

EVIDENCE & INVESTIGATION

JIM FRASER Session Chair

Jim Fraser is Professor of forensic science and Director of the University of Strathclyde's Centre for Forensic Science. He is Chair of the European Academy of Forensic Science, Associate Director of the Scottish Institute for Policing Research and a past President of the Forensic Science Society. He has extensive experience as an expert witness in criminal courts in the UK and has been involved in many high profile cases e.g. Robert Black, Stephen Downing, Michael Stone, Damilola Taylor.

Professor Fraser has significant experience in strategic and policy matters in relation to forensic science in the UK and internationally. He has advised a range of agencies on forensic, scientific and investigative matters, including the Association of Chief Police Officers, Her Majesty's Inspector of Constabulary, the Home Office and the Scottish and Westminster Parliaments.

His main areas of Teaching and research focus on the relationship between science and law and the contribution of science to policing and criminal justice. He is a member of the editorial board of Problems in Forensic Science, the Royal Statistical Society Working Group on Statistics and the Law and the EPSRC Peer Review College.

RICHARD EARLAND

Richard Earland was appointed as the first Chief Information Officer for the National Policing Improvement Agency (NPIA) in October 2006. In this role he has responsibility for the development of Forensic Science and Identification services, as well as national programmes delivering Digital secure National communication services, and the Information Systems Strategy for the Police Service. He has carried out a fundamental review of Police ICT and is now working with the APA, ACPO and Police Service to change the way IT is delivered across UK Policing. To facilitate this work he has developed a CIO Council within policing. Richard has extensive experience of delivering major ICT programmes, most recently as Group Director for Information Programmes with the Metropolitan Police Service (New Scotland Yard – London).

Before joining the NPIA, in addition to his experience in the MPS London, he was Kent Police IT Director for eight years. Working for the Association of Chief Police Officers (ACPO) in the period 2001-2003, he was the director of the Valiant Programme. Valiant involved working in partnership with other IT directors and police figures around the country to develop the IT strategy for the Police Service. This work provided the basis for the Information Systems Strategy for the Police Service (ISS4PS).

Richard is a voluntary Police Officer (Special Constable) with the British Transport Police and undertakes operational front line duties in London, typically on Friday and Saturday evenings. This gives a unique insight into the environment where ICT and science "hits the streets".

The coming of age of science and technology in policing

In contrast to the bulk of previous research which positioned police practitioners as the subject, this presentation will encourage them to see themselves as practical scientists. It explores two important and overlooked dimensions concerning science in policing; those of 'utility', the ways that new science enabled capabilities are introduced into policing, and 'organisational maturity', the way organisations are led and developed. It is argued that these dimensions need to be combined and a maturity model reflecting this combination is proposed. It is suggested that the basic tenants of applying a scientific approach appear to be accepted at policy and operational level. However, further development and adoption of the type of maturity model described presents an opportunity for police practitioners to apply scientific rigour to the way we lead and develop our organisations whilst exploiting the utility of science. This combined approach would allow science to become truly embedded in policing.

NORRIE DIXON, MBE

Temporary Chief Inspector Norman Dixon has 30 years service with Lothian and Borders Police and is currently seconded to the Association of Chief Police Officers in Scotland (ACPOS) as the ACPOS National Mobile Data Project Manager. He has a breadth of uniform and CID operational and managerial experience. He was the first Police Officer to be trained in 'Systems Thinking' within the Lothian and Borders Process Improvement team and for over 8 years has been involved in working with users to create more efficient and effective police business processes. This work led him into the world of Police Mobile Data.

As the Lothian and Borders Police Mobile Data Project Manager and working with partners he understood the information requirements within core police business processes and successfully designed, developed and deployed a fully functional off line PDA police e-notebook.

He is now the ACPOS National Mobile Data Project Manager with a responsibility to manage the introduction of a national on line PDA e-notebook for the Scottish Police Service. This Project is within the overall ACPOS Business Change Programme of work to deliver significant ICT enabled Business Change throughout the Scottish police Forces.

