Intelligence Analysis & Sense-making: a practical exercise

Prof Chris Baber
University of Birmingham
Heuristics

• Through our life experiences, we develop a set of convenient, rules-of-thumb which can allow rapid categorisation of a situation and rapid selection on an appropriate response.
• If heuristics lead to the ‘correct’ answer, they are beneficial; if they lead to an ‘incorrect’ answer they are termed Biases...
• ...BUT ‘bounded rationality’ allows for rapid, experience-based decision-making in the face of incomplete, contradictory, and dynamic information [3]
Biases

• Representativeness: if something is ‘typical’ of a class fail to consider alternative evidence
• Availability: ease of recall influences probability estimates
• Confirmation bias: placing more emphasis on evidence which confirms an hypothesis, e.g., investigating officers stop searching once they had found a viable suspect [3]
• Confirmation bias: [4] following 2004 Madrid bombings fingerprint examination driven by expectation to find match; Drore fingerprint study [5]
Intelligence Scenario

Background

• Investigation and events surrounding a number of terrorist plots during 2003-05

• Based on publicly available information

• Several simultaneous investigations / suspected plots, including:
  – Operation Crevice – fertiliser bomb plot
  – Operation Rhyme – multiple bombing plot
  – Operation Theseus & Operation Atlas – post hoc Investigations of London Bombings on 7\textsuperscript{th} July 2005
Early 2000s: Multiple security agencies, operations, plots, suspects and terrorist groups

- MI5 Scotland Yard anti-terrorist branch
- West Yorkshire Anti-terrorist branch
- Operation Crevice
- Operation Rhyme
- Fertiliser Bomb Plot
- Multiple Bombing Plot
- Operation Theseus (post-hoc: July 2005 onwards)
- Operation Atlas

Suspects and Terrorist Groups:
- Muhammad Naeem Noor Khan
- Omar Khyam
- Lashkar-e-Taiba
- Jaish-e-Mohammad
- Mohammad Siddique Khan
- Mohammed Junaid Babar
- Dhiren Barot
- Mohammad Naeem Noor Khan
- Pakistani Intelligence
- CIA
- FBI
- West Yorkshire Anti-terrorist branch
The challenge

- Identifying ‘Ibrahim’ – Mohammed Siddique Khan
- Limited resources, multiple threats/suspects (~50 terrorist networks in the UK at that time)
- Mid-2004 MI5 refocuses on urgent threats
- Operation Crevice – 55 individuals (15 essential, 40 ‘desirable’)
- Largest ever Security Service and Police counter terrorist operations
- Collaborative sensemaking vs. ‘need to know’

http://news.bbc.co.uk/1/hi/uk/6477777.stm
http://news.bbc.co.uk/1/hi/programmes/panorama/6476207.stm
Media ‘infographics’ of bomb plots: timelines and networks for the fertilizer bomb plot

UK fertiliser bomb plot

Five men have been found guilty of plotting to kill hundreds in an al-Qaeda-linked bomb plot. The international conspiracy included links to the 7 July 2005 London bombings. Two other men on trial at the Old Bailey were found not guilty.

Mohammed Khawaja, Ottawa

Software developer Mohammed Momin Khawaja was employed at Canada’s Department of Foreign Affairs when he was arrested. In 2003 he had travelled to Pakistan and attended a training camp with some of the UK suspects. According to evidence heard in court, his alleged role was to build a detonator. He is facing trial in Canada.

http://news.bbc.co.uk/1/shared/spl/hi/guides/457000/457032/html/nn1page2.stm
Operation Crevice: periphery of fertiliser bomb plot

Unknown Males #1 and #2 – ‘desirable’ petty fraudsters

21st February 2004: Male #1 joins group discussion at house in Crawley, attended by the alleged detonator designer


28th February 2004: Bugged conversation in Khyam’s car.

21st February 2004: Male #1 discusses Jihad

2nd February 2004: Omar Khyam seen in a vehicle (Honda R480 CCA) with two unknown males.

Vehicle registered to Mohammad Sidique Khan’s wife

Babar fails to identify either suspect in doctored photo

June 2004: Mohammed Junaid Babar convicted of providing material support to al-Qaeda in US.

Vehicle followed to a house in Dewsbury, West Yorkshire

An MIS desk officer cropped the photographs so that the background could not be identified.

