Eyewitness identification: A system handbook

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Preface

There is no debate about the fact that eyewitness identifications can be unreliable. False eyewitness identifications resulting in false convictions have been documented by various authors. This book is based primarily on a premise that I proposed in a 1978 article ("Applied Eyewitness Testimony Research: System Variables and Estimator Variables"): a significant proportion of the errors that occur in eyewitness identification can be prevented by the use of proper procedures. There has been an explosion of scientific research in psychology since the mid-1970s on eyewitness testimony and this book is a culmination of that knowledge plus a strong dose of common sense.

The second premise of this book is that police often use procedures that significantly deviate from those that have been proven safe, effective and reasonable for obtaining identification evidence from eyewitnesses. The recommended procedures outlined in this book are considered safe in that they are designed to help protect the innocent from being falsely identified. The recommended procedures are effective in the sense that the use of these procedures can help establish the true identity of the guilty party. Finally, the recommended procedures are considered to be reasonable in the sense that implementation of the recommendations does not pose an overly heavy burden on police.
Although forensics units of police departments have invested a great deal of effort into the skilled evaluation of some forms of evidence (such as fingerprint systems of identification) there has been little attempt by such units to acquire and practise the up-to-date science of eyewitness evidence. Forensics units can use this book to teach detectives, and any others who question eyewitnesses, about the principles of memory and the science and art of questioning. This book can also be used to develop departmental policy regarding how witnesses should be questioned, what kinds of records should be kept, when sketch artists might be used, how photo-spreads should be conducted, how lineup members are selected, and so on.

I have been conducting research on eyewitness testimony and presenting talks to psychological researchers, police officers, attorneys and judges across North America since 1978. One of the things that I've learned from police officers is the fact that they often are unaware of the large gap between their policies and their practices. At a talk I gave in 1985, three high-ranking members of a major police department were in attendance. As representatives of their department, they came prepared with some excellent examples of photo-spreads that they had put together. They assured me that they were aware of the issues in eyewitness identification and that they had policies that were in complete agreement with the recommendations contained in my talk. Three months later I was asked to give expert opinion in a criminal trial in which the defendant had been identified as an armed robber. The five Caucasian eyewitnesses were never shown a lineup or photo-spread; they were shown one photograph of an oriental man prior to trial and later at trial identified the only oriental in the courtroom. The police department that used the biased, one-photo procedure was the same department that sent the three members to my talk. I agreed to give expert opinion in this case because the identification procedure clearly violated the most basic principles of proper identification procedure. Regardless of whether or not the defendant was the actual perpetrator, the resulting acquittal was appropriate in this case. The failure of police to use a true photo-spread or lineup will always leave reasonable doubt about the identification. Is it possible that the eyewitnesses were merely cooperating with the police or changing their memories to accommodate the characteristics of the single person they were shown? Or did they in fact recognize the suspect and could have identified him from among other orientals in a photo-spread or lineup?

Experimental psychologists increasingly are willing and
competent to testify as to the value of identification evidence whenever such evidence is obtained using procedures that are suggestive or suboptimal. Attorneys will find this book useful for determining the extent to which the procedures used in a given case depart significantly from those recommended. To the extent that there are significant departures, these can be brought to the attention of the court and, if there is need, an expert in eyewitness identification might be called for opinion. In short, the time has come in which police procedures in obtaining identification evidence from eyewitnesses are being closely scrutinized and, whenever these procedures violate certain basic principles, strongly criticized.

This book is more than just a set of procedural recommendations. Each recommendation is accompanied by a rationale. The rationale are perhaps more important than the recommendations themselves for two reasons. First, every case is unique and, therefore, a blind following of the specific recommendations might lead to an overapplication of the rules. The rationale are provided in part to aid in understanding when a specific procedure might or might not apply to a particular case. The rationale, together with the discussion in Chapter 1 of how human memory works, should be of considerable help in deciding when a particular rule applies and how to deal with peculiar cases. Thus, the reader is encouraged not to use the specific procedural recommendations (which are reprinted in the Appendix) in isolation from the substance of the text.

Although the specific recommendations contained herein are perhaps the best that could be developed at this time, it seems almost certain that future editions will refine these procedures as new research adds to our knowledge and as experience in using these procedures reveals better methods. Indeed, this is the second reason why the rationale might be more important than the specific recommendations themselves; acceptable procedures must be defended and justified and deviations from the procedures in this book require that new, better rationale be developed. In spite of some imperfections that are almost certain to arise, the procedural recommendations contained in this book are the most complete and comprehensive set yet developed. I welcome the comments and criticisms of police, attorneys, judges, psychologists and others who can help refine these procedures for the future.
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Modern Conceptions of Human Memory

Human memory is not like a videotape system. Unlike the video camera, which captures all events in the direction it is pointed, the human eye may look without perceiving. A camera has no interests, expectations, desires, wishes or biases to influence how it sees events. Nor does a videotape system interpret what it sees. Memory fades with time and gaps in memory are filled in by inference about what could or must have been.

Consider a simple example of the fallibility of human perception. Accuracy of perception is, of course, a prerequisite for accurate memory. Examine for a moment the two-line figure below.

```
line a

line b
```
Without measuring these lines, which line appears longer? If you said they were the same length or that line a is longer than line b, you are wrong. Line b is 25% longer than line a.

Consider another simple demonstration. Read the following names aloud to someone:

Lizzie Borden, Jim Wilson, Tom Standt, Marie Osmond, Elizabeth Taylor, John Wilson, Nancy Reagan, Mike Miller, Jane Fonda and Saul Danford. Pause for a moment and ask the person which was more frequent in the list — male names or female names? Almost without exception the person will confidently report that female names were most frequent. Why? Because, unlike a videotape review, a person’s review of his or her own memory is selective. In this case, prior knowledge of the female names, each of whom is a famous person, made those names over-representative of the list in the memory of the person.

The purpose of this chapter is to introduce the reader to the dominant modern conception of human memory. Although police officers may be tempted to skip over this theoretical discussion and go directly to the recommendations chapters, I feel it is important to have a good grasp of how memory works in order to understand and appreciate fully the importance of the recommendations made in subsequent chapters.

It is a generally accepted view in the scientific study of memory that the successes and failures of human memory are attributable to things that occur in three “stages.” The term “stage” is meant here to refer to a period or degree in the process of development. The stages of memory are acquisition (sometimes called encoding), storage (sometimes called retention) and retrieval (which usually is broken down into two types — recall and recognition).

ACQUISITION

In technical terms, acquisition is the process of transforming physical energies (e.g., light reflecting from an object) into memory codes via the senses (e.g., sight). This does not mean that acquisition is passive. Where a person looks (i.e., attention) depends on an interaction between the environment and the person. For example, a noise in the environment might orient the person to look. Or one person’s interests may cause him to look in the direction of an attractive female while another person’s interests may make him examine a sporty automobile.
It is not just where a person looks but also how that person looks that has implications for memory. In recent studies, for example, people were asked to examine faces for the purpose of either making judgments of physical features (e.g., size of nose, type of mouth) or for the purpose of judging personality traits (e.g., honesty, kindness). Although both groups of people paid equal amounts of attention to the faces, those who made trait judgments proved far superior in their ability to recognize these faces subsequently (Baddeley, 1979; Bower & Karlin, 1974; Wells & Hryciw, 1984; Winograd, 1981).

What is acquired in memory is by no means a direct representation of what actually happened because, among other things, acquisition depends on expectations. In a classic demonstration, Bruner and Postman (1949) presented people with an array of playing cards in which certain cards had suit and colour reversed (e.g., the ace of diamonds was black instead of red). When later asked critical questions such as “How many aces of diamonds were there?” people responded on the basis of their prior expectations regarding the linkage of colour and shape. For similar reasons, people judge orange-coloured tomatoes to be redder than orange-coloured lemons (Bruner, Postman & Rodrigues, 1951). As well, Photo-fit reconstructions of a face that people saw previously tend to be “swarthy” if the witness was led to believe that the person was a mass murderer rather than a lifeboat captain (Shepherd, Ellis, McMurran & Davies, 1978).

