p76). This is also commented on by Grieve, Crego and Griffiths (2007, p580).

The concept of reviewing inquiries while they are live is relatively new and still controversial in some quarters. SIOs can be resistant to having another person or team examining their work, but this will change in time as the process develops and as the ‘emotional ownership’³ of a murder inquiry on the part of the SIO evolves into an organisational ownership. This study is an attempt to assist in that development, in order that good and bad practice can be more readily identified by benchmarking against academically tested research, rather than using the reviewer’s judgement alone which is as likely to be as inconsistent and subject to the same personal bias as the original investigation may have been. It is all about learning and avoiding the mistakes of the past and in accordance with ACPO advice on *Major Crime Reviews* (Sawers, 2008).

The aim of the research was, therefore, to evaluate a tool for murder reviews which could be used to standardise and formalise the process, assist in the identification of strengths and weaknesses in an ongoing investigation and thereby reduce miscarriages of justice – both the innocent being convicted and the guilty being acquitted.

2 Methodology

2.1 Design

A review of existing literature revealed that there had been a number of previous templates. However, no evidence could be found that these had been formally tested to see if they assisted in the review process. None of these templates contained a benchmark against

² Records be kept of the rationale for decisions involving human risk

³ Emotional Ownership is the undefined and perhaps irrational concept of a feeling of ownership over a situation or problem to the exclusion of others (Rigsbee, 2007).

which to judge the initial investigation but rather relied on the reviewer's own knowledge and experience.

The Review Tool was designed following an extensive literature search whereby the constituent parts of a murder investigation were identified through clearly defined literature groupings. The Review Tool was developed and structured in accordance with chapters in ACPO (2006) *Murder Investigation Manual* (MIM) with each section containing a hyperlink connection with good practice policy and, where possible, academic research. Evaluation of the tool was by way of comparing the reviews of SIOs who used the Review Tool with SIOs who did not.

The murder inquiry which was given to all participants was the first two months material of a concluded murder of a female in 2004. It would not have been feasible to ask the participants to review the whole of the murder investigation as this would have been a mammoth task.

2.2 Participants

Twelve police CID officers were selected for the study. They were divided equally into both the control and experimental groups. The two groups were similar in terms of demographics and both included three 'experienced' and three 'inexperienced' investigators in the area of murder investigation. The experienced participants were members of a force Major Crime Department who were working towards Level 3 of the NPIA Professionalising Investigations Programme (PIP)⁴ and had been the SIO of at least three murder investigations. The inexperienced participants had little or no experience of murder investigation and had never performed the role of SIO, but were equivalent to Level 2 PIP. The control and experimental groups were, therefore, of similar composition.

2.3 Materials

Two templates were produced, one for the control and one for the experimental groups. The Review Tool was composed of 31 bespoke categories and benchmarked to academic research or accepted good practice. A list of the categories used is included in Appendix 1.

These 31 categories were identified through a literature search by reading policy documents, academic literature and consulting with SIOs. They were broad headings, each

⁴ PIP is the current accreditation method for investigators on three levels where level 3 is for SIOs, level 2 PIP is for full time investigators, and level 1 is for the basic investigator.

with a number of subheadings⁵. The main identifying feature of each category was the fact that the academic work tended to concentrate on these same broad areas making them simple to signpost to good practice and policy. Collectively the 31 categories covered every area of a murder inquiry. The categories were arranged in accordance with the MIM chapters for ease of reference.

Instructions were given to ensure that the participants in both groups identified positive and negative aspects. Participants in the experimental group were asked to judge the inquiry against the benchmark and not solely rely upon their own knowledge and experience. The control group received no instructions in relation to benchmarking, but were permitted to consult the MIM and indeed any document they wished.

2.4 Scoring and coding

When the murder reviews were completed by the control and experimental groups, they were analysed using the principles of content analysis⁶. A peer review was used to test the coding and to assess reliability. The analysis was subject to independent review to ensure accuracy and to reduce any observer error or bias.

Each comment on each review was assessed for quality by the researcher and given a rating from 1 to 7 which was independently verified. Those given a rating of 1 were considered to be invalid comments where the reviewer had apparently misunderstood something. Those with the maximum rating of 7 were considered to have the potential to lead to new actions or lines of enquiry.

The amount of information included in each review was also assessed.

⁵ By way of example, the category heading of 'witness management' includes; identification, treatment of witnesses, interview strategy, pre and post trial support as well as witness protection issues. The category of 'managing communication' includes internal communications through briefings and consultation within the service as well as external communication through the media and other mediums such as leaflet drops and poster campaigns.

⁶ This is described as "*a research technique for making replicable and valid inferences from data to their context*" (Krippendorff, 1980, p21). Robson (1993) describes a six point strategy to conducting content analysis which are largely self explanatory and were used as a basis for the analysis of the data (Robson, p.275-279).

3 Outcomes

3.1 The reviews

The experimental group reviews far outweighed those produced by the control group in terms of both quantity and quality. As the groups contained the same number of experienced and inexperienced officers this suggests that the Review Tool prompted reviews which contained more information and were considered to be of higher quality. Conducting reviews using the Review Tool also took a third longer to complete which may be considered to be a negative factor. This is possibly offset by the increase in the quality of the review.

This result is perhaps unsurprising; directing the participant to pay attention to all 31 aspects of the review process must inevitably focus the mind on aspects that otherwise would not have occurred to anyone other than the most experienced of reviewing officers.

A potential drawback of the Review Tool is that it could act as a limiting factor to innovation and freedom of thought. This does not, however, seem to be borne out by this study as no additional issues were identified by the control group over and above those raised by the experimental group. Furthermore, each of the 31 categories presented a free text facility which encouraged freedom of thought and ingenuity but within the restricted and bespoke category being considered by the reviewer.

Another factor within the research was the significant difference in output between the experienced and the inexperienced participants. It is very clear that the experience of the reviewer is a significant factor in quality and quantity in both the control and experimental groups. The inference is that any officer performing a review should be very experienced within the field of murder investigations. The Review Tool has been shown to increase quality in both the experienced and inexperienced officers but the fact that the experienced members of the control group outperformed the inexperienced members of the experimental group, although by a small margin, indicates that the provision of the Review Tool is not a complete substitute for experience. It is suggested that the use of a structured tool is likely to gather far more quality information than leaving the process purely to individual thought, knowledge and experience.

One of the most interesting aspects of this research was the evaluation of the positive and negative comments made by both control and experimental groups in their reviews. There were far more positive comments identified within the experimental group in most categories over and above the findings within the control group.

The bottom line in terms of experienced and inexperienced participants from both groups was that the use of the Review Tool increased the quality of the reviews by 37%. The interesting statistic to note is that this tends to correlate with the time taken to conduct the review and that both time and quality are increased by the use of the Review Tool.

3.2 The reviewers' experience

In addition to the statistical findings, participants were asked to comment on the process they had undergone. The experimental group articulated in general terms that the process was difficult and complex, but the use of the Review Tool assisted the process of review. Two control participants used the MIM as a guide, which they felt gave them a structure to their review.

Individuals within the experimental group made a number of comments on the Review Tool, for example:

As there are more questions, there is a need for more replies. Some of the additional questions...serve as a valuable reminder to any reviewer that some of the information that they do not normally think about may exist and therefore should be reviewed.

A comment from another participant was that some of the 31 categories seemed to overlap. This is perhaps inevitable in a process as complex as a murder investigation which can never be categorised.

The document in itself is extremely detailed and is structured in a manner that directly relates to the key areas of a murder investigation identified in the Murder Investigation Manual. It is consequently logical and lends itself to benchmarking against national guidance and the structure of the SIO policy log. In achieving the detail and referenced benchmarking required, the Review Tool becomes a lengthy and time-consuming document. This prompts a detailed review but requires some continuity in the review officer's thought processes that can be disrupted when applying the document to this exercise and around additional demands.

The inference here is that a reviewing officer needs to be given dedicated time to complete what is a complex and time consuming process. The reality of the study was that the participants, although allowed to complete the reviews in duty time, experienced interruptions from their other duties. This was always going to be a weakness in the research.

Perhaps the most significant comment however was by one of the experimental and inexperienced participants who stated:

*It was really hard work. I found it really difficult, but it made me learn the MIM back to front.
It was like doing a training course.*

This is a really interesting comment in that it opens the door for the Review Tool not only to be available for operational reviews, but also an aid to training and development.

4 How Applicable is this to Operational Reviews?

This is clearly a small-scale study which has limitations in terms of how the findings can relate to the real world and how generalisations regarding its usefulness can be made. However, there is a strong indication that the use of the Review Tool by officers conducting murder reviews brings tangible benefits, not least of which is an increase in the quality of the review.

Perhaps the biggest limiting factor was the fact that all the participants were from the same police force. It may have been interesting to gather the views of officers from other forces who had differing policies, training and experience. Another interesting dimension would have been to trial the Review Tool on a non-police reviewer. This may have revealed any ‘incestuous thinking’ or mindset present within the police culture.

The amount of information made available to the reviewing officers was also less than that used in a full review in order to make the experiment manageable for the participants. The next step would be to field test the Review Tool on a murder in an operational setting. The results could be similarly compared with reviews conducted without such guidance.

5 Key Themes

There are a number of important issues that emerge from this study which perhaps go beyond the scope of the original stated aims. The first is the principle of using a structured and directed method to achieve an outcome as opposed to a free text and open process. Within the context of the study, it would appear that a guided approach produced a better outcome. This, however, may not be transferable to other contexts. It is certainly the case that if one wishes to collate certain information, a form or guided list of questions is

perhaps the best way of efficiently gathering what is required. If, however, the aim is to encourage innovation and free thinking, this could be restricted if this is presented in too structured a format.

Although the use of the Review Tool did reduce the gap between experienced and inexperienced reviewers, there appears to be no replacement for experience in murder investigation when it comes to conducting a review of a murder enquiry. This does confirm the ACPO stance that reviewing officers need to be experienced in the actual investigation of murder. Having stated this, however, the use of the structured Review Tool did still improve the reviews of experienced officers.

One of the key outcomes of the study is confirmation of what was perhaps not surprising: there is a correlation between quality and the amount of resource put into a review. This suggests that when commissioning a review, ACPO should pay particular attention to the amount of resource they are prepared to put into the process, which must be proportionate to the risks associated to the particular review under consideration. The issue of proportionality and 'best value' should be at the forefront of their minds and, in particular, the balance between the benefits of reviewing an ongoing case and the needs of the investigation. It would make no sense for a review to take place at the expense of the murder investigation itself.

The study tends to endorse the principles of the MIM and the ACPO (2005) *Core Investigative Doctrine*. The weakness in this assertion is that the Review Tool does not consider any other investigative model. However, the literature and the research does tend to support the MIM as the preferable model for the investigation of murder, if not all crime. Similarly the principles espoused within the ACPO (2005) *Core Investigative Doctrine* appear to be founded on empirical research identified within this study and, therefore, providing the best framework to benchmark a murder investigation against. This is what the Review Tool aims to do.

The study endorses the adoption by ACPO of the PIP process and the work of the NPJA in professionalising investigations as this promotes the acquisition of knowledge and the demonstration, by evidence, of competence.

6 Recommendations

- The Review Tool should be adopted as part of the SIO development programme, whether that be the MIM or the ACPO advice on reviewing murders (Sawers, 2008).
- The NPIA should place the Review Tool on the NPIA SIO website with all hyperlinks attached which will ensure that good practice, policy and procedure is immediately available to all reviewing officers.
- The Review Tool should be regularly reviewed and updated in line with new policies, legislation and new technologies.

Many lessons have been learnt already from the reviews of murder investigations nationally. One such review was of the tragic murder of Sussex school girl Sarah Payne. Her mother Sara Payne, speaking at the Homicide Working Group SIO Conference (2006) at Wyboston, made comment on how the Police Service had moved on and progressed in terms of the professional way that the police investigate murder partly due to the learning gained from the lessons from the review of her child's death. She stated:

If this is what she has done in her death, think what she would have done in her life.

Let this be a testimony to the value of the review of murder investigations.

A full copy of the research can be emailed on request.