Photographs of individuals on the periphery of fertiliser plot circulated to foreign intelligence agencies to try to identify them.
Information sharing: ‘Need to know’, ‘task and complete’

At the time MI5 did not inform West Yorkshire Special Branch about the surveillance operation.

It did not tell them about the Honda, its registration number, the name of its owner, the addresses and places where the passengers had got out, its final destination or the photograph of the occupants.

It was more than four months after Khan and Tanweer had been followed up the M1 that MI5 put West Yorkshire fully in the picture - and that was two months after the Crevice cell had been arrested.

It’s reasonable to suspect that the arrests would have alerted Khan and Tanweer and made them more circumspect about their activities.

In June 2004, after the arrest of the fertiliser gang, MI5 sent a request to West Yorkshire Police asking them to confirm details about Sidique Khan, but the Operation Honeysuckle details did not come up on their computer.

http://www.independent.co.uk/news/uk/crime/mi5s-chance-for-supergrass-to-identify-77-ringleader-2221688.html
http://www.bbc.co.uk/news/uk-12507847
Threat evaluation of Mohammed Siddique Khan: ‘Jihadi Tourist’

April 2003: During surveillance of McDaid (Operation Honeysuckle), Khan gave McDaid a three-minute lift in his blue BMW. A check on the car threw up Sidique Khan’s name and address at Gregory Street, Batley.

His details were recorded but he was not judged to be of “significance” to the operation.

February 1993: Khan’s photograph and a criminal record in his name were put on the Police National Computer after he was cautioned over an assault.

Martin McDaid had been known to MI5 since “at least 1998”. McDaid’s home was raided in November 2003.

January 2001: West Yorkshire Police Special Branch conduct surveillance on a group of Muslim men on a walking expedition, led by McDaid, on behalf of MI5. No intelligence ‘of concern’ was produced. Photographs were shown to an informant, though Khan was not identified.

July 2003: Sidique Khan travels to Islamabad (Pakistan).
March 2004: Senior police officers were concerned about a “second plot of which we had no visibility and another attacks was planned.”

July 2003: Babar sets up an al-Qaeda training camp in Malakand in Pakistan. “Ibrahim” attends the camp and is trained to use weapons.

July 2004: West Yorkshire Police were also asked to try and find out more about Ibrahim and Zubair in July 2004 but sent a reply that they could do nothing with such limited details. On the same form, they were asked to check details of Sidique Khan’s Honda Civic, which had been seen in the Operation Crevice surveillance but no one realised they were the same person.

June 2004: Mohammed Junaid Babar convicted of providing material support to al-Qaeda in US.

May 2005: A last effort to identify “Ibrahim”, code-named Operation Downtempo, was launched; an MI5 desk officer suggested that he might be one of three individuals based in Leeds who had featured in surveillance of the fertiliser bombers in February 2004.

Identification of ‘Ibrahim’

April 2004: Babar reports that in July 2003 Ibrahim flew to Islamabad (Pakistan) where he bumped into members of another British terrorist cell at the airport, where they went for breakfast – “a social gathering of those who are like minded extremists.”

Metropolitan Police investigating Operation Crevice were able to get the flight number on which their suspect arrived at Islamabad airport in July 2003.
Identifying ‘Ibrahim’

• Weak links: “To give an idea of scale, the links between the fertiliser plot bombers and Khan and Tanweer represent less than 0.1% of all the links on record in relation to the fertiliser plot investigation.”

• Only one officer was in charge of prioritising following up 4000 ‘contacts’ with individuals who had appeared as part of that investigation

• There was no process for returning to review decisions on who to follow up and the process was “reasonably intuitive.”

• If Siddique Khan had been identified as ‘Ibrahim’ “It would have made him much more significant”

Exercise

• Divide into Teams
• Each Team has a small pack of materials regarding suspicious individuals
• Task 1: each team considers the level of ‘risk’ posed by the individuals in their packs
• Each Team then sends an envoy to other teams to provide a briefing
• Task 2: each team must decide which individual(s) are using multiple names and pose multiple risks
Scenario

Intelligence reports suggest that a gang, based in Leeds, is involved in smuggling drugs from boats landing in harbours in the West Country. There is reason to believe that a consignment is due in this week and that it will be couriered to Leeds by car.

Using the evidence provided, decide who should be followed and arrested and where the best place might be to make the arrest.
References


[7] Dror

[6]