Generally, the acquisition stage should be thought of as occurring while the eyewitness is viewing the event. However, it must be kept in mind that things that occur prior to the event also affect acquisition, such as when some prior event creates expectations. In addition, new acquisitions occur continually after witnessing the event and these new acquisitions can alter what is represented in memory. For example, a witness may see a person committing an offence, lose sight of the offender, and shortly thereafter see another person dressed similarly. Having remembered the clothing of the offender, the witness might now study the second (innocent) person’s face and add that information to his memory for the offender. Acquisition is an ongoing process.

Information may be encoded in the form of category labels or semantic form rather than in episodic or image form under some conditions (e.g., Collins & Quillian, 1969). In other words, rather than encoding an image of a person’s face, a witness might encode the label “attractive” or “mean” or “heavy.” When this happens, memory may become guided by the label through the introduction of world knowledge, stereotypes or various forms of inferencing. For example, if a witness encoded the label “mean” he or she might later report
that the person had a rough complexion (as the stereotype of mean people suggests). In fact, however, the label “mean” might have been encoded because the person squinted his eyes and bared his teeth. The general point here is that people often have little or no access to the sources of their judgments and must work backward to infer what plausibly caused them to make such a judgment (see Nisbett & Wilson, 1977). In one study, people watched a film of an auto accident and it was subtly suggested to some of them that the cars “smashed” while others heard the label “hit.” These labels affected the viewer’s estimates of speed and their later reports as to whether or not they saw broken glass (Loftus & Palmer, 1974).

What is encoded depends in part on the salience or perceptual prominence of the stimulus. With regard to faces, it is generally the upper portions that are most frequently mentioned in people’s descriptions. Hair, eyes and nose, for example, are the three most commonly mentioned facial features and together account for more than half of the total description features mentioned by people (Ellis, Shepherd & Davies, 1980). Chin, lips, mouth, complexion, cheeks and forehead together account for only 20% of the features mentioned by people. Changes in such things as hair style (Laughery & Fowler, 1980; Patterson and Baddeley, 1977) or spectacles (Baker, 1967) produce particularly strong decrements in the recognition abilities of witnesses. The addition of spectacles harms recognition more than does the addition of a moustache. The reason for this is probably that the disruption of the upper portion of the face, which was acquired or encoded more thoroughly than the lower portion, eliminates a major source of match between encoding and recognition conditions.

Unique or atypical faces, such as those that are especially attractive or unattractive, pleasant or unpleasant, are easier to recognize than are common or typical faces (Peters, 1917; Shepherd & Ellis, 1973). It is not clear whether this is due to the ease of distinguishing among faces at retrieval or the greater attention and thereby superior encoding at the point of acquisition. Most theorists, however, suggest that this is due to some aspect of acquisition (e.g., Goldstein & Chance, 1981; Ellis, 1984).

Generally, it appears that cross-race encounters (e.g., Caucasians viewing black faces or vice versa) are encoded less efficiently than are same-race encounters. Ellis, Deregowski and Shepherd (1975), for example, found that Caucasians attend to hair colour, hair texture and eye colour regardless of whether they are viewing a Caucasian or black face. These features, however, are relatively homogeneous
among black faces. It appears from this and other work (e.g., Shepherd & Deregoński, 1981) that members of one race may fail to encode appropriate facial features of members of another race.

It is generally accepted that high levels of stress or arousal interfere with information acquisition (see Deffenbacher, 1983). How much stress it takes to produce significant decrements in acquisition, however, is an unanswered question. This will be addressed in more detail in the next chapter. Suffice at this point to note that the idea of a stressful event creating an "indelible memory" or the so-called "flashbulb effect" has no basis in empirical findings. Eyewitnesses who claim that an event was so stressful that they will never forget it (e.g., "I'll never forget that face") probably have such vividness because of repeated mental simulations or rehearsals of the event after the fact. These mental rehearsals may or may not be accurate representations.

RETENTION

Short-term Memory

Many of the major theories of memory (e.g., Atkinson & Shiffrin, 1968) propose that information must go through a short-term memory store before it can be transferred to long-term memory. Short-term memory is a “limited capacity” system in which information is lost within 20 seconds or so unless it is actively rehearsed or unless it is transferred to the long-term store. A good example of short-term memory is when a person is looking up a phone number. By rehearsing the phone number it can be kept available for usage indefinitely. Once attention to the number ceases (e.g., because of a distraction or non-use of the number) it is lost from memory quickly. In other words, it is a temporary store. Short-term memory also is limited in capacity. A person cannot, for example, look up a 25-digit number and keep it in short-term memory unless the person uses special techniques which borrow from information stored in long-term memory. On the other hand, there are no known limits to the amount of information that can be stored in long-term memory and a person need not constantly attend to or rehearse information in long-term memory in order to retain the information.

Long-term Memory

Although there are no known limits as to how much can be stored
in long-term memory and constant rehearsal is unnecessary for retention, not all that is placed in long-term memory is necessarily retrievable. There are three prominent views of what happens to information during storage. First, there is an old and popular view that "forgetting" is due to decay of the memory trace. (The trace-decay view assumes that there are physiological correlates of every psychological experience but that the physiological trace decays as time passes.) Second, there is a Freudian view of forgetting which posits that forgetting is an intentional or motivated activity to protect a person against stressful or anxiety-producing thoughts. This is a clinical view of forgetting and it is popular both in the media and among non-scientific practitioners of psychotherapy. However, scientific research has failed to show support for this notion of forgetting (Holmes, 1974). In addition, if it has any validity it applies only to a small proportion of situations wherein extreme trauma is involved.

The dominant view of forgetting is based on cognitive rather than physiological or psychodynamic concepts. There are various versions of the cognitive viewpoint, but each version assumes that information stored in memory can undergo alteration or addition or both and that retrieval requires adequate "cues" for a successful memory search. The idea of retrieval cues is discussed in the next section. The notion of alteration is that a memory, once stored, may undergo changes as a result of two sources. First, there are internal sources. Gestalt psychologists, for example, have shown that people's memory for a figure progresses toward more symmetrical or more perfect figures. If someone is shown a drawing of a broken circle and is later asked to redraw what had been seen, a more perfect circle is drawn. For similar reasons, attitudes and beliefs that a person holds about a particular object of memory may work on the memory to alter it to more perfectly fit the person's world view. More easily demonstrated are external sources of influence. Loftus, Miller and Burns (1978), for example, showed people a series of thirty colour slides depicting an auto-pedestrian accident. In one segment of these slides, a red Datsun pulled up to a stop sign (for other viewers it was a yield sign). After the slide series, some viewers were asked "Did another car pass the red Datsun while it was stopped at the stop sign?" Other viewers were asked the same question with the word "yield" substituted for "stop." Thus, some who saw a stop sign were asked the question that presupposed a yield sign and some who saw the yield sign were asked the question that presupposed a stop sign. Later, when
asked to choose between whether they had seen a yield sign or a stop sign, 41% reported having seen the sign falsely presupposed in the question rather than the sign that they actually saw.

Research has not been able to distinguish between whether stored memories are altered by new experiences (such as misleading questions) or whether the new experience adds to memory. Consider the stop sign/yield sign study. The alteration hypothesis says that the misleading question caused the person to replace his or her memory of 'a stop sign with a yield sign (or vice versa). The addition hypothesis says that the misleading question created a new memory without replacing the old memory and that these memories coexist. These coexisting memories then compete in some sense in terms of which will be reported.

The person on the street tends to attribute forgetting to the passage of time. But there is no evidence that time per se is responsible for memory failure. Instead, it may be the things that happen to the person over time that cause what is usually called forgetting. If "nothing" happens over time, such as when a person sleeps, there appears to be no loss in memory (Ekstrand, 1972), suggesting that the trace-decay hypothesis may not be correct. Of course, the more time that passes from witnessing to testing, the more opportunity for new encodings to interfere with memory for the original event, either through alteration or addition.