References

ACPO (2005) *Core Investigative Doctrine*. Wyboston: NCPE.

ACPO (2006) *Murder Investigation Manual*. Wyboston: NCPE.

Baca, L. D. (2001) *The Homicide Investigator*. Los Angeles County Sheriff Dept.

Grieve, J., Crego, J. and Griffiths, W. (2007) Miscarriages of Justice – The Role of the Investigative Process in T. Newburn, T. Williamson, and A. Wright. (Eds.). *Handbook of Criminal Investigation*. Collompton: Willan.

Innes, M. (2003) *Investigating Murder. Detective work and the police response to criminal homicide*. Oxford: Oxford University Press.

Krippendorff, K. (1980) *Content Analysis: An introduction to its methodology*. London: Sage.

Laming, Lord H. (2003) *The Victoria Climbié Inquiry. Report of an Inquiry by Lord Laming*. London: HMSO.

Morris, Sir W. (2004) *The Morris Inquiry*. London: Metropolitan Police Service.

Payne, S. (2006) Address to the 2006 SIO Conference. 6th November: Wyboston.

Robson, C. (1993) *Real World Research: A resource for social scientists and practitioner researchers*. Oxford: Blackwell Publishers.

Rogers, T. (2005) *Serious Crime Investigation Review Course*. November, 2005. Harrogate.

Sawers, M. (2008) Major Crime Reviews. *The Journal of Homicide and Major Incident Investigation*. Volume 4(1) pp3-13. London: NPIA.

Appendix 1

Categories used in the review tool

1. SIO Policy Log
2. Initial Response
3. Fast-Track Actions
4. Perennial Actions
5. Identification of the Enquiry Team and Key Roles
6. Missing Persons Reports
7. Summary and Aim of the Investigation
8. Use of Hypotheses
9. Standard Analytical Products
10. Identification of Links to Other Crimes
11. Evidence of Review and Management Intervention
12. Multi-Agency and Partnership Working
13. Investigative Support
14. Identification of Scenes and Scene Parameters
15. Crime Scene Management
16. Forensic Strategy
17. Pathology
18. Searches
19. Passive Data Generators
20. House to House Enquiries
21. Witness Management
22. Family Liaison
23. Managing Communication
24. Community Involvement
25. Elimination Enquiries
26. Suspect Management
27. Surveillance Strategy
28. Covert Human Intelligence Sources
29. Reconstructions
30. Major Incident and HOLMES Procedures
31. Post-Charge Maintenance

Buried Homicide Victims: Applied geoforensics in search to locate strategies

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Abstract

Police searches for homicide victims have historically involved large numbers of police, military and public volunteers, conducting visual or manual line searches covering formalised gridded sectorised areas. Speculative digging or probing of large areas of ground has also been employed with variable success.

Geological explorative search techniques are applicable to law enforcement searches, since the underlying search philosophy, concepts and principles are similar. That is, there is a buried/concealed 'object' or 'target' desirable to be found.

The principal objective of this paper is to describe the effective and efficient geoforensic processes that can assist to locate buried victims of homicide and how the combined skills of law enforcement and geoforensic search specialists enable the ground to be better understood and more professionally searched.

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1 Introduction

Law enforcement personnel throughout the world are usually well trained and experienced in investigative, interview and crime scene recovery techniques. However, homicide ‘search techniques’ are less established with limited training and framework models. Traditional police methods of finding graves has often involved large-scale gridded areas with personnel ‘finger-tip/line searches’ and ‘trial-and-error’ excavations. These are inefficient, labour intensive, may destroy evidence and ignore subtle ground disturbances. They are sometimes supported by non-specialists such as public volunteers and should be considered with respect to whether such groups will successfully locate a highly concealed sub-surface burial (Boyd, 1979).

Within the UK, the police formalise search practice via the PNSC (Police National Search Centre) who train police officers in search procedures.

A recognised UK law enforcement definition of search is defined as ‘*The application and management of systematic procedures and appropriate detection equipment to locate specified targets*’ (ACPO, 2006). Search requires the application of systems, combined with appropriate expertise, an understanding of the ground conditions (i.e. the geology) and the deployment of detection equipment to locate a specific item. It is these processes and skills of ‘looking’ for a specific object that enables its discovery. For an SIO investigating a concealed burial a geoforensic specialist can provide valuable skills to aid any searches.

2 The Search for a Burial Site

2.1 Search objectives

The search for a homicide victim’s grave is one for, rather than of, the crime scene. The primary assets of any search are experienced, trained personnel implementing a written search strategy deploying proven techniques and technologies.

2.2 Search scale

Homicide searching occurs at all ranges of scales, geographical settings and time frames, from small individual dwellings to extensive tracts of remote rural country. In general, searching tends to evolve from the macro-sized to the micro and from the non-invasive to the invasive. The size of the grave relative to the size of the search area will also influence the most efficient search technique with the greatest detecting resolution.

2.3 Search philosophy

Scenario-based searching

Scenario-based searches are conducted using available intelligence and behavioural information, encouraging the investigator to generate hypotheses that could account for the disappearance of the victim and the body disposal method chosen by the offender. By ‘profiling’ the victim and offender behaviours, credible options for sites for disposal of a body may be considered. Behavioural Investigative Advisers may assist the SIO in understanding the capability, capacity, motive and resourcefulness the offender may have concerning the disposal of the victim’s body.

The benefits of such an approach is that specific hypotheses regarding the person’s disappearance are tested following a logical process, they remove ‘investigator’s gut feeling’ and encourage the selection of the most appropriate resources to detect the person being sought.

The search for a victim of homicide differs from traditional search and rescue techniques. The victim is not mobile and so there is no correlation of time and distance, nor will they be actively seeking their discovery. An offender has chosen a location that may have no relevance to the victim and so the victim’s last known position may not be relevant.

Feature focused

This process is the identification and subsequent searching of physical landmarks within the search area that could be easily relocated by an offender. The offender may have a particular reason to identify a landmark or may be chosen for their ease of access, relocation purposes or concealment opportunities. This process is reliant on the assumption an offender wishes to relocate the burial or be precise as to its position within a given area.

Intelligence led

Analysis of the currently known case facts or intelligence enables hypotheses generation. This ensures searching based on logic with justification for resources and finances. Geophysical and other search techniques will have a sound scientific understanding of the geology and prevailing ground conditions.

Systematic Standard Operating Procedure

Standard Operating Procedures (SOPs) should be applied to all search techniques. These provide assurance of search consistency throughout the area searched and enable valid

peer or independent reviews on the qualitative aspects of any search. These SOPs should be in a written and descriptive form and become part of the overall search strategy and documentation.

2.4 Geoforensics: The science of search

Geoforensics, also known as forensic geoscience or forensic geology, is the application of geoscience to assist with law enforcement investigations that may come before a court of law. Geoforensic specialists assist SIOs in the explorative search-to-locate and the crime scene trace evidence phases of an investigation.

For the purposes of this paper, geoforensic practitioners may be broadly divided into the two following fields, depending on their skills, expertise and capabilities:

- **Laboratory-based geoscientists:** including geochemists, mineralogists, petrologists, micro-palaeontologists and isotope specialists. They use physical trace samples to provide intelligence or evidence and assist with the identification of the location of a crime scene. They can link an offender (or object) to the scene and link the victim to an offender.
- **Field-based geoscientists:** whose skills in explorative disciplines (such as geophysics, geochemistry, geomorphology, hydrogeology, environmental geology, remote sensing and geotechnics) are used to search the ground. Geologists provide an understanding of the ground including its digability or changes that have taken place at a grave site since burial (such as erosion and weathering), and identify methods and techniques suitable to locate a grave (Donnelly, 2006)

3 Conceptual Geological Modelling: What lies beneath?

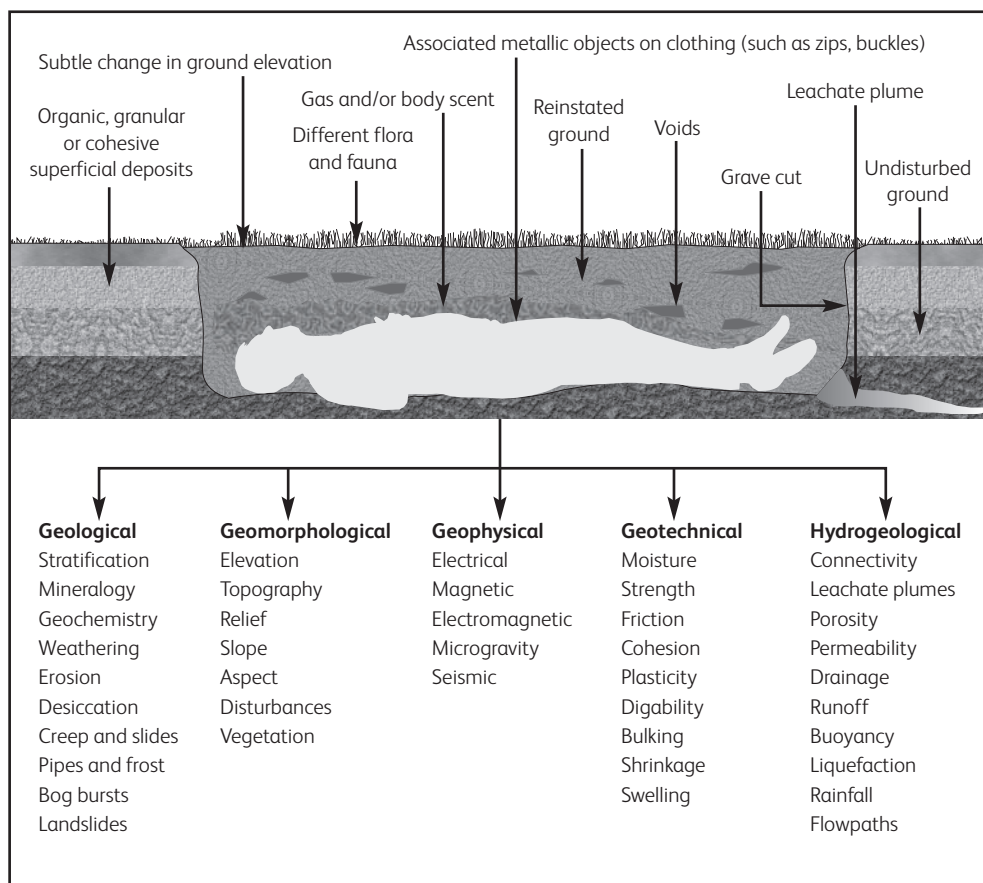
Geological modelling is perhaps not the first consideration for an SIO searching for a burial, however its use will help to ensure that any searches are more likely to succeed. A conceptual geological model for a grave is developed by a geologist before a search is undertaken and requires a specific understanding of the natural (geological) ground conditions and how these have been influenced by the activities of the offender (eg, digging, and subsequent reinstatement of the disturbed ground).

To find a buried object it is important to understand the expected geology in the vicinity of the burial site. The geological model facilitates the choice of appropriate instruments for

locating the burial. The development of the geological model requires an initial desk study to obtain a general appreciation of rock and soil types, and the influence of groundwater, with accompanying reconnaissance, (walkover) surveys to inspect and observe the ground conditions. Site visits are crucial to make detailed, expert, observations of any ground disturbance. This enables the geoscientist to decide if the observations are caused by natural events (for example weathering, erosion, seeps, springs, soil creep or subsidence), biological activity (such as burrowing animals) or man-induced (like digging or tipping of materials onto the ground surface).

Figure 1 shows an idealised conceptual geological model and the type of information that a geoforensic specialist may be able to provide. This type of model may assist in determining the most suitable suite of assets for conducting a search (after Donnelly 2002a; 2008, in Ritz, Dawson & Miller 2008).

Figure 1 – An idealised conceptual geological model for a shallow homicide grave



4 Digability and Excavatability Surveying: How low can you go?

The use of a geoforensic practitioner to assess the digability of the ground in the search area will establish, for the benefit of the SIO, the ease or difficulty any offender would have had in burying a victim and may even reduce the search area to regions where burial is achievable.

