

# Fusion 2010 Edinburgh

## Uncertainty Forum

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# human processing approach

1. Description: ultimately all intelligence analysis depends on human intellect
2. Applying approach to the example:
  - a. Threat analysis:
    - Threat must be graded in conventional (5x5 or 6x6) grid regarding reliability of source and validity of information.
    - If it was a suicide bombing, then presumably car exploded almost ten minutes ago.
    - If not, likelihood of 'customised' car being used for bombing?
    - Even if analyst 1 identifies car correctly, does not mean that A is driving it.
    - ANPR contribution adds little to analyst 1 expertise plus distinctive appearance of Toyota.
    - There is time for second white Toyota to be intercepted before it reaches building.
    - Depending on time available, the presence of more than one analyst makes it feasible to run this as an 'Analysis of Competing Hypotheses'

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## 2. Applying approach to the example (continued):

### b. Risk analysis

- If 'we are concerned' at threat to building B, then presume risk analysis carried out regarding vulnerability, evacuation measures etc.
- Ascertain whether suspect vehicle now outside building.
- If it is, threat analysis concludes that bombing probable, and risk analysis reveals building highly vulnerable to car bomb, institute evacuation procedures on opposite side of building to parked car. Note possibility of second bomb.
- If thought building can withstand blast, then do not order evacuation but move people away from windows/doors on side of building at which car parked.

## 3. In which situations is approach superior?

Statistical calculations of probability increase in reliability the larger the data set. Car bombings (suicide or not) are essentially unique events and therefore the human element will always be required.

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4. Limitations of the approach can be examined at various *levels*:

- a. *individual* cognitive processes and the limitations , for example, 'mindset', mirror-imaging....
  - Analyst 1 has 10 years experience but of what - e.g. interpretation of TECHINT or all-source c-t analysis?
  - Analyst 2 is new in post but may have experience elsewhere or have received training in new techniques of which analyst 1 is unaware.
- b. *small group* e.g. 'groupthink';
- c. *organisational* e.g. turf wars, security procedures inhibiting sharing, clashing organisational cultures...

5. Data-Tractability: this method capable of informing preventive action in the time available but the less time there is then the less evaluation of information can take place....