RETRIEVAL

Successful retrieval depends, of course, on adequate encoding and storage but successful retrieval depends on other things as well. Generally, retrieval is successful to the extent that the cognitive (thinking, perceptual) activities at the time of retrieval resemble those involved in acquisition (Tulving & Thomson, 1973). Most people have an intuitive grasp for this principle of memory. When people misplace objects, for example, they usually will try to first recall what they were doing at the time the object was misplaced. Thus, the success of the person at remembering the location of the object depends not only on conditions of encoding (e.g., degree of attention paid at the time of object misplacement) and conditions of storage (e.g., the amount of time and events that happened in the interim), but also on the strategy of instantiating mental retrieval cues.

Retrieval cues can be generated internally (as in the previous example of the lost object) or externally. Suppose, for example, a person is asked to recall as many words as possible that fit the following
sequence: __ __ __ __ i __ __. In a 60-second period, most people recall a modest number of words for this sequence. Suppose, however, someone is asked to do the same for the following sequence: __ __ __ __ i n g. Although there are fewer words that fit the latter sequence than fit the former sequence, people easily recall many more instances of the latter than the former in a given period of time. Why? In the latter case there is a useful retrieval cue that is not present in the former case. Although people could have generated this retrieval cue (i.e., all seven-letter words ending with “ing”) in the former case, the explicit external provision of this cue in the latter case made retrieval success more likely. Unfortunately, aspects of retrieval in eyewitness testimony are much more complicated than this simple example would suggest. Generally, retrieval cues must be generated by the witness (i.e., internal sources) because the officer questioning the witness has no knowledge of how the witness encoded the event. The risk is that the officer will mislead the witness if the retrieval cues are provided by the officer. Nevertheless, asking the witness to describe the viewing conditions (a recommendation I make in Chapter 3) is an effective way to prime the witness’s retrieval cues. As well, conducting a lineup at location (which is endorsed under certain conditions in Chapter 7) is a recommendation deriving from this cue-utilization idea.

There are two types of retrieval that are traditionally distinguished between by memory theorists — recall and recognition. In recall, the person is provided with some request to generate verbally or pictorially (e.g., drawing or Identi-kit) the stimulus in question. In recognition, the stimulus or some similar substitute is provided and the person’s task is to retrieve context information (e.g., “Is this the person you saw on May 28 at the 7-Eleven Store?”). Although common belief has it that recognition is superior to recall, there are conditions in which recall succeeds where recognition fails (Tulving & Watkins, 1977).

The eyewitness tasks of providing verbal descriptions (initial interrogation), working with a sketch artist to generate a composite or working with an Identi-kit or Photo-fit operator are tasks of recall. Having eyewitnesses view mugshots, photo-spreads or lineups are tasks of recognition. Recent research shows how certain ways of encoding a face affect recall and recognition in different ways. In this study (Wells & Hryciw, 1984) people were shown a face and instructed either to make trait judgments (e.g., rate the honesty of the person) or feature judgments (e.g., rate the size of the nose from large to small). In other
words, the information that these people acquired (encoded) about the face was at one of two levels (trait or feature). Later, some people were given a recognition task or they were given a recall task. The recognition task required them to select the face they saw earlier from a series of five similar (distractor) faces. The recall task required them to rebuild the face using an Identi-kit. The results showed that those who made trait judgments were superior to those who made feature judgments in terms of their ability to recognize the face among distractors. However, when asked to rebuild the face using the Identi-kit, the feature encoders recreated the best likenesses. The reason for this is that the recall task, which requires the person to operate at the level of features, involves similar perceptual operations as those involved in a feature-encoding task; conversely, recognition operates at a holistic level which is similar to the perceptual operations involved in making trait judgments.

Response Criteria

The tendency for someone to indicate that they recognize or recall some stimulus or event depends in part on the person’s response criterion. A response criterion may be relatively lax or strict, depending on the person’s general tendency in that situation to report or not report weak memories. Consider, for example, two individuals with equally good memories who are looking through a series of mugshots. If one individual has a lax criterion, he may report a positive identification of one of the mugshots merely because the photo resembles the offender. If the other individual has a strict criterion, he may be unwilling to mention this same mugshot because the degree of likeness was not sufficient to meet his strict (or high) criterion for positive identification.

Whether a witness has a lax versus strict response criterion has important consequences for the behaviour of eyewitnesses. In order to study and understand these consequences, psychologists have distinguished between four possible outcomes: false alarm, hit, miss and correct rejection (see Green & Swets, 1966). Consider a simple situation in which a witness is shown a photograph of a person who may or may not have committed an offence. If the witness says “Yes, that’s the man” it might be either a false alarm or a hit, depending, of course, on whether the person in the photo is in fact the person who committed the offence. If the witness says “No, I cannot positively identify him” it might be either a miss or a correct rejection. The
general tendency for someone to say “yes” is a lax criterion and the general tendency to say “no” is a strict criterion in this situation. Those witnesses who have lax criteria tend to maximize hits at the expense of maximizing the chances of a false alarm. Those who have strict criteria tend to maximize correct rejections at the expense of maximizing the chances of a miss.

It is impossible to establish what should be the appropriate response criterion level for witnesses. However, research by Hilgendorf and Irving (1978) indicates that there is considerable variability between people in their response criteria levels in identifying faces. This variability may be even greater than the variability between people in the goodness of their memories for those faces. As a general rule, witnesses with lax criteria for recognition ought to be less trusted when they report a positive memory than those who have strict criteria. Conversely, those with strict criteria ought to be trusted less when they report a negative memory (i.e., failure to identify or a “not sure” response) than those who have lax criteria. Of course, it is undesirable to have a witness with an extreme response bias in either direction. Excessively lax criteria can result from deference to authority or an overly-cooperative attitude (see Ellison & Buckhout, 1981), failure to caution the person against guessing (Hilgendorf & Irving, 1978) or lineup procedures that explicitly or implicitly pressure witnesses to choose someone (Malpass & Devine, 1984).

Summary

Memory is best construed as an interactive product of acquisition, storage and retrieval factors. Initial perceptions are influenced by expectations, attitudes and other social factors as well as generally shared errors (e.g., underestimating vertical distances). Gaps exist in the acquisition of a witnessed event and these gaps may be filled in later by inferences, guesses, and so on. There is no scientific evidence to prove that long-term memory is permanent (Loftus & Loftus, 1980). Loss in memory accuracy over time seems to be more a function of new experiences that interfere with memory than a function of the passage of time per se. The success of a retrieval task depends not only on the accuracy of initial perceptions, the adequacy of encoding strategies and the minimization of interference during storage but also the appropriateness of retrieval cues and retrieval strategies. The type of error committed in memory reports (false alarms versus misses) depends a great deal on the response criteria characterizing the particular person and situation.
A NOTE ON THE EXPERIMENTAL METHOD

Throughout this book there are references to psychological research studies. Whenever possible, recommendations are based on conclusions derived from psychological studies that have used the experimental method. It is important to know what the experimental method is in order to understand how these conclusions are reached.

The experimental method of research in psychology was borrowed from physics in the late 1800s. The central advantage of the experimental method over other research methods is its ability to discover lawful cause-effect relations. The principal requirement for discovering these lawful cause-effect relations in eyewitness research is that the researcher establish complete control over what the eyewitnesses view and how they are tested. This allows the researcher to vary the witnessing and testing conditions systematically in order to isolate the causes of errors that occur in the witnesses' memories.

Consider one example of an eyewitness identification study that used the experimental method. R.C.L. Lindsay of Queen's University and Gary L. Wells of the University of Alberta (1985) were interested in testing the idea that a sequential lineup (where the eyewitness views one person at a time and makes a yes/no decision before viewing the next person) would produce fewer false identifications than would a more traditional lineup (where all lineup members are presented simultaneously).