The method of excavation in rock is determined primarily by its geology. Typical methods of excavation in rock are digging or ripping (with the use of mechanical excavators) and blasting (with the use of explosives). In homicide searching such approaches to excavation may need to be considered if, for example, body disposal has taken place in a quarry, mine, pipeline trench or beneath concrete foundations.

More commonly, body disposal takes place in soil, or softer rocks (such as shale and mud rocks). The ease of which the soil can be dug (ie, its digability) and placed back into the grave (or reinstated) is of critical importance. The offender is likely to choose a site where the soil is sufficiently thick and can be quickly dug then reinstated, with no or little surface indication that digging has taken place. The digability of soil depends on its geological properties such as natural water content, depth, weathering, slope angle, groundwater, surface water, vegetation, stability of the walls on excavation, bulking and swelling of the soil as well as the method of digging. There is no generally accepted quantitative measure of digability. This can only be determined by in situ testing.

In situ digability tests may be easily performed before the search (usually at the reconnaissance stage), involving either probing or digging using tools similar to those to which the offender is believed to have had access (Ruffell, 2005b). This also provides the opportunity to inspect the soil structure to determine whether it is granular (sand rich), cohesive (clay rich) or organic (peat). These observations are important as they have critical implications on the efficiency of burial and preservation of human remains depending on the time elapsed since burial (Cornwell, 2002) and in determining the optimal detection equipment to use.

When soil is excavated, it increases in its bulk and may result in a slight increase in ground elevation, or soil distribution around the grave. Subsequent subsidence, or settlement, of the reinstated ground may then cause a depression that could become filled with standing water. A digability survey will determine the following:

- Geological information on the soil/rock types that can then be compared and matched to any soil samples seized from the offender's clothing, vehicle or digging tools to reduce the search area.
- The level of difficulty and time required for a shallow excavation and the effective depth that can be achieved.
- How effectively the soil can be reinstated and what visible topographical features may exist, to indicate the possible presence of the grave.
- A prediction of the length of time it would take an offender to bury the body. This may be relevant where the investigation has narrowed the time available for body deposition.
- The optimal geophysical detection equipment to be of use in the soil being assessed.

Once the assessment of digability is complete, an environmental assessment may be required, to include the surface vegetation to identify anomalous growth that may be accounted for by a buried human cadaver. It will also identify vegetation that has not been disturbed and thus not the scene of any burial. Advanced surveys of this nature benefit from the accompaniment of, for example, an environmental geologist, palynologist or botanist.

5 Geophysical Investigations: All things that beep

The SIO in addition to police search personnel and police dogs may consider the deployment of geophysical instruments. These are widely available to assist searches for buried objects and depend on several complex factors including types of target buried (such as human remains, money, explosives, weapons); geological conditions; anticipated depth of burial; age of burial; experience and skill of the geoscientist. Geophysical surveys can be non-invasive or invasive and may take hours to weeks to complete.

The use of geophysical methods does not preclude the use of cadaver-detecting dogs and manual search methods; rather, they are complimentary and supportive techniques as one is detecting organics the other non-organics.

5.1 Geophysical survey considerations

Geophysical investigations rarely require any contact with the ground surface (ie, they are non-invasive) for their operation and, therefore, adhere to the law enforcement preference of moving proportionately from the non-invasive to the invasive in forensic searches, thus minimising evidential contamination and damage. The data obtained provides measures of the vertical and lateral variation of the physical properties of the ground, this data can only be interpreted in the light of knowledge of the likely ground conditions derived from the conceptual geological model.

There are some common limitations that make search areas challenging for geophysical surveys. Principal amongst these are:

- The presence of metallic objects such as overhead power lines, utilities, cables, sewers, gas mains, buildings, reinforced concrete and fences (known as geophysical noise);
- Steep, or irregular topography;
- Man's activities (such as digging, tipping, building, construction, farming and mining);
- Electrical interferences (such as mobile phones, lap top computers, machinery and power cables);
- Seasonal weather variations;
- Access and logistical problems (such as trees, dense vegetation and areas of flooding).

5.2 Geophysical instruments useful for detecting burials

Magnetic

The naked human body has virtually no associated magnetic anomaly unless there are inserted medical items such as surgical medical steel pins and plates. However, a clothed buried body may contain objects that could be detected such as metal buttons, zip fasteners, shoe eyelets and belt buckles, while pockets may contain spectacles, keys, coins, pens and other metallic (ferrous or non-ferrous) objects.

Resistivity

Contrasts in the electrical resistivity between a grave and its surroundings can be delineated using depth-sounding and profiling techniques, involving insertion of electrodes into the ground and measuring vertical and horizontal variation in resistivity.

Induced Polarization

Similar to resistivity profiling, the Induced Polarization (IP) effect is a transient voltage that is observed after current flow ceases in a resistivity array. Aspinall and Lynam (1970) report use of the method in archaeological surveying, finding it slower and less effective than resistivity surveys.

Electromagnetic (conductivity)

An effective and rapid surveying alternative to resistivity profiling, allows continuous recording of the subsurface conductivity at a walking pace. Two instrument types are available; one measuring conductivity to about 1.5 metres subsurface, the other to approximately 7 metres (Clark, 1996; Frohlic and Lancaster, 1986; Dalan, 1991).

Ground Penetrating Radar

Ground Penetrating Radar (GPR) operates at a frequency range of 25 MHz to 2 GHz, and identifies shallow physical anomalies in the ground. GPR applications have received publicity in cases of buried victims such as those in Cromwell Street, Gloucestershire (so-called 'Fred West Murders') and more recently proved effective in searches at a former care home in Jersey. This approach is very effective for locating buried graves that are lined 'cavity' structures (Bevan, 1991; Ruffell, 2006).

Direct location of a buried body by GPR in a search area is more problematic. GPR experiments over buried pigs at test sites and tests carried out at the University of Tennessee, Forensic Anthropology Unit (The Body Farm) where donated human cadavers are buried, indicate that it can be used to locate such objects. Miller (2002) investigated the effects of buried decomposing human body targets using GPR over a period of time and showed that changes in GPR anomaly response related to stages of body decomposition. In such tests the GPR operator knows the target location. Test sites are also frequently constructed in uniform ground and so not a replicator for a real world search scenario.

This method may be more successful for the indirect location a buried body, by delineating the change in physical properties of disturbed soil overlying the cadaver. The skills required with this technique include those of the instrument operator as well as the interpreter of the data collected (Ruffell, 2005c; Ruffell et al., 2004).

Metal Detectors

These instruments use the pulse induction, or time domain principle and are one-man, portable, hand-held scanning devices with an audible signal or meter output. Units that are more sophisticated may locate metal coins to 0.5 metres depth, while larger targets, such as metal spades, may be located at depths of 1 metre.

Airborne geophysical surveys

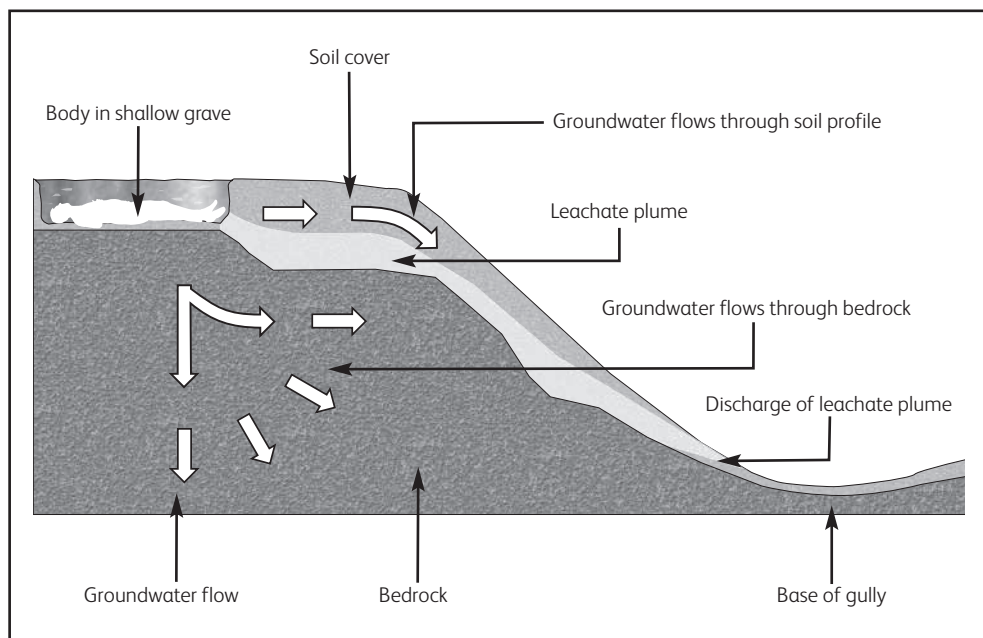
Airborne geophysical surveys may be deployed from a light aircraft, helicopter or un-manned low flying aircraft (drone). Typical types of airborne geophysical surveys are magnetic, electromagnetic, gravity and radiometric. Un-manned systems may be used at low altitude (and in hostile environments) that would be too dangerous for piloted craft. However, such an approach tends to attract public attention and may not be suitable for covert operations.

6 Hydrochemical and Geochemical Investigations: There is something in the water

An understanding of the hydrogeology in the vicinity of a gravesite is necessary as it influences surface water flow paths, groundwater flows, preservation of human remains, migration of body scent (gas/vapour), and the deployment of the most suitable non-invasive geophysical and geochemical techniques.

The size of any footprint of geochemical and geophysical signatures may improve the chances for grave detection. Leachate is water that has percolated through objects or chemicals deposited in the ground. In the context of a body deposition site leachate may contain traces of material from the body and so may assist in identifying the target area (Donnelly, 2002a, in Ritz, Dawson & Miller, 2008). See Figure 2.

Figure 2 – Schematic model to illustrate leachate plumes generated from decomposing human remains



7 The Designed and Phased Implementation of a Search Strategy for a Homicide Burial: Plan to succeed

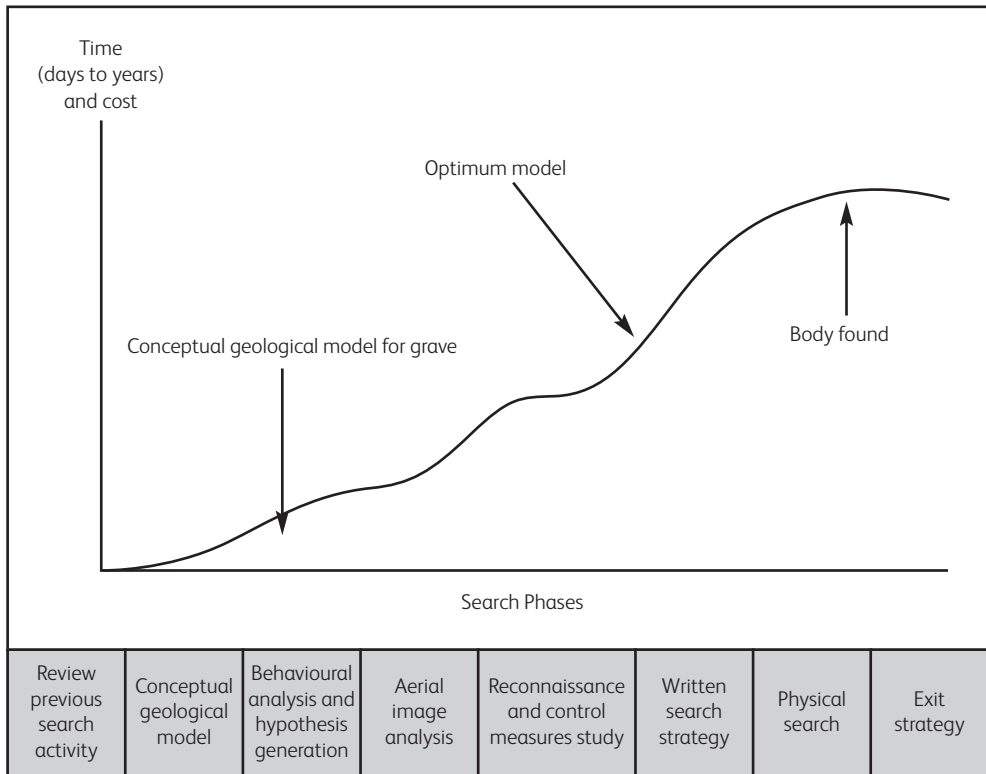
Well-organised searches follow an established pattern that begins with a desk study and review of all available information and intelligence. The generalised sequence is summarised below and in Figure 3.

