Investigative Psychology

The domain of *Investigative Psychology* covers all aspects of psychology that are relevant to the conduct of criminal or civil investigations. Its focus is on the ways in which criminal activities may be examined and understood in order for the detection of crime to be effective and legal proceedings to be appropriate. As such, *Investigative Psychology* is concerned with psychological input to the full range of issues that relate to the management, investigation and prosecution of crime.

Investigation as Decision Making

Its constituents can be derived from consideration of the sequence of activities that constitute the investigative process. This runs from the point at which a crime is committed through to the bringing of a case to court. This makes it apparent that detectives and others involved in investigations are decision-makers. They have to identify the possibilities for action on the basis of the information they can obtain. For example, when a burglary is committed they may seek to match fingerprints found at the crime scene with known suspects. This is a relatively straightforward process of making inferences about the likely culprit from the information drawn from the fingerprint. The action of arresting and questioning the suspect follows from this inference.

However, in many cases the investigative process is not so straightforward. Detectives may not have such clear-cut information but, for example, suspect that the style of the burglary is typical of one of a number of people they have arrested in the past. Or, in an even more complex example, such as a murder, they may infer from the disorder at the crime scene that the offender was a burglar disturbed in the act. These inferences will either lead them on to seek other information or to select from a possible range of actions including the arrest and charging of a likely suspect.

Investigative decision making thus involves the identification and selection of options, such as possible suspects or possible lines of enquiry, that will lead to the eventual narrowing down of the search process. In order to generate possibilities and select from them, detectives and other investigators must draw on some understanding of the actions of the offender(s) involved in the offence they are investigating. They must have some idea of typical ways in which offenders behave that will enable them to make sense of the information obtained. Throughout this process they must amass the appropriate evidence to identify the perpetrator and prove their case in court.

Information Management

It follows that three processes are always present in any investigation that can be improved by psychological study. First, the collection and evaluation of information derived from accounts of the crime. These accounts may include
photographs or other recordings derived from the crime scene. There may also be records of other transactions such as bills paid or telephone calls made. Increasingly there are also records available within computer systems used by witnesses, victims or suspects. Often there will be witnesses to the crime or there will be results of the crime available for examination. There will transcripts of interviews or reports from various experts. Further there will be information in police and other records that may be drawn upon to provide indications for action. Once suspects are elicited there is further potential information about them either directly from interviews with them, or indirectly through reports from others. In addition there may be information from various experts that has to be understood and may lead to actions. The major task of a police investigation is, therefore, typically to collect, assess and utilise a great variety of sources of information that provide accounts of crime. This is a task that can benefit considerably from the scientific study of human memory processes and other psychological studies of the reliability and validity of reports and their assessment.

The second set of tasks is the making of decisions and the related actions that will move towards the arrest and conviction of the perpetrator. There is remarkably little study of exactly what decisions are made during an investigation, or how those decisions are made. Yet there are clearly a limited range of actions available to police officers, constrained by the legal system within which they operate. From many studies of human decision making in other contexts it is also apparent that there are likely to be many heuristic biases and other inefficiencies in the decision making process. Awareness of these can lead to effective ways of overcoming them.

Appropriate Inferences

In order for decisions to be derived from the information available inferences have to be made about the import of that information. The third set of tasks therefore derives from developing a basis for those inferences at the heart of police investigations. These inferences derive from an understanding of criminal behaviour. For appropriate conclusions to be drawn from the accounts available of the crime it is necessary to have, at least implicitly, models of how various offenders act. These models allow the accounts of crime to be processed in order to generate possibilities for action. This process of model building and testing is, in effect, a scientific, psychological development of the informal, anecdote based process often referred to as offender profiling. That is only one small part of how psychology is contributing to investigations and thus a limited aspect of Investigative Psychology.

A simple framework for these three sets of tasks that gives rise to the field of Investigative Psychology is shown here.
Investigation Cycle Giving Rise to Field of Investigative Psychology

Information

Action

Inference

More formally then, **Investigative Psychology** is:
The systematic, scientific study of:
a) Investigative information, its retrieval, evaluation and utilisation,
b) Police actions and decisions, their improvement and support, and
c) The inferences that can be made about criminal activity, its development, differentiation and prediction,

With the objective of improving criminal and civil investigations.

There are many ways in which psychological knowledge and principles can be applied to criminal and civil investigations. A fruitful way of looking at the contributions of psychology to police investigations is how it can inform answers to 10 classes of operational question that police and other investigators face in the course of their activities.

1. How can police information systems be improved and the information collected be effectively validated?
2. How can the contact with witnesses, victims and suspects be improved especially through the development of interviewing procedures?
3. How can deception be detected?
4. What aspects of a crime are important indicators of the perpetrator?
5. What searches of police records or other sources of information should be carried out to help identify the offender?
6. Where can the offender be located?
7. Which crimes are linked?
8. Where and when will the offender commit his/her next offence?
9. In what ways can investigative decision making be improved and supported?
10. What sense can be made of the offence that will help to organize the legal case?

Psychology can inform these operational issues on 2 levels. Most centrally, Investigative Psychologists are able to provide the substantive knowledge, based on empirical studies that can, increasingly, provide direct answers to these questions. Secondly, psychology can provide a framework for understanding the processes that police must go through in attempting to find the answers.

The capacity of humans to collate and organize information, so that decisions can be made on the basis of it, can be facilitated by a variety of means. One way is to provide visualizations of the material. Human beings can often see patterns between associations and within activities if they can be presented in some visual summary. Bar charts of frequencies are one common example of this, but
commercially available software will chart networks of contacts and other sequences of associations or actions.

Decisions are also facilitated if extensive and disparate information can be described in some summary form. A further level of support to police decisions can be made therefore by identifying the salient characteristics of the offences and offenders and by producing summary accounts of them. This may be the production of maps that indicate the locations where there are high frequencies of crimes, sometimes called criminal 'hot-spots'. In these cases the salient characteristics are simply where the crimes have occurred and the description consists of some summary or averaging of the crimes over an area in order to indicate where its geographical focus might be. All description requires some selection, distillation or averaging of information and when that is done validly the description is helpful. Particularly useful to the police, will be data on the relative commonness or rarity of actions in crime they are investigating among offenders generally. This base rate information guides the investigator toward those most salient features of an offence that will be most relevant to the process of deriving inferences about that particular offender.