The first requirement of this research was that the witnessed event had to be staged in front of unsuspecting eyewitnesses. Using a staged event allows the researchers to control what the eyewitnesses see and hear, it guarantees that all eyewitnesses were exposed to the same event, and it allows the researchers to compare the witnesses' recollections to a known set of facts. Indeed, control over the course of events is a basic and necessary premise of the experimental method. In the Lindsay and Wells (1985) experiment, the staged incident was the theft of a calculator in a waiting room. The theft was repeated before 1-4 persons in the waiting room until 240 different eyewitnesses had all been exposed to the incident. This highlights one of the main principles of the experimental method: the use of large numbers of cases. Using 240 eyewitnesses helped assure that any conclusions that were reached were not due to the peculiarities of just a few eyewitnesses or mere chance, but instead applied to a more general population. After witnessing the theft, the eyewitnesses were randomly assigned to view either a sequential lineup or a simultaneous lineup to identify the perpetrator. Random assignment is one of the most misunderstood
concepts among non-scientists. Many people think that the term “random” is similar to the terms “haphazard,” “casual” or “aimless.” Nothing could be further from the truth. Random assignment means that each and every person in the experiment has an exactly equal chance of being in each condition. Thus, for example, each of the 240 eyewitnesses to the staged theft in the Lindsay and Wells experiment was equally likely to be in the simultaneous lineup or sequential lineup condition. The use of random assignment along with the large numbers of eyewitnesses in each condition provided assurance that the differences in the rates of false identification between the simultaneous lineup and the sequential lineup could not be attributed to certain extraneous factors. The results of this experiment, in which there were fewer than half as many mistaken identifications when using the sequential procedure than when using the simultaneous procedure, were then subjected to a mathematical test of statistical significance.

Statistical significance tests, while sometimes mathematically complex, are simply means to determine whether or not the results can be attributed to chance. In the case of the Lindsay and Wells study, the statistical significance test showed that there was less than one chance in one hundred that the result was due to chance factors. Thus, it was concluded by Lindsay and Wells that the use of a sequential lineup procedure caused a reduction in the rate of mistaken identifications.

It is unfortunately not the case that every conclusion and recommendation in this handbook is based on scientifically proven facts. Whenever such proof is available, however, it is used as the basis for the recommendation and the experiments on which it is based are cited. In cases where scientific evidence is not available or where conflicting experimental results have been obtained, the recommendation is based on common sense, prevalent theory, current practices, practical considerations or a combination of these.
Estimator and System Variables

The purpose of using eyewitness testimony as evidence is to maximize the chances that a guilty person will be convicted and to minimize the chances that an innocent person will be suspected, accused or convicted. But the problems of unreliability in human memory (especially in brief, unanticipated and possibly stressful situations) make it profoundly important that police fully understand that some of this unreliability may be attributable to factors that they (the police) can control.

The distinction between those variables affecting eyewitness accuracy that police can and cannot control has been called the system variable/estimator variable distinction (Wells, 1978). System variables are controllable by police and include such things as the method of questioning witnesses or the structure of a lineup. System variables are so named because of their controllability by “the system.” Estimator variables are beyond the control of police and include such things as the witness’s opportunity to observe the offender during the offence, whether or not the witness and offender were of the same race, and so on. Estimator variables are so named because they are not controllable, but instead their influence can only be “estimated.” It is known, for example, that cross-race identifications are more difficult for witnesses than are same-race identifications (e.g., Malpass
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& Kravitz, 1969), but, of course, police cannot control the race of witnesses and perpetrators. On the other hand, poorly constructed lineups increase the likelihood of false identification (Lindsay & Wells, 1980) and, unlike race, lineup structure is a system variable that police can control.

This book is almost exclusively devoted to system variables. In the next section, however, I discuss some major estimator variables. I discuss these estimator variables because there is a natural tendency for police to interpret the credibility of an eyewitness’s account based on estimator variables. Because of this, it is important for police to better understand the meaning of these estimator variables in terms of how they relate to eyewitness credibility. In this chapter I will introduce the system variables that are discussed in detail in later chapters.

ESTIMATION AND INTERPRETATION

Estimator variables are numerous and complex in their manner of interaction. Wells (1978) conservatively estimated that there are in excess of one million "combinations" of estimator variables which makes the actual task of estimation beyond the reach of experts, let alone those who may make intuitive guesses. Nevertheless, there may be some value in understanding the role played by some estimator variables, especially those that appear to be misunderstood by most people.

Consider, for example, an eyewitness who gives a fluent, detailed, and/or complete description of a perpetrator versus an eyewitness whose description is sketchy, general and incomplete. There is a natural tendency for people to consider the former witness to be a "good" witness relative to the latter witness. However, caution must be exercised when making that interpretation. Research indicates that fluency and completeness of description has little relationship to the likelihood that the eyewitness subsequently will be able to identify the described person from a lineup or photo-array (Goldstein, Johnson & Chance, 1979; Wolfskiel and Brigham, 1985). This research shows that good describers of faces are not necessarily good identifiers. Although there is some evidence suggesting that faces that are described easily are also easier to identify (Wells, 1985), it appears that the quality of a description has more to do with the face being described than it does with the description abilities of the witness. Some other misunderstood issues regarding the estimation and interpretation of
eyewitness accuracy include eyewitness confidence, non-identification
behaviours of eyewitnesses, the role of stress, race of witness and
perpetrator, and other witnessing conditions. Each of these are
discussed in the following sections.

Confidence of witness

The confidence or certainty with which an eyewitness makes a
statement or identifies a suspect is construed widely by lay people
to be diagnostic of the eyewitness's accuracy (Brigham & Wolfskiel,
1982; Deffenbacher & Loftus, 1982; Rahaim & Brodsky, 1981; Wells,
Lindsay & Ferguson, 1979; Yarmey & Jones, 1983). Eyewitness research
experts, on the other hand, agree that there is little or no relationship between
eyewitness identification accuracy and eyewitness confidence (see Yarmey
& Jones, 1983). Experimental studies tend to support the position of the
experts (Wells & Murray, 1984).

Wells and Murray's (1984) review of the research on confidence­
accuracy relationships shows that of the 31 separate empirical
investigations involving a total of well over two thousand eyewitnesses,
only 13 of these studies showed a statistically significant relationship
between accuracy and confidence. Even those studies showing a
statistically significant relationship tended to show the relationship to
be quite weak and not particularly useful. In other words, the likelihood
of a confident witness being accurate may only be trivially greater
than is the likelihood of a non-confident witness being accurate.

It may be of some value to understand why the confidence of
an eyewitness is not a good indicator of the accuracy of an eyewitness.
The reason for this stems primarily from the fact that the factors causing
eyewitness accuracy are different from the factors causing eyewitness
confidence (Leippe, 1980). In general, eyewitness accuracy is
determined by the traditional memory variables involved in
acquisition, storage and retrieval (as discussed in the previous chapter).
The confidence that an eyewitness holds regarding his or her memory
for the witnessed event, however, is determined more by social and
personality variables. Brown, Deffenbacher and Sturgill (1977), for
example, showed that eyewitness confidence level is much more a
characteristic of the witness than it is an informative index of whether
or not the witness was correct. In other words, some eyewitnesses
are generally confident while others generally are not confident
regardless of their accuracy or inaccuracy. Research by Lindsay, Wells
and Rumpel (1981) showed that an acquisition variable (opportunity
to view the perpetrator) had robust effects on the witnesses' later abilities to identify the perpetrator but had no effect on witnesses' confidence. Research by Wells, Ferguson and Lindsay (1981) showed that eyewitness confidence inflates following an identification if the interrogator “briefs” the witness about preparing for later cross-examination. Confidence inflation in this study was at least as great for eyewitnesses who had falsely identified someone as it was for witnesses who accurately identified someone in the lineup.