- **Review (desk study):** All available intelligence, geological and other information concerning the site is collated and analysed.
- **Development of a conceptual geological model:** Producing a model that will identify the likely ground conditions, geology and general characteristics at, and in the immediate vicinity of the grave.
- **Hypotheses generation: Behavioural and geographic analysis:** Behavioural and geographic profiles augmented with confidential law enforcement databases such as CATCHEM of any suspects or victim may suggest possible disposal scenarios.

Other models may include missing persons and suicide search models. These may suggest possible places and conditions in which the victim may be found.

- **Aerial image analysis:** Aerial and satellite imagery both current and historical, preferably before the victim's disappearance, may to a trained analyst or geologist identify locations of any ground disturbances and suitable ground conditions for the choice of the grave location.
- **Reconnaissance site visits:** A detailed walk-over survey obtains an appreciation of the search area (ie: putting the desk study into actual context) to identify any technical, logistical or access constraints (like overhead power lines which may influence choice of geophysical techniques) and identifies possible gravesites by the assessment and interpretation of topographic and geological maps. These visits also encompass a digability survey to assess the viability of burial and where possible soil/pollen samples should be taken for comparative analysis against any seized exhibits such as digging tools to help identify the burial site. Finally, where applicable controls should be buried to calibrate and ensure the most appropriate detecting method or equipment is used for the search phase.
- **Development of a written search strategy:** Producing a document that will support search decisions. Including relevant information uncovered in the desk-based study, the likely scenario of disposal as informed by behavioural analysis, and the most appropriate way to search the target area based on in the field reconnaissance. It will detail the standard operating procedure (SOP) for any search asset, their likely search duration and costs.
- **Search, review and continue:** Conducted under the supervision of a law enforcement officer qualified in search management procedures.
- **Development of a search strategy exit:** A written report detailing all the searches actioned including any associated mapping and photography, and documentation of any objects found. Conclude all investigative facts and intelligence are exhausted and recommend searching cease.

Figure 3 – Schematic graph to demonstrate the phases and time/cost in a search to locate a homicide victim.



The duration, axis values and morphology of the 'curve' will vary for each search (modified from Donnelly 2002a, in Ritz, Dawson & Miller 2008).

8 Conclusions

Geoforensic specialists can offer SIOs targeted support in the search-to-locate phase of a homicide investigation by their ability to read the ground and understand the processes that affected it, before, at the time of, and since body disposal took place.

Digability surveys, geophysical equipment selection, onsite calibration and soil samples collected by geoforensic practitioners will inform the SIO on the likelihood of a burial in any given landscape. In addition, if any seized exhibits from an offender's clothing, vehicle or digging tools contain soil deposits they may through comparative analysis help the SIO prioritise or reduce the area to be searched.

Limitations in using geoforensic specialists for the SIO to consider are one of cost and potentially additional time delay in a search being undertaken due to the planning phases involved. However, these may be offset by the ultimate deployment of the right type of equipment in a much reduced search area giving the SIO greater confidence especially if a grave is not discovered. The cost benefit of using a geoforensic specialist dramatically increases when the search area is a large rural location or a large complex building where a body or bodies are believed to have been concealed.

Finally, while this paper focuses exclusively on burials related to homicide many of the processes and techniques described are directly transferable to other burial scenarios such as drugs, weapons and explosives caches related to terrorism and organised crime.

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Any views expressed in the paper are those of the authors and not necessarily those of these organisations.

References

ACPO (2006) *Practice Advice on Search Management and Procedures*. Wyboston: NCPE.

Aspinall, A. and Lynam, J. T. (1970) An Induced Polarization Instrument for the Detection of Near Surface Features. *Prospezioni Archeologiche*, 5, pp67-75.

Bevan, B. W. (1991) The Search for Graves. *Geophysics*, 56, pp1310-1319.

Boyd, R. M. (1979) Buried Body Cases. *FBI Law Enforcement Bulletin*, 48, (2), pp1-7.

Clark, A. (1996) *Seeing Beneath the Soil: Prospecting methods in archaeology*. Routledge: London.

Cornwell, P. (2002) *The Body Farm*. Time Warner Paperbacks: USA.

Dalan, R. A. (1991) Defining Archaeological Features with Electromagnetic Surveys at the Cahokia Mounds State Historic Site. *Geophysics*, vol 56, no. 8, pp1280-1287.

Donnelly, L. J. (2006) First inaugural meeting of the Geological Society of London, Forensic Geoscience Group. Geoscientists at Crime Scenes. Forensic Geoscience Group Meeting, Geological Society of London, Burlington House, 20 December 2006.

Frohlic, B. and Lancaster, W. J. (1986) Electromagnetic Surveying in Current Middle Eastern Archaeology: Application and evaluation. *Geophysics*, vol.51, No.7, pp1414-1425.

Miller, M. (2002) *Coupling Ground Penetrating Radar Applications with Continually Changing Decomposing Human Targets: An Effort to Enhance Search Strategies of Buried Human Remains*. MA Thesis. University of Tennessee.

Ruffell, A. (2006) Freshwater Underwater Scene of Crime Reconstruction Using Freshwater Ground-penetrating Radar (GPR) in the Search for an Amputated Leg and Jet-ski. *Northern Ireland, Science & Justice*, 46(3) pp133-145.

Ruffell, A. (2005b) Burial Location Using Cheap and Reliable Quantitative Probe Measurements. Diversity in Forensic Anthropology, Special Publication of Forensic Science International. *Forensic Science International*, 151, pp207-211

Ruffell, A. (2005c) Searching for the I.R.A. Disappeared: ground-penetrating radar investigation of a churchyard burial site, Northern Ireland. *Journal of Forensic Sciences*. 50, pp414-424.

Ruffell, A. and McKinley, J. (2005) What lies beneath: how forensic geoscience aids criminal investigations. *Science Ireland*, pp144.

Deposition Sites: Case studies Operation Fincham and Operation Sumac

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Abstract

Detective Chief Superintendent Wate has been the Head of CID for Cambridgeshire Constabulary for the last four and a half years. He is a member of the ACPO Homicide Working Group. He was the SIO for the deposition site of the bodies of Holly Wells and Jessica Chapman in Operation Fincham. He writes here of his experiences of dealing with this site.

Detective Superintendent Birch is an experienced SIO and has been the Head of Cambridgeshire's Major Investigation Team for the last three years. He writes here of the lessons he learnt from visiting the deposition sites in Suffolk and being briefed by Detective Superintendent Roy Lambert (retired) and David Stagg, Scientific Support Manager for Suffolk Constabulary. Both played key roles in the management of the crime scenes, and this article includes details of the way in which these scenes were managed and the lessons learnt from this experience.

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1 Introduction

The purpose of this article is to highlight learning experience from two high profile murder enquiries. Firstly the deposition site in Operation Fincham, the investigation into the murders of Holly Wells and Jessica Chapman. The second one the deposition sites in Operation Sumac, the investigation into the murders of the five women in Ipswich. Both of these have a lot in common with open air deposition sites that SIOs come across every year throughout the country. There is nothing groundbreaking to come out of either of the case studies but a lot of good practical guidance on how the deposition sites were dealt with and lessons learnt from these first-hand experiences.

In this article we look at Operation Fincham going through this at each stage of the body and forensic recovery. I have written this as a personal account. In Operation Sumac we look at this through a series of mini themes as described by D/Supt Roy Lambert and David Stagg when they briefed us and took us to each of the deposition sites. The same lessons learnt are then emphasised and brought out in a conclusion.

2 Operation Fincham

On Sunday 4th August 2002, Holly Wells and Jessica Chapman were reported missing from their homes in Soham. As a result of this, a large-scale police operation was mounted in the full glare of the world's media.

In the intervening 13 days before the girls' bodies were found, Cambridgeshire Police identified a recovery strategy in advance of such a discovery. This was developed by their scientific support manager and in consultation with the experts who would probably be used if their bodies were discovered. As with any homicide investigation it was possible that their bodies may have been deposited in another force area. Advice on cross-border investigations published in this issue of *The Journal of Homicide and Major Incident Investigation* states that:

'Conventional police wisdom is that the investigation should be run by the force best placed to identify the perpetrator'

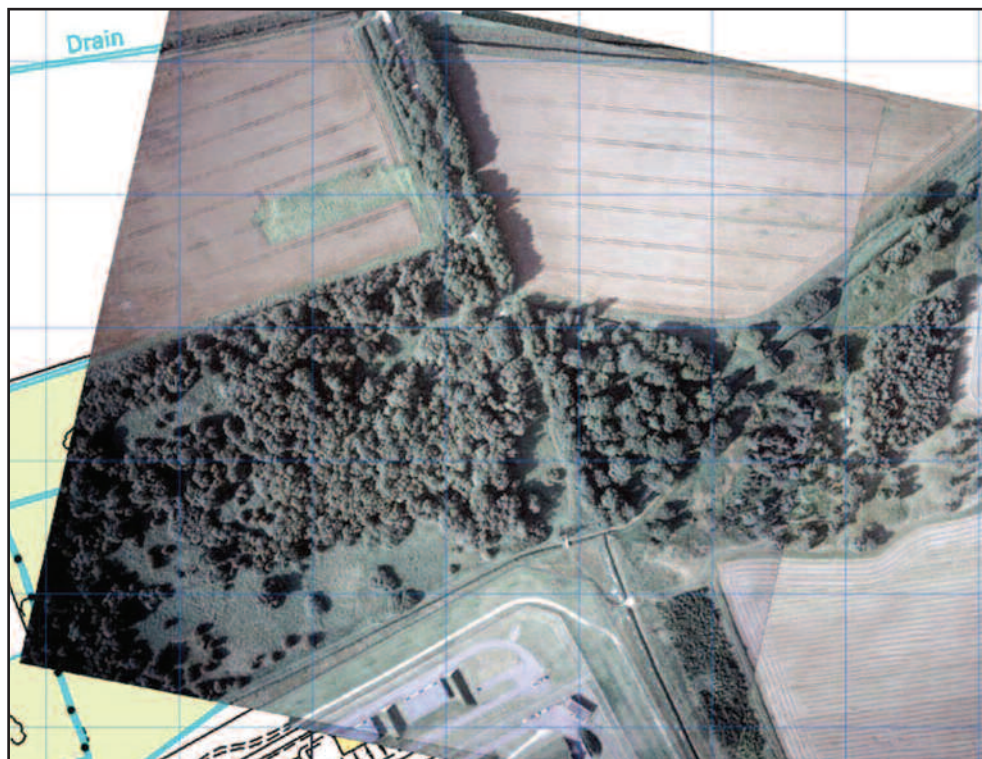
Pearson, 2008:28

This, of course, cannot be written in tablets of stone and any decision must follow full discussion between forces involved. As a result, a probable recovery strategy was agreed and it was concluded that if the girls' bodies were found anywhere else other than in

Cambridgeshire, it was likely that Cambridgeshire would take primacy. This was circulated to all forces adjacent to Cambridgeshire and each agreed on this as the appropriate course of action.

At about 1pm on Saturday 17th August 2002, I received a call telling me that two bodies had been found in a ditch in Suffolk. I was designated as Senior Investigating Officer (SIO) of that scene. This immediately brought into play the recovery strategy that had been agreed in advance: Suffolk Police had been previously consulted so were aware of the plan within it and were in full agreement.

Figure 1 Aerial photograph of Operation Fincham deposition site



On arrival in Suffolk, I identified a rendezvous point at Mildenhall police station, a couple of miles from the scene. I instructed all personnel arriving and all experts to attend this location rather than the scene. My reasoning behind this decision was I felt in better control of the experts and staff away from the site as my thoughts were that they would be looking at the site rather than us, concentrating together on how best to forensically recover the bodies.