In the Queens Birthday Honours list June 2008 Norman Dixon was awarded the M.B.E. for services to the Police Service

Pressing keys and feeling collars

The ACPOS National Mobile Data Project, led by Deputy Chief Constable Garry Sutherland, believes that the use of Mobile Data within the Police Service is, in reality, an enabler of better information management and the introduction of mobile devices for police officers is more complex than just issuing them with small computers. It provides an opportunity to examine core police business processes in detail to determine exact information requirements and re-design them in a more efficient and effective manner, reducing duplication of effort and increasing data quality.

Mobile Data work in Scotland has already developed a PDA e-notebook as a complete replacement for paper and pen that has become enhanced with the ability to remotely access national police computer systems. This provides police officers with a very powerful tool that enhances the quality of information they gather, the quality of information that is made available to them and overall allows them to make better informed decisions when dealing with members of the public.

The presentation will explain the path the ACPOS National Mobile Data Project has taken to get into this position, its expected delivery outcomes in relation to the overall ACPOS ICT enabled Business Change, and explain the operational and business benefits already being experienced.

DEREK CARSON

Dr Derek Carson is a Reader in Psychology at the University of Abertay, Dundee. Part of his research investigates the way people identify faces and he has published papers investigating the efficacy of the facial composite systems currently used by the UK police forces. He sits on the SIPR Evidence and Investigation Steering Committee and is currently supervising a SIPR funded PhD investigating the ability of witnesses with a learning disability to engage in face identification tasks.

Technology Related to Facial Identification

Although not yet at the level depicted in some popular police TV shows, technology does play an increasingly central role in modern day policing. One area where technology has had a significant impact is facial identification. In the 1980's early manual facial composite systems such as Photofit were replaced by computer based systems such as E-fit. With this change to an electronic format came changes to the role of the operator and to the skills required to perform the task. Recent advances in the new generation 'evolving composite systems' such as Evo-fit and Efit-V are demanding changes of their own. In a similar fashion the introduction by many forces of video based electronic line-ups - VIPER is radically changing the way witnesses are asked to identify suspects. In this presentation I will

argue that training of operators and the wider roll out of new technologies is just as important as the development of the technologies themselves. Human beings interact with the technologies in many ways, for example, as operators and users (witnesses), therefore, the empirical testing of these technologies must include investigations into these human- system interactions. I will argue that this is especially true of the emerging biometric based systems where the promise of automatic facial identification can at times seem tantalisingly close.

AMINA MEMON

Dr Amina Memon is a professor of Psychology at the University of Aberdeen. She has a first class degree in Psychology and a PhD in Psychology. She is a Fellow of the British Psychological Society. Professor Memon's main expertise is in Social and Cognitive psychology. Her research is international with collaborations in Australia, Brazil, New Zealand, North America, Holland, Germany and Sweden. She has received awards to support her research from the Economic and Social Research Council, the National Science Foundation, the Nuffield Foundation, the Leverhulme Trust, British Academy and the Royal Society. Dr Memon has published widely on topics such as investigative interviewing of child witnesses, police interviews, face recognition, eyewitness identification, the performance of elderly witnesses, false memories and jury decision-making. Her most recent project (Nuffield funded) focused on the role of psychological science in enhancing the effectiveness of video-parades. The research has already been disseminated widely. Dr Memon has over 60 publications on applied aspects of memory and social cognition, and has produced two texts, one on interviewing and one text on psychology and the law. In 2002-2003 she was asked by the Scottish Executive to develop national guidelines for interviewing children in Scotland and in 2004 and in 2007 the guidance on therapy for children and adults. Dr Memon works closely with professionals involved in the interviewing of witnesses and has contributed to training programmes all over the world.

Obtaining evidence from child witnesses using video parades

Amina Memon, Catriona Havard, Brian Clifford, University of Aberdeen & Fiona Gabbert, University of Abertay, Dundee.

Following the implementation of the Vulnerable Witness Act, an increasing number of children in Scotland are being asked to give evidence as witnesses in criminal cases and view VIPER parades. To date, there is little research on how well children perform using this type of identification procedure. Two recent studies will be presented. In the first, children aged 6-8 and 13-14 years witnessed a staged event where an unfamiliar man (target) interrupted a class. Following a delay of several days the children were presented with a video parade or photographic lineup. In a second study, we examined the effects of a change in the target's appearance (hairstyle) on the identification ability of the younger children. The practical implications of the results are discussed.