It is disconcerting to learn that eyewitness confidence is a poor and perhaps misleading clue to eyewitness accuracy. And it is tempting for many police officers to continue to be influenced by the confidence of a witness. However, two further things should be noted. First, I have found that police officers who have conducted large numbers of lineups tend to agree that there is little or no relationship between an eyewitness's confidence in identification and accuracy in identification. It appears that this “insight” derives from these officers' experiences of seeing eyewitnesses choose with great confidence a lineup distractor (e.g., police detective or some other known-innocent lineup member). It should also be noted that the relative absence of a confidence-accuracy relationship means not only that high-confident witnesses may be incorrect, but also that low-confident witnesses may be correct.

**Non-identifications**

When an eyewitness identifies a suspect embedded among distractors (e.g., from a photo-spread or lineup), there is a natural and appropriate tendency for investigative officers to increase the strength of their belief that the suspect is guilty. How much they should increase their belief of the suspect's guilt depends on many things including the goodness of the lineup procedure. Unfortunately, there is a tendency to treat non-identifications as uninformative regarding the guilt or innocence of the suspect. Non-identifications are of two types — failures to identify anyone in the lineup and the identification of a known-innocent distractor. Wells and Lindsay (1980) have used mathematical proofs as well as experimental data to show that under sets of conditions in which lineup identifications can properly be said to be diagnostic of the suspect's guilt, non-identifications necessarily are diagnostic of the suspect's innocence. Suppose, for example, an investigator believes prior to conducting a lineup that there is a 90% chance that the suspect is guilty. An identification of the suspect by the eyewitness should
increase the investigator's certainty and a non-identification should decrease the investigator's certainty.

Failure to consider non-identifications as a form of exonerating evidence is a judgment that defies scientific logic (e.g., Bayesian statistics). Non-identifications are often treated as non-events, as though a lineup was never conducted. This is a serious but common error in human judgment. Considering a non-identification to be uninformative is an illusion in the same sense that line a was seen to be longer than line b in Figure 1 (see Figure 1 on p. 70).

The two types of non-identifications are not equally diagnostic of innocence. Research shows that eyewitnesses' identifications of distractors are somewhat more likely to occur when the lineup's suspect is innocent than when the suspect is guilty. But failures to identify anyone in the lineup are even more diagnostic of the suspect's innocence than are identifications of distractors because failures to identify anyone are much more likely when the suspect is innocent than when the suspect is guilty (see Wells & Lindsay, 1980).

The fictional Sherlock Holmes was a master at seeing the diagnostic value of non-events. In one case, for example, he reminded Watson of "the dog's behaviour." "But the dog didn't bark," noted Watson. "Exactly," replied Holmes, "which means that the dog knew the person who entered the house that night!"

Stress

Stress is another estimator variable that sometimes is misunderstood. A problem with the study and understanding of stress is that a given witnessed event that is stressful may also be arousing, anxiety-producing, fear-producing, and so on. Thus, a study that varies the degree of violent content in a witnessed event (e.g., Clifford & Scott, 1978) could be said to be a study of stress, arousal, anxiety or fear. In spite of difficulty in separating these various elements, it is possible to make some conclusions because the effects of these variables appear to be roughly the same. In general, it appears that high levels of arousal, stress, fear or anxiety are detrimental to eyewitness accuracy (Deffenbacher, 1983). The issue becomes more complex, however, when considering the entire spectrum from the lowest levels of arousal to the highest levels. The well-known Yerkes-Dodson Law states that there is an optimum or "best" level of arousal for every task and that for relatively difficult tasks the relationship between arousal and performance is curvilinear. In other words, a person can be under-aroused
in some circumstances. This might happen, for example, if a person had just awakened from sleep. In such a case, a small amount of additional arousal should benefit the person’s eyewitness abilities.

Stress, arousal, fear and anxiety must have some source or causal agent. For the eyewitness, this may be the presence of a gun or other weapon or it may be a verbal threat to do harm. Part of the reason why such arousal is detrimental to eyewitness accuracy is that such levels of arousal are atypical for the person and cognitive functions are disrupted. Some of this disruption is systematic, such as the narrowing of attention (Easterbrook, 1959). But equally detrimental, perhaps, is that the source of the arousal (e.g., weapon) may receive an inordinate amount of attention. The so-called “weapon focus” effect (Clifford & Bull, 1978; Loftus, 1979) explicitly hypothesizes this phenomenon. Situations evoking stress, arousal, fear and anxiety tend to instantiate a “flee or fight” response in which basic human concerns for immediate well being are likely to override any higher-order mental processes (e.g., remembering a perpetrator’s face) unless they serve the immediate situation.

Thus, data and theory do not support the idea that stress and its correlates will facilitate eyewitness accuracy. Fortunately, most police officers seem to realize that high arousal is detrimental to eyewitness accuracy (67% said so in a recent survey; see Brigham & Wolfskiel, 1983).

Race

A recent questionnaire asked people about their beliefs regarding whether or not cross-race identification (e.g., Caucasians identifying blacks) are more difficult than same-race identifications (Deffenbacher & Loftus, 1982). Surprisingly, 40% of the respondents felt that the idea of cross-race identifications being a problem was a myth. Experiments, however, show that it is in fact true that cross-race identifications are more difficult than are same-race identifications (although there are some qualifications as noted below).

Studies consistently show that one race has more difficulty identifying members of another race than they do of their own race (e.g., Brigham & Barkowitz, 1978; Chance, Goldstein & McBride, 1975; Cross, Cross & Daly, 1971; Feinman & Entwisle, 1976; Galper, 1973; Luce, 1974; Malpass & Kravitz, 1969). However, only some of these studies have found reciprocality in the sense of this being equally true for blacks and whites (see Lindsay & Wells, 1983). Cross, Cross and
Daly (1971), for example, found that blacks were equally proficient at identifying both black and white faces whereas whites were better at identifying white rather than black faces. Galper (1973) found that whites who were enrolled in a black studies programme identified faces of blacks better than they identified members of their own race. Thus, there are some exceptions to the cross-race identification effect, but the experimental literature generally supports the idea that cross-race identifications are more difficult than are same-race identifications.

Recent research helps clarify what is meant by "more difficult" in reference to cross-race identifications. Research by Lindsay and Wells (1983) indicates that the errors made in cross-race identifications primarily are "misses" (i.e., errors of non-identification) rather than false identifications. That is, people seem (appropriately) more cautious when attempting a cross-racial identification. Therefore, if they are not pressured into making an identification (and no one should be pressured) they will quite often make no identification at all.

Why are cross-race identifications more difficult than same-race identifications? It is tempting to think this might be related to racial attitudes. The bigot, for example, is seen as someone most likely to say "they all look alike to me." In fact, however, racial attitudes seem not to predict the actual degree of difficulty that people have with recognizing members of another race (Brigham & Barkowitz, 1978). Another explanation has centred on the idea that people interact more frequently with members of their own race than they do with members of another race and, therefore, have greater experience with discriminating among faces of their own race. Some support has been found for this idea, but it appears that exposure to the other race or frequency of contact is not sufficient to eliminate the cross-race recognition difficulty; instead, it appears that a person must have several friends of another race rather than just attend an integrated school or live in an integrated neighbourhood (Lavrakas, Buri & Mayzner, 1976).

Other Witnessing Conditions

As indicated earlier, all witnessing conditions are instances of estimator variables. Most information concerning witnessing conditions comes from statements provided by the witness. This creates a peculiar situation in which witnessing conditions are ascertained by asking the very witness whose memory is being evaluated. Generally,
a degree of caution must be exercised in evaluating how good or poor the witnessing conditions were because the witness may err in describing those conditions. For example, it is known from studies that the amount of time the perpetrator was viewed by the witness is useful in estimating the likely accuracy of the witness; but it is also known that witnesses overestimate such viewing times (Wells & Murray, 1983), especially if they were of short duration and much was happening (Shiffman & Bobko, 1974).