There are a series of connections between Operation Fincham and Operation Sumac; DCS Stewart Gull the Officer in Overall Command for Operation Sumac was the On Call Superintendent and the Divisional Commander for the area that the bodies of Holly Wells and Jessica Chapman were found in. David Stagg was the Head of Scenes of Crime for Suffolk at the time and attended both the scene of the girls' deaths and also the experts meeting. Dr Nat Cary was the Home Office Pathologist for both operations.

Prior to the meeting I attended the scene to get a firsthand feel for the scene and to be briefed by the Suffolk DI at the scene. Suffolk Police had carried out a fantastic job of cordoning off both ends of Wangford Road as well as all around Common Drove leading to where the bodies were lying in a woodland area called 'The Carr'. They were lying in the bottom of a ditch.

I decided that it was very important to get the distance of the outer cordons right to stop not only press intrusion but also members of the public entering the scene. This proved to be very useful as very soon hundreds of members of the public and press arrived at this outer cordon.

I then confirmed an inner cordon at the top of Common Drove and decided on a PoISA search along the couple of hundred yards or so of Common Drove up to a several metre inner cordon for the forensic search up to the bodies. I found it important to have a separate scene log on each of these cordons, as specific restrictions could be put on each cordon, thus allowing investigators room to work while keeping access to central areas to a minimum.

Holly and Jessica had been found by a gamekeeper and two of his friends. A learning point here was that my arrival was a couple of hours or more after discovery and the witnesses who found them were still there waiting. It would have been best for them to be either taken home or to another location.

The media interest was already building and was quite considerable at each of the cordons. I made a decision with the Media Department to allow four representatives down to the bottom of Common Drove to film as a syndicate for the others. We were still having media incursions around the site and I called the police helicopters from Cambridgeshire and Suffolk to police a no fly zone, which I had requested to come into force.

On looking up Common Drove to 'The Carr', from Wangford Road, I was met with a chalk path. The bodies were 150 yards or so further down the chalk path. This path was also made up of mud, bits of broken concrete and rubble. Suffolk Police had already formulated a common approach path, which I agreed was correct. I also had the inner cordon up closer to the bodies.

I made a decision not to have any experts at the scene at this stage. I had the scene videoed from the road by one of the Suffolk Scenes of Crime Officers (SOCOs) which I had been given. I also had one of the other Suffolk SOCOs photographing any footprints or tyre tracks all the way up the road.

That night, back at Mildenhall police station, all of the experts had by now arrived. The most important part of any body recovery from a deposition site now took place, namely the planning meeting. I had everyone present who I felt could assist me with how best to recover the bodies. We carried out a video briefing and went through a detailed body recovery plan. It was often difficult with a number of experts present, all of whom felt that they should take priority. It was important that the SIO and Crime Scene Manager adopted a phased approach to the forensic recovery and that they developed a recovery plan based on the recommendations received from expert advisers.

I wanted to ensure that we maximised the amount of material gathered from the scene. The scene was too extensive to cover it all with artificial lighting and, by this time, daylight was fading. We checked and established, via various websites, that the weather would be fine again on Sunday. Given the long days that had been worked by both staff and experts and the length of time the bodies had already been in situ, the decision was made to recover the bodies the following day when refreshed staff could work in daylight.

Figure 2 Deposition site for Holly Wells and Jessica Chapman



This is the time that I should have maybe put more thought into the use of a tent to cover the bodies. It had looked an impossible task on the previous day due to the width and depth of the ditch. Given the disruption to potential evidence underfoot that placing a tent in such a difficult location would have caused and the weather predictions I had decided against the use of tents over

the bodies. I now feel that the use of a tent to protect outdoor crime scenes should be a consideration at the top of all SIOs' decision making on deployment to a deposition site.

Family Liaison Officer deployment and strategy was key to ensuring that the families fully understood what was happening and the reasons behind my decisions, particularly as recovery was to be delayed until the next day. There is no doubt that the impact of the crime scene management tells immeasurably on a family's emotional state. This is illustrated by the following quote from Holly's father Kevin Wells on how he saw my decision making in this case.

'A decision has been made that the girls' bodies will remain in situ overnight. This should allow enough time for all the experts to visit and complete their tests. The priority now is to secure as much evidence as possible to convict the person or persons responsible for the murders. That makes sense. But what hurts at this moment is the fact that Holly although dead, is going to be left in a ditch. It seems so demeaning.'

Wells, 2005:102

Sunday morning, 18th August 2002. My Crime Scene Manager Ken Lewis and I arrived at the scene early and I briefed the staff that we had four priorities.

1. Identify the bodies.
2. Establish cause of death.
3. Establish time of death.
4. Implicate any offenders.

During the following 16 months leading up to the trial, all four of these priorities were achieved.

Due to the limited working space around the bodies I decided that the best way to ensure a phased recovery was to limit the number of experts at the scene on that Sunday. Only four were used in this initial stage along with two SOCOs, an entomologist, an environmental profiler, a FSS biologist and a Home Office pathologist.

This was decided according to the circumstances and needs of this particular investigation and may not be appropriate to other cases. There are now a number of contacts and advice documents that are available which I didn't have at the time. Documents including NPIA (2008) Briefing Paper: Body Recovery and the NPIA (2008) Expert Advisers Information Pack contain useful advice. In addition the NPIA Specialist Operations Centre at Wyboston can also provide advice and access to a number of support services.

I asked the odontologist to meet us at the hospital. I was of the view that as few people as possible should see Holly and Jessica after they had been found. I wanted the world to remember them as the two little girls in Manchester United tops under the clock.

I decided that we needed the road cleared up into the woodland area. I used a PoISA search team to carry out a line search so that we could clear the road ready for the undertaker's vehicle. This enabled the vehicle to get up into the woodland area later on that day.

The ditch itself was about five feet deep. It had been water-filled and the water level was altered by the movement of boards to regulate the water in the fields around. It was ringed by woodland, leaving deposits in the base of the ditch. There was a large amount of vegetation at the top of the banks. There were signs of burning to both bodies and the tree branches directly above them.

When we carried out our forensic recovery, conflicting opinions were presented by two of the experts with respect to the amount of time the bodies had been in situ. This led to some conflict regarding the order in which experts would be able to access the site. Although we did maintain a degree of flexibility, the recovery plan had been carefully thought through and the decision was made to stick to the original plan. Ken Lewis the Crime Scene Manager re-emphasised the agreed phased recovery plan, thereby ensuring that everybody knew exactly what they were doing. This seemed to work effectively.

We carried out a forensic search with the two SOCOs, up to where Holly and Jessica were lying. The Home Office Pathologist, Nat Cary had arrived and it was at this stage that we had our own monsoon. We had sheets and sheets of rain, thunder and lightening directly overhead. I really thought that I'd got it wrong and that we should have probably recovered the bodies through the night. In fact, Peter Lamb FSS and Nat Cary often mention when lecturing about this forensic recovery, that it is the first time they've ever had a SIO worried about their health and safety! I made the decision that it was no longer safe to be up Common Drove and we all retreated back to the vehicles on the Wangford Road.

However, it didn't take long for our tropical storm to blow over and we returned to Common Drove, recovering both the bodies during the next session down there. It was at this time that I was as sure as I could be that it was Holly and Jessica. I came to this conclusion based upon items found at the scene. I had been in contact with the Family Liaison Officers throughout the day. We made the decision, for the benefit of everybody to make a public announcement to that effect.

We continued with the recovery and took the girls to Addenbrookes Hospital.

We worked through the night and the post mortems on both Holly and Jessica were completed almost 24 hours later. I attended the post mortems. A short while after that we returned to Common Drove to continue the forensic recovery which had been halted overnight.

On the Wednesday, I escorted the families to the deposition site to show them where their girls' last resting place had been. It was very emotional all round.

When showing the families the scene from the investigation we considered very carefully the presentation of both ourselves and the scene itself. It is clear from Kevin Wells' book that this simple gesture made an impression that had a lasting impact on the family.

'Det Supt Russell Wate meets our group. Like all the scenes of crime officers, he is dressed immaculately in suit and polished shoes, as a mark of respect. Given the quagmire around us, it is a gesture that we appreciate deeply.'

Wells, 2005:120

The forensic recovery probably went on for 15 months or so with the use of soil experts, fire experts, further entomologists, biologists and botanists in order to piece together any evidence that we had that could implicate Huntley to 'The Carr' at Wangford.

3 Operation Sumac

On 1st November 2006, Tania Nicol was reported missing in Ipswich, Suffolk. Little did Suffolk Police know then that they would be launching the biggest crime in action murder enquiry that the UK had ever seen, with worldwide press interest. During the next six weeks four further victims Gemma Adams, Anneli Alderton, Annette Nichols and Paula Clennell, went missing and were subsequently found to be murdered. Each of these women had a separate SIO and enquiry team working to that murder.

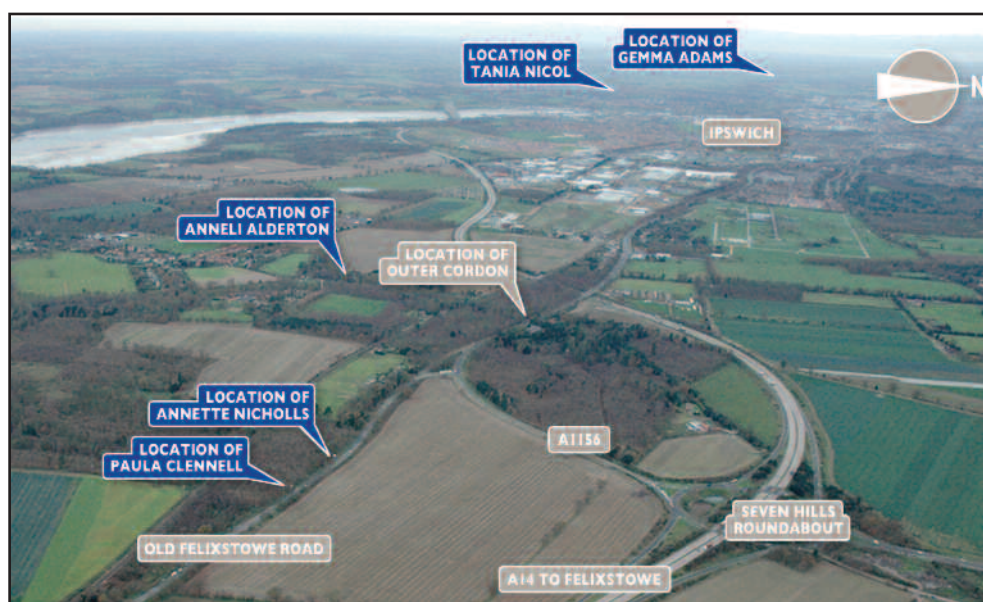
On 15th December 2006 all five murders were formally classified as a linked series homicide enquiry.

3.1 Body locations

The discovery of Gemma and Tania's bodies in water presented its own difficulties. It was immediately clear that these were not deposition sites and the bodies had been deposited substantially up river. Their actual deposition sites were never identified. The bodies were badly decomposed and were removed by stretcher board, as soon as possible, to carry out a post mortem. A PoISA search was carried out in the immediate vicinity of the recovery, in essence to recover any items of significance. As these were not deposition sites as such I will be concentrating on the land discoveries.

The first land-based deposition site was that of Anneli Alderton. This site was in a woodland about 20 metres from a fairly quiet country lane. It was about 50 metres from a junction with another lane. Entry to the deposition site could have been from either lane, although the more secluded secondary lane would have meant a longer journey carrying the body. Conversely, the less secluded lane with the shorter journey would have meant any vehicle used by the depositor would have been visible to passing traffic. The woodland was dense, although being December the foliage was very sparse. There were no walking paths nearby and there was potential for the body to remain undiscovered for a considerable period of time. There was no obvious approach path to the body. Anneli's body had been 'laid out' in a clear bid by the depositor to 'present' the body.

Figure 3 Aerial photograph of Operation Sumac deposition sites



The second and third land-based deposition sites were that of Paula Clennell and Annette Nicholls. They were very close together and can be described in similar terms. These sites were adjacent to a busy country road. The bodies were found about 5-10 metres into the wooded area. There was dense foliage although, as detailed earlier, given the time of year this was at its thinnest. There were lay-bys on the road as well as room to stop a vehicle. A vehicle could have easily stopped by the side of the road and a depositor removed a body. This would clearly have involved huge risk. There was no obvious route to the bodies other than from the road as the woodland was very dense with no paths leading to the body from the other side. Annette's body had also been 'laid out' in a similar fashion to that of

Anneli Alderton's. These bodies were much more likely to have been discovered, given their close proximity to the road.

3.2 Scene preservation

One of the first things carried out on discovery of each body was a fly-over by the force helicopter. This recorded the exact location of each deposition site and provided a valuable tool for later briefings and decision-making processes. It was during the fly-over of the deposition site for Paula Clenell that the body of Annette Nicholls was discovered.

As in Operation Fincham the SIO, in conjunction with the Crime Scene Coordinator (CSC), had prepared a recovery plan in advance of any discoveries. This mapped out a staged approach to forensic and body retrieval. The aim being not only to identify who had deposited the body at the location, but to link the victim and suspect to any subsequent crime scene by way of trace evidence and ultimately to identify the murderer.

David Stagg highlighted the necessity in using a temporary smaller tent over the body while a larger tent was erected. This was identified by him as essential in the preserving the scenes. He also highlighted the importance of taking scene temperatures and tent temperatures as tenting a body for any length of time can distort the results of some forensic examinations, specifically around entomology.

At the scenes, good inner and outer cordons were created with an additional outer cordon. This was similar to Operation Fincham and kept both media and public out of the scenes. At the site where two bodies were found in close proximity, each was dealt with as a separate entity. Each had its own inner and outer cordon, with a wider third cordon covering both.

At the initial findings, photographs and video were taken. A sweep with crime light was carried out in the dark and then the scene closed down for a briefing.

3.3 Forensic recovery: Experts, planning and prioritisation

On discovery of the deposition sites, the importance of a pre-examination briefing could not be over emphasised by both DCS Wate from Operation Fincham and D/Supt Lambert from Operation Sumac. In attendance at this briefing were the SIO, CSC, CSM, Specialist Adviser (SA), forensic scientist, environmental scientist, pathologist and Scenes of Crime team.

The importance of utilising a CSC was identified in order to deal with the strategic issues facing the forensic team. The CSC provided the link into the Officer in Overall Command (OIOC) and dealt with the strategic issues, whilst the CSMs dealt with the tactical issues at each site.

DCS Stewart Gull's OIOC meetings included the five SIOs for each part of the enquiry as well as the CSC. There, forensic submissions for each of the deposition sites were prioritised based on the entire picture and the strategic objectives for the whole enquiry.

A technique used during body recovery included pre-prepared swabs. Body swabs were taken by the pathologist, while tapings were taken by SOCOs. A mobile lab was used at the scene for screening purposes (This mobile lab was used at a later stage for screening large numbers of clothing exhibits recovered from the two suspects). The order of the experts' attendance was decided at the briefings.

The importance of early examination of fibre samples from the scene was highlighted thus enabling focused viewings of the suspect's clothing. The same was true of hair samples from both bodies and garments.

As previously mentioned, the two bodies that were found in close proximity were treated as separate scenes. No assumptions were drawn and each had its own cordons. The forensic team dealt with one in its entirety and completed the post mortem prior to doing any work at the second scene. The second scene was covered, secured and then shut down pending the first being finished. Cross-contamination issues were highlighted in advance and one scene dealt with 24 hours after the first. Scientists and experts were advised to deal with wash-ups, clothing changes and new full personal protective clothing prior to attending the second scene. The mortuary was likewise fully cleaned as highlighted earlier, prior to the following post mortem.

A search strategy meeting included the SIO, CSM and Search coordinator. There the strategy and parameters of the search were agreed and formulated. It is noted that the PoISA still carried out searches in the inner cordon areas after scientist and forensic searches had taken place. This yielded positive results, identifying fibres that linked the offender to both the scenes and the bodies.

Body removal was pre-empted by a pathway being cleared within the inner cordon and samples being submitted for screening.

3.4 Post mortems

At the mortuary, contract cleaners were used to deal with scene contamination issues between each post mortem, even though the speculative DNA swabs and fibre tapings had been taken from the bodies in situ at each scene. Likewise a discussion took place with the pathologist to ensure no cross-contamination issues were present. The same scientists and pathologist were used. Different SOCOs were used from those at the deposition sites and between each post mortem.

Additionally, there were pre-post mortem briefings with the pathologist, SIO, CSC, CSM, SOCOs and exhibits officer. The strategy was discussed and recorded for the post mortem. The importance of ensuring the exhibits officers are trained and experienced was also highlighted.

3.5 Court presentation

The SIOs for Operation Sumac found it beneficial to think about how they would present their deposition site to the court as they were setting out on their forensic recovery. Much thought went into these court presentation issues at the outset of this enquiry. Use of private companies and other forces to support presentations of information to the media and later at trial by the prosecution team was highlighted.

Evidence was presented in a number of ways:

1. Use of computer flow charts linking in specific garments with fibres found and then identifying them to specific crime scenes or deposition sites. These were supported by ANPR and CCTV images linking into the presentation.
2. Body mapping diagrams specifically identifying DNA sites.
3. A specific fibre mapping presentation.
4. Mounted 3D images were used to show the deposition sites and identify clothing that was significant to the prosecution.

4 Conclusions

These high profile case studies are both interesting and provide learning for SIOs in a number of ways. The main areas of good practice identified are:

- 1 **The production of a recovery strategy in advance of the identification of a deposition site.** This allowed both SIOs to engage with relevant experts at an early stage and put them on standby until required.

- 2 **The use of multiple cordons.** The outside ones kept out the public and press. Inner cordons were used for PolSA searches and inner/inner cordons for forensic recoveries. Separate logs for each of these cordons also proved essential.

- 3 **The planning meeting with experts pre-recovery.** This was crucial in both investigations. It allowed everyone to focus on the job as a whole and ironed out any issues in relation to specialisms before attending the scene. This meeting and the subsequent recovery plan also helped the SIO and Crime Scene Manager to maintain control of the site. In Operation Sumac they also made very good use of a post body recovery debrief before attending to the post mortem.

- 4 **Consideration of the issues for family liaison raised by deposition site management.** The points raised by Kevin Wells in his book illustrate all too clearly the impact that this can have on the family.

- 5 **Scene protection for the bodies.** This worked well in Operation Sumac by tenting the bodies but needed further consideration in Operation Fincham. The experience of the latter suggests that such protection should be considered regardless of current or predicted weather conditions.

- 6 **Consideration of cross-contamination at SIO level.** In Operation Sumac the use of outside contractors to do an industrial clean seems very good practice. This was also illustrated in the management of deposition sites for the bodies of Paula Clennell and Annette Nicholls as separate scenes despite there being only a maximum of a hundred yards between them.

- 7 **The taking of scene, tent and body temperatures.** This proved to be was found very useful for Suffolk Constabulary, allowing a more precise interpretation of the rate of decomposition in relation to the length of time the bodies had been in situ.

- 8 **Early consideration on the discovery of the deposition site of how material will be presented at court.** Both Operation Fincham and Operation Sumac used a number of advanced techniques to highlight the deposition sites to ensure the jury could at least get some flavour of what was at the scenes at the time of the recovery of the bodies. Much of this material would have been difficult or impossible to generate at a later point.

Further information in relation to the Operation Sumac investigation is available in the strategic and tactical debriefs produced by the NPIA. These are available on www.genesis.pnn.police.uk.

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References

ACPO (2006) *Expert Advisers Information Pack*. Wyboston: NCPE.

NPIA (2007) *Strategic Debrief Operation Sumac*. London: NPIA.

NPIA (2008) *Briefing Paper: Body recovery*. London: NPIA.

NPIA (2008) *Tactical Debrief Operation Sumac*. London: NPIA.

Pearson, S. (2008) Managing Cross-Border Single Homicide Investigations. *Journal of Homicide and Major Incident Investigation*, Vol 4 (2) pp27-41. London: NPIA.

Wells, K. (2005) *Goodbye Dearest Holly*. London: Hodder.

Using the National Mobile Phone Register in Homicide Investigations

**Detective Superintendent Mick McNally,
National Mobile Phone Crime Unit**

Abstract

Detective Superintendent McNally has been the head of the National Mobile Phone Crime Unit (NMPCU) for the past three years, previously working in the Serious Crime Directorate (Homicide Command) and in covert policing.

The NMPCU was set up in 2003 in response to the significant rise in mobile phone related street crime across the UK. The unit is jointly funded by police forces and the Home Office, and works closely with industry. The NMPCU is primarily a national intelligence unit, which has undertaken some targeted proactive work and provides support and guidance to law enforcement agencies across a wide range of covert and overt policing activity. The unit targets intelligence development in the areas of cross-border, organised criminal networks, supports law enforcement agencies with volume crime and identifies new technology and emerging trends.

The purpose of this article is to highlight a number of areas where the NMPCU can add value to investigations within the homicide and major investigation arena, particularly in relation to the use of the National Mobile Phone Register (NMPR) and the effectiveness of the industry contacts via the NMPCU. It should also be noted that in the past eighteen months this unit has achieved considerable success in utilising call data to track down wanted persons who were difficult to trace via conventional methods, identifying and providing critical evidence to support prosecutions for linked series crime.

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1 Introduction

The NMPR (www.thenmpr.com) is critical to the work of the NMPCU and all other law enforcement agencies are encouraged to use it to help officers identify stolen mobile phones and exploit detection and false crime reporting opportunities. The register has been the foundation of the NMPCU success, with the total number of mobile phone crimes reduced by 40 per cent in the Metropolitan Police area alone.

Figure 1 – The NMPR website



The NMPR is an internet-based secure search portal accessible to all law enforcement staff within the UK with a password. There are approximately 25,000 police searches completed per month and over 22 million items of property included within the databases searched by the NMPR. The register searches the unique International Mobile Equipment Identity Number (IMEI) of a mobile phone. It can also search other serial numbers relating to items such as watches and ipods and **in limited cases** can search a mobile phone number. This last feature is only accessed via the NMPCU, see Box 1 in Section 3 How to Access the NMPR.

The NMPR searches a number of databases including:

- Shared Equipment National Database (SEND) – populated by the crime reports from all police forces across the UK and insurance companies documenting insurance claims.

- Shared Equipment Identity Register (SEIR) – populated by phone networks recording details of phones reported lost or stolen to them by customers.
- Immobilise (www.immobilise.com) – populated by members of the public using this as an asset registration site for mobile phones and other property.
- Retailer records of customer details from the point of sale.
- MFound – used to record details of phones that have been recovered and are believed to have been previously lost or stolen.

Figure 2 – Identification numbers potentially available from one handset



The NMPCU advocates that all forces record IMEI details of all lost or stolen phones so that they can be entered into the SEND database for searching via the NMPR. It is also advised that police forces search IMEI numbers on the NMPR at every legitimate opportunity (eg, mobile phones belonging to all prisoners detained in custody suites) to exploit detection opportunities.

2 The National Mobile Phone Register

When a search of the NMPR is completed, there is potentially a wealth of information available to the searching officer.

Ever been blocked (Y/N)	Lost/stolen (Y/N)	Valid TAC (Type allocation code)	Registered (Y/N)	Found (Y/N)	Searched earlier (Y/N)	Search on CheckMend (Y/N)
Has the network been notified of it being lost/stolen at any time?	Is the phone currently lost/stolen? (Should have crime reference number)	Make and model of phone for comparison.	Has the owner registered on immobilise-public asset registration scheme?	Has it been recorded as found but not returned to owner?	Useful intelligence information giving details of previous searches.	Legitimate recyclers will carry out this to establish if phone lost/stolen, no further details given to recycler.

This information can lead to the identification of a victim of crime, intelligence that an officer has previously searched the handset details (there should be another record of that previous search, eg, custody record, stop slip). This may in turn identify potential suspects currently in possession of a stolen phone.