It is also important to understand that good witnessing conditions, such as good lighting, reasonable distances and adequate exposure duration are necessary but not sufficient for eyewitness accuracy. Eyewitnessing is a psychological event of considerable complexity and there is no direct translation from environmental, physical conditions (such as lighting or distance) to the assessment of memory accuracy. Sommer (1959) described a hunting accident and court case that illustrates this point. Five men on a hunting trip got their car stuck and two of the men went to get help. One of the two men came back toward the car and was shot by one of the men who stayed behind. The man who was shot was thought to be a deer. Later, a police officer testified that he had gone back to the scene the next day and set up the original conditions (distance, lighting, etc.). He said he had no difficulty seeing a person as a person, even under slightly poorer viewing conditions. "Yet, the policeman knew he was supposed to be looking at a man; thus, he perceived the object as a man" (Loftus, 1979). The general point is that good viewing conditions are not to be treated as an argument that the witness perceived accurately, only that the witnessing conditions allowed accurate perception if other psychological factors (such as attention or expectations) did not interfere.

SYSTEM VARIABLES

As indicated in the previous section, the estimation and interpretation of eyewitness accuracy is fraught with uncertainty. Furthermore, it is ultimately up to the judge or jury as triers of fact to make the judgment about eyewitness accuracy, for example, as to the adequacy of the witnessing conditions. But police have a much more important role to carry out; they must assure that the procedures they use in questioning witnesses, conducting composite tasks, mugshot tasks, photographic displays and lineups are state-of-the-art. Unlike such things as witnessing conditions, police can control the ways in
which they ask questions, conduct lineups, and so on. Even under the best of witnessing conditions a poor set of procedures by police can seriously distort eyewitness reports. This section overviews the five basic domains of system variables which are developed in detail in subsequent chapters.

**Questioning Witnesses**

There are two main principles that guide most of the specific recommendations on the questioning of witnesses. First, questions should follow a course from general, open-ended questions to specific questions. That is, the first questions ought to be no more than a general probe as to the witnesses' viewing conditions and statements of what they saw. These free and open reports are more reliable than what is obtained through specific questions. An officer can go on to ask specific questions (e.g., about a perpetrator's height) if these things were not mentioned in the open, narrative report, but answers to specific questions should be accorded somewhat less credibility. The second main principle guiding the specific recommendations in Chapter 3 is the avoidance of leading questions. The use of leading questions is a serious violation of the recommendations in Chapter 3 and the avoidance of such questions may be more difficult than many people believe. Whether the use of a leading question is intentional or unintentional is not at issue here. Indeed, the use of a leading question usually is unintentional and it is for this reason that great care and forethought must go into the questioning of eyewitnesses. The recommendation that a different officer question each witness in multiple-eyewitness cases derives from this concern about leading questions.

**Composite Tasks**

There are three main composite production systems in use today — the Identi-kit, the Photo-fit and sketch artists. Unlike the initial questioning of eyewitnesses, for which it may be impractical to use only well-trained specialists, I recommend that only trained specialists administer Photo-fits and Identi-kits. Because it is a form of eyewitness questioning, composite tasks hold all the same precautions against leading questions. In addition, a poor Photo-fit, Identi-kit or sketch artist likeness may induce some distortion in the eyewitness's memory. Research shows that some persons' faces simply cannot be built to
any degree of reasonable likeness using the Identi-kit or Photo-fit. Furthermore, recent research shows that people do not normally encode faces in such a way that they can retrieve facial information at a feature level — a level required by all composite production tasks. Generally, composite tasks should not be used unless there is no suspect, in which case it can have some investigative value. Discrepancies between the composite and any person who might eventually become a defendant, however, may be taken advantage of by defence counsel even though the discrepancy may be attributable to inherent difficulties with composite tasks.

Mugshots

As with composites, mugshot tasks should be used only if there is no suspect. There are several reasons why police should not be eager to have eyewitnesses examine mugshots. First, mugshots in use in most police departments are dated. If the perpetrator’s photo is among the mugshots it may be overlooked because of changes in age, hair, facial hair, and so on. In addition, research shows that a face viewed in a mugshot set may later be misidentified during a photo-spread task or live lineup because of the familiarity created by the earlier mugshot task. Generally, research shows a reduction in the likelihood of accurate identification as the number of mugshots viewed by the witness increases.

Photo-spreads

When a specific suspect exists in a case, either a photo-spread or lineup should be used. Research shows that the likelihood of mistaken identification decreases as the number of viable alternative photos increases. A viable photograph is one in which the person matches the general characteristics of the perpetrator as described earlier by the eyewitness(es). Numerous things can bias the photo-spread task, such as having too few viable alternative photos, making the suspect’s photo distinctive in any way, suggesting to the eyewitness that the perpetrator is in the set of photos, and so on. Numerous details about procedure such as how to mount the photos, what to tell the witness before and after an identification, who should conduct the photo-spread, and so on are outlined in Chapter 6.
Lineups

Normally, a live lineup is preferred to a photo-spread. There are several situations, however, in which a live lineup procedure may be undesirable (e.g., if good distractors are not available). The main principles guiding a good lineup are similar to those guiding a good photo-spread (e.g., good distractors, no suggestions). Unique to lineups, however, are situations having to do with clothing, voice identification, and so on. These situations require specific procedures that are planned carefully in advance. The general concept underlying lineup tasks (as with photo-spreads) is independence. Eyewitnesses’ knowledge of who it is that the police suspect, which may come about in a variety of ways, indicates that any identification of the suspect was not independent of police procedures and raises serious questions about the accuracy of the identification.

THE CHILD EYEWITNESS

Young children sometimes have special problems as eyewitnesses. Frequently these problems arise because the children are the victims of the offence to which they are being asked to provide testimony and often the offences are sexual. The police officer who is not trained in child sexual offence investigation should not question a child about a sexual offence. The purpose of this section of the handbook is to provide a general sketch of what a trained professional does in cases of child sexual abuse. The reader should not believe that he or she is competent to question child witnesses of sexual abuse merely because of familiarity with this section of the handbook.

One of the main difficulties with questioning a child sexual abuse victim is that young children might not have the vocabulary to describe genitalia and sexual activities. Older children, who might have the vocabulary for such descriptions can also have great difficulty with such descriptions because of the emotionally sensitive nature of the subject. One recent development that many professionals have found to be effective is the use of anatomically correct dolls. Actually, the term “anatomically correct” is something of a misnomer because the size of the genitalia on these dolls is exaggerated. Nevertheless, the general theory of these dolls is that they allow the child to point at genitalia and to use the dolls to display actions in response to questions about what happened. As well, spontaneous play with the dolls allows the professional to discern some important information about whether
or not the child has been exposed to certain sexual activities.

Professionals have found the following rules of thumb to be useful and advisable:

1. Plan the questioning session carefully so that it can be completed in one day rather than being spread over several days.
2. Use two workers rather than one so as to have someone who can corroborate the statements and actions of the child and accurately record the child’s responses.
3. Use a neutral setting for the interview. The child’s home is not an appropriate setting even if the alleged event was not associated with the family or the home. Family rules and taboos are felt more strongly by children in their own homes.
4. Include others in the interview (e.g., mother or teacher) only if the child requests that person.
5. Use toys to set the child at ease and break the ice.

The professional brings out the dolls only after a rapport is established with the child. The dolls are fully clothed at that point and are given names. Names are necessary because the purpose is not to engage the child in make-believe play but to get an accurate representation of real events and real people. The interviewer does not initiate the undressing of the dolls but instead allows the child to do this in response to certain probes (e.g., “Show me what he did.”).