3 How to Access the NMPR

The NMPR is accessible to all police officers and police staff across the UK who would have legitimate reasons to use it for crime prevention, intelligence and enforcement purposes. Officers must first obtain a password by entering the website **www.thenmpr.com** from a computer working within the police national network (pnn-secure network). When the front screen is displayed, the officer has to Request Access and this generates an email request for a password. The officer has to provide a number of personal details and a password will be automatically emailed to the officer within minutes.

Once a password has been received the officer can access the register and conduct their own searches. As stated previously, in some instances additional information may be available by contacting the NMPCU.

Figure 3 – Search page

The screenshot shows a web application interface for searching. At the top is a navigation menu with links: Search, Bulk, Auditing, Report, Operations, Statistics, SPOC, Analysis, ReportMyLoss, Information, Documents, Logout. Below this is a sub-menu with 'Profile' and 'Email support'. The main heading is 'Searching on behalf of someone else' with a sub-link 'Search at my request'. The search form includes:

- A text input field for 'Search for IMEI or other serial. (Also Mobile or Land-line)'.
- A dropdown menu for 'Reason for search' with 'Select' as the current value.
- A dropdown menu for 'Party's force' with 'Select...' as the current value.
- A dropdown menu for 'Party's borough'.
- A text input field for 'Party's id/warrant'.
- A 'Search' button.

4 General Use of the NMPR Within the Homicide Arena

The NMPR is able to access over 22 million items of property across a number of databases described above, this is increasing on a daily basis. It is strongly advised that all property of significance to a murder enquiry is checked against the NMPR (eg, phones, watches, ipods) at the earliest opportunity and that appropriate information reports are created to reflect police interest in these items.

It should also be noted that much of the telecommunication data obtained from the telephone networks documents consist of not only phone numbers but also IMEI numbers.

The Register can be used to help with the following:

- To identify the owner/user of a handset through information on the register provided via asset registration, network providers, retailers, phone re-cyclers and police crime data.
- Use of the information report feature (similar to Police National Computer-PNC information report) to alert officers who search the register of the interest of a phone to a another crime enquiry. Reports can only be created by NMPCU staff who can be contacted on 0208 246 0028 for advice.
- Audit trail records of police searches of the register provide potential lines of enquiry for investigating officers to identify persons in possession of a phone either before or indeed after an incident.

- Audit trails also provide opportunities to identify recyclers who have used the NMPR system prior to negotiating purchase of a second handset. This may then assist in identifying for example, CCTV or further witnesses.
- Type Allocation Code (TAC). In simple terms, part of the IMEI number of a handset is assigned to a particular make and model of phone by GSMA which is the global trade association representing most mobile phone operators. That means that when an IMEI search is completed on the register the make and model of the handset details on the register should be the same as the phone being searched by police. If this is not the case, this may indicate reprogramming which may have a bearing on the investigation being conducted.

Box 1 Specific Use of NMPR in Homicide Arena

In September 2007, serious crime investigators were investigating a multi-suspect homicide. They initially arrested four main suspects, however, there was one suspect who was noted on CCTV at about the relevant time of the offence. The only details they had were a nickname and a mobile phone number which was registered as pre-pay with no further keeper details. The enquiry team used the NMPR to carry out a telephone number check (only currently available via NMPCU) and it was ascertained that this phone had been registered on one of the databases. This led to his early arrest, subsequent charge for murder and the completion of what could have been a long outstanding line of enquiry with the potential to cause complications at a trial.

A recent development has been the inclusion of information reports, similar to the Police National Computer (PNC) information reports; these can only currently be inputted by NMPCU staff. For example, this allows investigating officers to update the NMPR record to highlight that a particular phone has been stolen during a particular offence and that if found it needs to be preserved for forensic examination. This is a free-text field which can include suspect details together with the reference and contact details of the incident room. This feature is of particular importance to homicide investigations as this is the only method on a national basis where police interest in a particular handset can be registered. Although a new feature, it is now being used by homicide investigators.

The NMPCU operates as the UK law enforcement SPOC for the major mobile phone handset manufacturers. These partnerships have been built up over time and homicide investigators are recommended to liaise with the NMPCU SPOCs for advice when seeking industry expertise and assistance.

The NMPCU has a number of covert assets that can be used by homicide investigations involving mobile phones.

If there is a mobile phone involved in a murder investigation consider using the NMPCU's expertise and experience.

5 Case Study 1: Homicide prevention

Between May and August 2007, police identified a series of violent robberies in an affluent city area. The offenders targeted either lone females or those accompanied by children and stole property valued at approximately £100,000. The modus operandi for these offences was very similar in that the victims were either attacked from behind or confronted by two or three male suspects who would use excessive violence to steal their jewellery either by grabbing them by the neck and attempting to strangle them or punching them in the face. The level of violence was escalating, with threats being made to kill the victims in the later offences and so it was vital that these suspects were captured.

This linked series was investigated by a dedicated crime squad working with officers from the NMPCU to try and identify these suspects at the earliest opportunity. Early enquiries established that a similar vehicle had been involved in the first two offences and police were able to trace the car from a partial index given by witnesses. Subsequent enquiries enabled police to identify telephone numbers for a male suspect who owned this car at the time of the offence and then sold it a few days after the second offence. Telecommunication tactics were used to identify a suspect. Given the lack of identification opportunities, a surveillance operation was conducted against this main target and he and another suspect who fitted the description of the suspects in the series were caught by police in the act of committing a strangulation robbery.

Both suspects gave 'no comment' interviews and were subsequently convicted at court. The main suspect who was implicated in the five offences was sentenced to life imprisonment with a minimum recommendation of twelve years. The second suspect, who was only implicated in the last offence, was sentenced to six years imprisonment.

The example demonstrates the ability of the NMPCU to work with other police units to maximise investigative opportunities using telecommunication tactics.

6 Case Study 2: Homicide investigation

Homicide detectives contacted the NMPCU seeking advice and potential industry support. They were investigating a murder, which involved the recovery of a significant exhibit, a broken PCB (Printed Circuit Board) from a mobile phone. The investigation team sought specific details of this device, including:

- Clarification of the product code numbers shown on the device;
- Handset model;
- Manufacturer;
- IMEI;
- Supply chain from point of manufacture to retailer.

They hoped this would enable them to identify the phone numbers attributed to the handset in order to progress this evidential lead.

The exhibit was examined by an NMPCU partner technician, in an evidentially controlled environment. Identifying the following details:

- Product numbers on PCB confirmed it was a genuine handset;
- Model number derived from product number;
- Date of manufacture;
- Distribution chain details from manufacture to retailer;
- IMEI number on handset.

The information supplied by the NMPCU was of significant value to this murder enquiry. The extraction of the IMEI from the damaged PCB enabled the investigators to obtain the

telephone numbers attributed to the handset. This ultimately led to obtaining call data. The NMPCU and partners provided expert witness testimony at the trial. This evidence supported the prosecution.

7 Conclusion

The NMPR has historically been seen as a search portal available to help BOCU officers deal with volume mobile phone crime and recover stolen mobile phones and support charges of handling or theft offences. More recently its analytical tools enable it to identify potential false reports and other detection opportunities.

The murder case studies which have been highlighted demonstrate the NMPR and the NMPCU's usefulness to homicide enquires, not only to trace suspects, but also to add information reports to the NMPR, highlighting the importance of any mobile phone involved in a murder investigation.

The NMPCU has also built up extensive contacts within the mobile phone industry and these can be used where required.

The NMPCU collates and disseminates Good Practice Guides across a range of policing activity and further details about call data techniques can be obtained from the NPIA Genesis site. **www.genesis.pnn.police.uk/genesis**

Focus On... Forensic Linguistics

Featured Experts: Dr Timothy Grant
Mr John Olsson
Professor Malcolm Coulthard

Interviewed by: Carolina Villaneda
Investigative Practice Team
National Policing Improvement Agency

Abstract

Our first Focus article, *Focus On... Gait Analysis* proved to be a great success. In this issue we turn once again to the list of expert advisers held by the NPIA Specialist Operation Centre¹.

For this issue of the *Journal of Homicide and Major Incident Investigation* we focus on forensic linguistics. The demand for these experts has grown immensely over the past decade. This relatively new area explores the study of written or spoken language.

Three separate interviews have been carried out to produce this article. The three experts being Mr John Olsson, Dr Timothy Grant and Professor Malcolm Coulthard. The article contains their own experiences of the area. We are grateful for their cooperation.

If there are particular specialist areas you would like covered in future please contact the editorial team at: homicide.journal@npia.pnn.police.uk

¹ The SOC is contactable on 0845 000 5463. It is available to all SIOs and can offer a range of support services.

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1 Introducing the Subject

1.1 What is forensic linguistics?

Forensic linguistics is the study of language within a forensic setting, whether criminal or civil, including phases such as arrest, interview, charge and at trial. It involves the analysis of the authorship of documents such as:

- Letters;
- Emails;
- Mobile phone texts;
- Or any other type of document.

Forensic linguists analyse text and is able to answer questions regarding the textual origin or meaning of the word and/or phrase. The experts may be able to comment on the background of the writer, identify potential links to other texts of known authorship and whether or not the writer intended for the communication to be threatening.

1.2 How can it be used in a criminal investigation?

Forensic linguists can provide analysis of a range of linguistic material. These may include:

- Clarifying the meaning of a word or phrase;
- Identifying likely general characteristics of the author, such as age and gender;
- Linking one or more potential authors to the text;
- Identifying whether or not the author is a native speaker of English;
- Piecing together the order of communication;
- Establishing links between texts;
- Identifying what may be inferred from a piece of relevant written material about the author's knowledge of a crime;
- Interpreting poor quality audio recordings.

2 Introducing the Experts

2.1 Timothy Grant

What are your qualifications and experience?

“I’m currently Deputy Director of the Centre for Forensic Linguistics at Aston University. As well as the investigative work, I teach master courses in forensic linguistics (one by distance learning). I also run short courses for the police.”

“I have been working as a practitioner for 15 years. My most significant case was probably my involvement in Operation Rhyme, the prosecution of Dhiren Barot, for terrorist offences. Barot had plans to put gas cylinders in limousines and park the cars in underground car parks before detonating them. He described these plans in a document called the ‘Gas Limo Project’, which we were able to identify as his writing. In the light of our evidence and other evidence, Barot pleaded guilty and was given 40 years in 2006 (although this was later reduced to 30 years on appeal).”

“More recently my research has specialised in authorship analysis of short electronic texts like text messaging and Internet Relay Chat (IRC) such as MSN messenger. I’ve developed statistical techniques for identifying the senders of such messages.”

How many reports have you provided for the courts?

“There have been roughly 50/60 cases where I have produced a report.”

How many times have you given evidence at court?

“I have appeared in court six or seven times.”

2.2 John Olsson

What are your qualifications and experience?

“I originally graduated in psychology, and then moved into linguistics. I have completed two postgraduate degrees in linguistics from the University of Wales and the University of Birmingham.”

“I have been practising as a forensic linguist since 1995. I’ve worked with police forces all over the UK and the US and with lawyers in the UK and abroad.”

“My institute (Forensic Linguistics Institute) runs courses to educate police officers and lawyers, prosecution or defence, about the ways in which linguistics can benefit an investigation.”

“I have worked on murder cases, terrorism, suspicious death, sexual assault, internet pornography offences, witness intimidation, narcotics, people smuggling, tobacco smuggling, malicious communications (hate mail) and many other types of cases.”

“I have published a textbook on forensic linguistics, which I have tried to make as accessible as possible to non-linguists. My aim is to introduce police officers to the subject.”

How many reports have you provided for the courts?

“I have prepared nearly 300 reports for courts.”

How many times have you given evidence at court?

“About 18 or 20, mostly for the prosecution.”

2.3 Malcolm Coulthard

What are your qualifications and experience?

“I have 40 years experience as a university teacher and have taught at two universities, Birmingham and Aston, where I am currently a Professor of Forensic Linguistics.”

“The first time I acted as a forensic linguist was in the late 1980s. I now have over 20 years experience. I was the Foundation President of the International Association of Forensic Linguists in 1993, an association which now has members all over the world: Europe, North and South America and Australasia. I was also the founding editor of *Forensic Linguistics: the International Journal of Speech Language and the Law*, which is now in its fifteenth year.”

“I was involved in two major appeals, the Birmingham Six (the pub bombings which took place in 1974) and the Derek Bentley Appeal (19-year-old convicted of murdering a police officer in 1952). I have so far worked on some 200 cases including three terrorist trials in Northern Ireland, a Court Marshal in Germany and a case of academic plagiarism in Hong

Kong. The latest case I worked on was a murder trial in Middlesbrough in January of this year, which involved the analysis of text messages (Jenny Nicholl case²)."

"I helped to set up the world's first masters degree in forensic linguistics at the University of Cardiff and am now launching a distance learning MA in Forensic Linguistics at Aston University. This will be a part-time course, which will hopefully attract police officers. The recently founded Centre for Forensic Linguistics at Aston (<http://www.forensiclinguistics.net/>) also runs short courses for police officers, the most recent of which is 'Working with an Interpreter'. The Centre will also help investigating officers to find relevant expert witnesses."

How many forensic linguistics analysis reports have you provided?

"I've done 200 cases."

How many times have you given evidence at court?

"Nine High Court trials plus five Appeals."

3 The Interviews

3.1 When was the first time forensic linguistics was used as evidence?

Timothy Grant

"Forensic linguistics has moved from being predominantly used by the defence, as in the Birmingham Six and Carl Bridgewater appeals, to being strong enough to be used as prosecution evidence. There is now substantial precedent as well as Court of Appeal judgements supporting its use. However, forensic linguistics is more developed in Germany where the BKR (Federal Police) have specialised units devoted to linguistic analysis and the FBI have a written threat analysis section. Within the UK this work currently is outsourced mostly to university-employed experts."

John Olsson

"Forensic linguistics was first used in 1968 in the analysis of a suspect statement, by a Swedish linguist by the name of Jan Svartvik. However, it did not make its first appearance

² http://news.bbc.co.uk/2/hi/uk_news/england/north_yorkshire/7189805.stm

in court in any serious way until the 1990s. Most of the early work was by linguists acting for the defence in alleged miscarriage of justice appeals.”

3.2 Can offenders disguise their written style?

Timothy Grant

“It’s been attempted on a number of occasions but typically, as offenders do not know about forensic linguistics, they do not think of disguise. The most frequent attempt at disguise I’ve come across would be to pretend a lower level of linguistic competence by deliberately misspelling words – this is fairly easy to spot as poor spellers follow rules which may not be apparent to those trying to emulate them.”

John Olsson

“Offenders can disguise their use of language, but it is difficult to sustain for any length of time and unless they have a good knowledge of language they are likely to reveal themselves in some way. A good comparison is trying to disguise one’s voice by assuming another accent. We can probably all keep up the pretence for a few minutes but after some time would struggle.”

Malcolm Coulthard

“Yes, but almost always not entirely successfully.”

3.3 Have offenders ever pleaded guilty on the basis of forensic linguistics?

Timothy Grant

“Yes – most famously Dhiren Barot³ although the linguistic evidence was the principal evidence at the time of the charge by the time of the actual plea there was other substantial evidence.”

John Olsson

“Yes, on a number of occasions. In one case a man was accused of arson and criminal damage. He had kept a diary of the events but claimed that the diary had been written long afterwards, when he had gone round and spoken to neighbours of the events which had taken place. Examination showed that the diary was more likely to be of contemporaneous events as they occurred. Faced with the evidence he pleaded guilty.”

³ <http://news.bbc.co.uk/1/hi/uk/6123236.stm>

3.4 Has forensic linguistics been used to eliminate suspects?

Timothy Grant

“Yes – I’ve worked on a text messaging case involving drug dealing where a shared phone was used to send a death threat. The victim was found dead and it could be shown that eight suspects had access to the phone – I was able to eliminate six of the eight suspects as likely writers of the threatening text.”

John Olsson

“Yes. In one case a young woman had died under suspicious circumstances. A male friend had spent the evening with her and had then left after a disagreement. He claimed that he had gone home but on receiving several strange mobile phone texts from her had become concerned and returned to her house. On arrival she did not answer the door bell and with mounting concern he entered the property by a rear window. He found her on her bed unconscious with a bin liner over her head. He tried to administer CPR but without success. He panicked and left the premises, wiping his fingerprints from those surfaces he had come in contact with. The following morning, accompanied by a colleague, he reported to the police at Machynlleth and gave his version of events. I was asked to examine the mobile phone texts which had passed between the pair the previous evening. I did so and partially re-constructed the text conversation. Using my re-construction and cell site analysis it was deduced that he was not at the woman’s premises when certain messages passed between them. I reported to the coroner at Brecon and he ruled accidental death.” (Death of Brenda McKee, Brecon Coroners’ Court, August 2005).

Malcolm Coulthard

“Yes. I have had several cases where there have been several suspects and I have been able to rule out one or more of them.”

4 Points for SIOs to Consider

4.1 What are the limitations of forensic linguistic analysis?

John Olsson

“In any science there are limitations. Sometimes the biggest limitation is the expert not knowing their own limitations. Providing the work is undertaken with great care and the expert is able to remain objective and impartial there should be few problems. It is

important to bear in mind that linguistics is not psychology. The linguist does not give an opinion on mental state, intention, veracity, etc. Sometimes the linguist, just like any other forensic scientist, has to inform the officers that no opinion can be given, for example, where there is simply not enough data to examine.”

Malcolm Coulthard

“Forensic linguistics is a developing speciality... it is still more of an art than a science. The Council for the Registration of Forensic Practitioners (CRFP) are scheduled to open a register for forensic linguists in September 2008. The vast majority of forensic linguists still express their results as informed opinions rather than as statistical probabilities and agree that their opinions, if uncorroborated by other independent evidence, are insufficient to convict.”

4.2 What should SIOs consider when requesting forensic linguistic analysis?

Timothy Grant

“Once the CRFP register has gone live, experts will be strongly encouraged to register. This should help ensure the quality of practitioners within the expert field.”

John Olsson

“SIOs should consider whether the expert is the appropriate expert for the task. Forensic linguistics is becoming more and more specialised. Some experts are more skilful at the study of dialects, for example, than I am. Others are better at the transcription of poor quality audio. Most linguists will be happy to tell the SIO if there is someone else who is better qualified or more current in the particular area under examination.”

4.3 What do you require to carry out forensic linguistics analysis?

Timothy Grant

“Essentially two main things are required:

- 1) Comparative material;
- 2) Contextual material.

“Questions about which one of a group of people wrote a text are easier to resolve and sometimes it can be useful to have contextual material texts collected from people who are close to a suspect.”

“Quality is not important so long as it’s the best possible copy. Work from photocopies is fine as long as they are readable.”

John Olsson

“There are really two main things. Firstly, SIOs need to be very aware of how they brief experts. In a few cases experts can be over briefed. Some of this information is not only unnecessary, but potentially harmful at trial. It is important that the court does not feel that the expert was simply used to confirm the investigators’ views.”

“Telling the expert as little as possible is best. The main things a forensic linguist needs to know is, what are the texts to examine for linguistic features? Who are the candidate authors? Then the SIO just needs to provide the expert with the texts and let them make their comparison. In reality, the expert does not even need to know the name of the suspect or the victim. Objectivity on the part of the expert, as well as impartiality are very important, and a skilful briefing by the SIO will be part of what ensures that these qualities are brought to the fore.”

“Another important factor is when to approach the expert. In some investigations I have been called in at a very late stage when there is little time to do the analysis, or request further data for examination. It is not always easy for SIOs to anticipate who they will need to consult, or when, but I suggest the earlier the better – even if in the early stages it is simply a consultation which takes place where the expert is informed about the general issues. Later on, when the investigation has progressed further, the expert can then be commissioned. Sometimes an early call to the expert can prevent errors.”

Malcolm Coulthard

“Essentially the work I undertake is on written texts: letters, suicide notes, emails, mobile phone text messages for example. Our procedure is to compare the suspect texts with previous texts whose authorship is known. Investigating officers need to be able to supply a set of comparison texts, as much information as possible about the comparison and suspect text(s) and a brief outline of the case.”

4.4 What does the future hold for forensic linguistic analysis?

Timothy Grant

“The development with the CRFP will support the future of forensic linguists. Work load has increased; this is probably because we are either getting more known or because more

cases are reoccurring particularly in the realm of electronic communication; the internet is a place where it is relatively easy to be anonymous.”

John Olsson

“An expert’s main concern is about the future of the justice system and making sure that it is well served. Forensic linguistics can do this, and so will remain a good servant of the justice system. The integrity of the justice system is what counts.”

Malcolm Coulthard

“Forensic linguistics in the future will be much more computerised. At the moment there is a small number of skilled practitioners, as there was in the early days of DNA analysis. In the future linguistic analysis will become more automated and less dependent on the individual skills of the analyst.”

5 Other Questions

5.1 Is the science behind it solid enough to use in a trial as evidence?

Timothy Grant

“Linguistic evidence has been admitted in the UK courts on many occasions and where the linguistics is done well has helped secure prosecutions. A good example case would be the prosecution of Stuart Campbell for the murder of his niece Daniel Jones. Linguistic evidence has also been admitted by the Courts of Appeal.”

John Olsson

“Yes, depending on the nature of the evidence submitted and the task required to be done. Forensic linguistics has been used successfully in courts many times, both in the UK and abroad. I believe forensic linguistic evidence stands up as well as any other kind of forensic evidence in court.”

Malcolm Coulthard

“Yes. The science of linguistics is very robust and it is their knowledge of the rule-governed nature of language that enables linguists working in a forensic context to derive their opinions from the evidence. Linguistic evidence has been accepted many times in the Courts of Appeal.”

5.2 What difficulties have you come across when analysing a piece of evidence?

Timothy Grant

“The main difficulties are when there aren’t any distinctive features. Sometimes you can’t come up with answers.”

John Olsson

“Perhaps the most difficult task is estimating the importance of a particular piece of evidence. There are three main questions I tend to ask myself:

- 1) Does it lead to indicate a particular suspect?
- 2) Does it lead to the identification of someone other than the suspect?
- 3) Is the evidence found relevant?

Making sure you do not overstate an opinion and thereby jeopardise... an innocent person’s freedom or cause the courts problems by being over-confident is very important.”

Malcolm Coulthard

“All cases are different and the ease or difficulty, indeed sometimes the impossibility of reaching an opinion depends on several factors, for example, the length and number of the suspect texts, the known texts and the individuality or characteristics of the author in terms of grammar, spelling conventions, vocabulary choices etc. In more than half of my cases I have to say that it is not possible to give an opinion based upon the available evidence.”

5.3 How long does a forensic linguist need to analyse a piece of evidence?

Timothy Grant

“Each case is different. I normally suggest about four to six weeks to do the analysis. If the case is urgent then we produce reports more quickly than this. In the Barot case previously mentioned a small team of us managed to produce an initial report in about 24 hours. The analysis generally does require a certain amount of thinking and working time – there is no such thing as a linguistic fingerprint, and no machine or computer you can simply plug a text into and be delivered an answer.”

John Olsson

“It very much depends on the evidence. In cases where there are many texts (whether emails, letters, mobile phone texts, etc) it can take several months. However, where there are only a few texts to analyse, the work can sometimes be completed within a week or ten days. I tend to ask for a preliminary view of the evidence. I then state whether the work is within my expertise or not. If it is not I will happily recommend a colleague.”

Malcolm Coulthard

“As always the reply is ‘how long is a piece of string?’ However, work in the majority of cases takes some 10-20 hours.”

6 Conclusion

Forensic linguistics, the analysis of an individual’s characteristics within their writing, has come a long way since it became more familiar to the Police Service in the mid-1980s. It continues to grow and provide an incredible support to the investigations being carried out.

It has proven to be a great success when applied to appropriate investigations. However, this remains solely at the discretion of the officer in charge of the case.

For further information and contact details of the specialists working within forensic linguistics, contact NPIA Specialist Operations Centre 0845 000 5463.



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