A natural tendency of the untrained interviewer is to express shock or dismay or to say something like “That must have been terrible” in response to a child’s disclosure. Such reactions must be avoided. Shock or dismay can communicate to the child that he or she is saying something that is unacceptable. Statements such as “That must have been terrible” are presumptive; it may not have been so. Finally, the child should be assured that the incident is not his or her fault and that he or she is not the only child that this has happened to.¹

Problems with young children as eyewitnesses are not restricted to cases of child victims of sexual abuse. Psychological research shows that young children generally recall less from an event that they

¹ There are several publications that can be useful for learning the skills of interviewing children of sexual abuse. Dolls can be obtained from Analeka Industries Ltd., P.O. Box 141, West Linn, Oregon, U.S.A. 97068 and useful publications include “Guidelines for Investigative Interviewing of Child Victims of Sexual Abuse” (M. Wells, 1984) and “The Child’s Account,” a videotape and training manual available from Alberta Social Services and Community Health, 6th Floor, Seventh Street Plaza, Edmonton, Alberta, Canada, T6G 0X5.
witnessed than do older children or adults (Goodman & Reed, 1986; Marin, Holmes, Guth, & Kovac, 1979; Saywitz, 1987). Interestingly, however, what young children recall in an open narrative (see Glossary) tends to have approximately the same proportion of accurate to inaccurate detail as that of adults (there is just less total information). It is also the case that young children are more susceptible to leading questions than are older children or adults (Ceci, Ross & Toglia, 1987; King & Yuille, 1987).

The following chapters discuss the four primary domains of system variables; questioning eyewitnesses for purposes of obtaining descriptions, use of composites, mugshot tasks, photo-spreads and lineups. In addition, a chapter is devoted to conducting voice identifications, clothing identification and identification of other objects. Finally there is a chapter on hypnosis which discusses the general problems with its usage and recommends its use be limited to special cases for investigative purposes only.
Obtaining Descriptions

There are many things for police officers to do upon arrival at the scene of the crime; determining whether or not there were eyewitnesses is one of the most important. It is critical to keep in mind the fact that the memories of eyewitnesses can be volatile even though the witnessed event might have happened only minutes ago. There are several reasons why accurate descriptions are important at this point. First, an accurate description can assist police in an “area search” for suspects. Conversely, an inaccurate description (produced perhaps by one of the poor questioning techniques discussed later in this chapter) might aid the perpetrator’s exit from the area.

Second, accurate descriptions can help speed up the exoneration of innocent persons who might otherwise seem suspect. The exonerating function of accurate descriptions is an often overlooked yet valuable function of eyewitness descriptions.

Third, descriptions furnished by eyewitnesses have probative value in court. The United States Supreme Court, for example, has explicitly argued that the degree of match or mismatch between a defendant’s characteristics and the eyewitness’s prior description of a perpetrator is to be used in judging the reliability of any lineup or photographic identification (Neil v. Biggers, 1972). Indeed, seemingly trivial details can have profound consequences in court. Consider the case of R. v.
Peterkin (1959) wherein the eyewitness described an assailant as having a trenchcoat draped over his right arm to conceal a weapon in his hand. The accused testified he was left-handed and was acquitted. Many police officers might take a witness’s statement that the assailant “had a trenchcoat over his arm to conceal a weapon” and then ask the witness “It was over his right arm, I assume?” As discussed later in this chapter, this is a leading question that can promote inaccurate eyewitness reports.

Finally, as will be seen in Chapters 6 and 7, accurate descriptions are important tools for constructing a proper photo-spread or lineup. Generally, all the characteristics given in an eyewitness’s prior description must be characteristics of those who serve as distractors in photo-spreads and lineups.

DESCRIPTIONS FROM WHOM?

Normally, police should obtain descriptions from all potential eyewitnesses. These eyewitnesses should first be separated so that they do not hear the descriptions provided by other eyewitnesses. Those who are unable to provide descriptions should be noted and recorded [Recommendation 3.1].

There are several reasons why all potential eyewitnesses should be questioned. First, there may be a tendency for police to believe erroneously that eyewitnesses who do not volunteer descriptions have nothing to offer or that those who were physically closest to the offender will give the best descriptions. Often, however, those closest to the offender might have a poor view, might be distracted, experience greater stress, or might focus on things other than the offender (e.g., focus on a weapon). In addition, there appears to be little relationship between those who are willing to offer an identification attempt and those who are likely to be accurate in their attempt (Murray & Wells, 1982).

Having multiple eyewitnesses is valuable for several reasons. First, the extent of agreement or disagreement in their descriptions attests to the reliability of those descriptions. If eyewitnesses disagree widely in their descriptions, it suggests that witnessing conditions may have been quite poor and any given description should be accorded little credibility. On the other hand, descriptions may disagree because some witnesses had poor viewing conditions whereas others had good viewing conditions. Thus, the advice of discrediting descriptions when they are in poor agreement applies primarily to situations where the
eyewitnesses had somewhat equal opportunities to view the perpetrator.

Although courts generally accord considerable importance to the quality of prior descriptions, police officers should avoid the assumption that good describers are good identifiers and poor describers are poor identifiers. Numerous studies (e.g., Goldstein, Johnson & Chance, 1979; Howells, 1938; Wells, 1984; Wolfskiel & Brigham, 1985) now indicate that good describers are no more likely to identify accurately from lineups or photo-spreads than are poor describers. In general, it appears that faces are recognized through “holistic” processes (Wells & Hryciw, 1984) that are not necessarily expressible in verbal forms. The courts have been criticized for assuming that the quality of a prior description has much value in assessing the likelihood of accurate identification at the time of a lineup or photo-spread (Wells & Murray, 1983).

Given these differences between description and identification it might be suspected that the taking of descriptions could interfere with subsequent identification. Indeed, a study by Williams (1975) suggests that description probes “decrease the accuracy in recognition by . . . [breaking] . . . the witness’s memory into parts.” Other research, however, indicates no interfering role for taking descriptions as long as the use of leading questions is avoided (see Davies, 1978; Marshall, 1966).

Separation of witnesses. Although police officers have no control over the nature and extent of interaction between witnesses prior to police arrival on the scene, early separation of potential eyewitnesses is important for several reasons. The courts have not consistently condemned the failure to separate witnesses, but most research shows that discussion among eyewitnesses reduces the value of individual eyewitness reports that occur later (e.g., Alper, Buckhout, Chern, Harwood & Slomovits, 1976; Rupp, 1975; Loftus & Greene, 1980; see Warnick & Sanders, 1980 for an exception). In general, I recommend that witnesses be separated as soon as possible so as to avoid their influencing one another’s descriptions [Recommendation 3.2]. There are three ways in which discussion among eyewitnesses harms the value of the information obtained subsequently from these eyewitnesses. First, it creates homogeneity among eyewitnesses’ reports thereby masking any important discrepancies among eyewitnesses. For example, an eyewitness who got a poor view might borrow from the descriptions given by others and appear to be a reliable witness. When police show that eyewitness a lineup or photo-array later, however,
he might identify a distractor, thereby lessening the case against the suspect. If police keep this witness away from the other witnesses, however, the witness might readily acknowledge that he did not see enough to provide a description and would not later be shown a lineup. Generally, discussion among eyewitnesses produces conformity toward the description of the most confident eyewitness. Yet, as discussed in Chapter 2, confidence and accuracy are poorly related. Finally, discussion among eyewitnesses or overhearing another witness's description can promote “replicated errors” in that the first person's description errors tend to be incorporated into errors for others who overhear that description (Loftus & Greene, 1980).

DESCRIPTIONS TAKEN BY WHOM?

Whenever possible, descriptions should be taken by a different officer for each eyewitness in a given case [Recommendation 3.3]. The general idea behind this guideline is that a police officer who is aware of the description by one eyewitness might, by choice of questions and question wording, unintentionally lead a second witness to give a description similar to that given by the first witness. The psychological literature supports this concern. For example, research shows that people have a natural tendency to ask questions that are likely to yield confirmation of their expectations (Einhorn & Hogarth, 1978). In other words, it is difficult for people to query someone without letting the questioner's prior expectations influence the form and content of the questions. Formal training might lessen this bias (e.g., see Nisbett, Krantz, Jepson & Kunda, 1983), but it is construed generally to be a bias that is not easily corrected and is unintentional.

There are certain conditions that might make it either difficult or undesirable to use a separate officer for each eyewitness. It would be impossible, for example, to use a separate officer for each eyewitness if the number of eyewitnesses exceeds the number of available officers. In such cases, the eyewitnesses ought to be divided somewhat equally among the available officers. Care should be taken to record the order in which eyewitnesses were questioned whenever an officer takes more than one description. It should also be noted that it may be undesirable to delay the taking of a description merely in order to await the arrival of another officer. Normally, such a decision should be based on the amount of time passed already. For example, if the witnessed event took place within the last 30-45 minutes (or less) it would not be wise to delay the taking of a description. If the event was some hours earlier,
however, a 30-minute wait for another officer will have no appreciable significance for the eyewitness's memory.

DESCRIPTIONS: WHEN?

Descriptions should be taken at the first reasonable opportunity from all witnesses. A second or third description from a given eyewitness can be taken prior to conducting an identification task (e.g., photo-spread, lineup) if deemed to serve a useful purpose [Recommendation 3.4]. The obvious idea behind taking descriptions at the earliest opportunity is to capitalize on the fact that memory retrieval success declines with the passage of time (e.g., Marshall, 1966). The rate of decline, however, is not constant. Instead, it declines more and more gradually as time passes (Ebbinghaus, 1885). Thus, forgetting is greater between the first and second hour after an event than it is between the sixth and seventh hour; there is more forgetting in the first day than in the second day, and so on. Thus, a delay of one hour may be serious if the witnessed event just happened, while a delay of one day may be insignificant if the witnessed event occurred two weeks before.

Descriptions taken after a photographic or live lineup identification have little or no value. Such descriptions may be little more than recollections of the photograph shown previously or recall of the characteristics of the person seen in the lineup. A second or even third description taken prior to an identification attempt, however, can sometimes serve useful purposes. For example, an eyewitness might not be able to recall much immediately after the witnessed event if the event was especially traumatic for the witness. Later, when the emotional impact has subsided, the witness might be better able to describe the event. (Note: Although this might serve to cast some doubt on the witness's later recollection, such situations are best treated as special cases and it is up to the prosecuting attorney to argue the probative value of the later recollection. Also, these situations are unlikely to yield "inconsistent" descriptions; instead, the later description is likely to simply be more complete.)

Another reason why a second or third description might be taken prior to an identification attempt is to check on the reliability of the description. Components of a description that are inconsistent (e.g., discrepancies in height estimates given at time one versus time two) suggest strongly that the particular component ought not be trusted. It is often the case that errors in memory are distributed randomly,
which makes errors in recollection more variable across time than are accurate recollections. On the other hand, consistency in recollections ought not be accorded too much credibility. An eyewitness can recall a particular component or feature consistently for reasons other than the fact that the recollection is accurate. Indeed, many witnesses may simply recall the description given earlier to police; the need to appear consistent is a strong human trait (e.g., see Festinger & Carlsmith, 1959).

Obviously, descriptions solicited from a given eyewitness on multiple occasions should follow the same guidelines as apply to the situation where descriptions are solicited from multiple eyewitnesses. That is, it is desirable to use a different officer the second time than was used the first time, and so on. Furthermore, precautions should be taken to prevent the second officer from “refreshing” the witness’s memory by using the description given to the first officer; doing so nullifies the second description’s status as a check of reliability.

Finally, a description given just prior to viewing a photo-spread or lineup might help prime the witness’s memory, focus attention on the issue in question or in some other way aid the ability of the eyewitness to identify the offender. Care should be taken, however, because a poorly worded series of questions about the offender’s appearance can promote misidentifications (Loftus & Greene, 1980). It is probably best to simply ask the witness to recall the situation and the events that led up to the point of witnessing the offender without using specific questions or requiring specific answers at this point.

DESCRIPTIONS: HOW SHOULD THEY BE TAKEN?

Questioning should follow a sequence of asking (a) about the witness’s opportunity to observe, followed by, (b) open narrative questions, (c) directed narrative questions, and (d) specific questions. Questions asked as well as answers given should be recorded carefully, preferably by the use of tape recordings [Recommendation 3.5].

There is now an empirical literature that documents the serious implications of poorly worded questions and the important differences between free reports (or open narrative) and specific questions (see Loftus, 1979). There are several reasons why failure to follow the procedures outlined in this section will prove detrimental to a given case. First, following the procedures outlined herein will help maintain the highest accuracy possible in the obtained descriptions. This serves
the dual purpose of exonerating from suspicion those who might otherwise be suspects and focusing attention on those who match the description. In addition, following the procedures outlined herein should guarantee, as much as possible, that the police procedures in handling witnesses are not subject to criticism in any later court proceedings. As well, when there are multiple eyewitnesses (and therefore perhaps more than one officer involved in taking descriptions), the current procedures serve the function of maintaining consistency between officers’ questioning techniques. As a result, any differences between eyewitnesses’ descriptions can be attributed to differences in their recollections rather than attributable to differences in police questioning procedures. Finally, agreement between eyewitness descriptions should generally be greater when uniform procedures are followed for each witness, thereby enhancing the investigative and forensic value of descriptions.

Opportunity to observe. First, ask the witness about his or her opportunity to observe the offender, including such things as what directed his or her attention to the person, the duration of the observation, distance from the person, lighting conditions and whether there were any obstacles to clear observance [Recommendation 3.6]. This information should be asked prior to requesting a description for several reasons. First, it helps establish whether or not the eyewitness was in fact a witness who could possibly describe the offender. If the opportunity to observe was particularly poor, the officer is wise to alert the witness to the fact that he or she should not feel obliged to provide a “good” or detailed description. If the witness first gives a detailed description, he or she may later feel pressure to exaggerate the goodness of the viewing conditions in order to justify the detail of the description. In other words, this is the point where information regarding opportunity to observe is most likely to be reliably obtained from the witness. Later, if there are discrepancies among witnesses, the previously collected information regarding opportunity to observe will be useful in determining which descriptions ought to be accorded higher credibility. It should also be noted that eyewitnesses likely will be asked about opportunity to observe on subsequent occasions, such as at pre-trial hearings and at trial. These may be compared to the original statement of opportunity to observe taken by the officer.

Eyewitnesses often are mistaken about their witnessing conditions, indicating distances closer or farther than they actually were or estimating the duration of observation to have been longer than it was in fact (see Wells & Murray, 1983). As a general rule,
witnesses tend to overestimate short temporal durations, especially if there was a great deal going on at the time (Shiffman & Bobko, 1974). Stimulant drugs, such as nicotine and caffeine, lengthen the perceived duration of an event whereas sedatives tend to shorten perceived duration (Yarmey, 1979, p. 42). Hallucinogenic drugs, such as marijuana and LSD act like stimulants in that they lengthen the perceived duration of time (Fischer, 1967).

People tend to overestimate vertical distances (Gardner, 1933). Thus, if the witness is at ground level and observing an event on a hill or building above, the distance may be overestimated. Gardner's research also shows that people overestimate the size of large objects in the context of smaller objects, overestimate the size of small angles, underestimate the size of filled spaces, and underestimate the size of small objects in the context of larger objects. Distance and speed are usually underestimated when viewed across water, snow or in the sky, especially if there are no familiar surrounding objects.

Open narrative. After the witness describes his or her opportunity to observe, the witness should be asked to describe the offender. No specific questions or directives should be given at this point [Recommendation 3.7]. Research shows that eyewitness descriptions include the fewest errors when the witness is asked to describe the person in an open narrative form (e.g., Cady, 1924; Clifford & Scott, 1978; Lipton, 1977; Marquis, Marshall & Oskamp, 1972; Snee & Lush, 1941) as opposed to using specific questions. In general, police have no way of knowing which aspects of an offender were most salient to a witness, whereas the order with which the witness freely recalls things should bear directly on the likely accuracy of recall.

The open narrative form of questioning is one that is structured totally by the eyewitness. It allows the witness to "pour out" information about which he or she is relatively certain and does not pressure the witness to consider at length the things for which memory may be poor. As might be expected, however, the open narrative tends to yield incomplete reports (e.g., Lipton, 1977) when compared to the completeness of a technique that uses specific questions. But this is not an observation that justifies the use of specific questions in lieu of open narrative. Instead, the completeness of a report can be increased after taking the open narrative by following the open narrative with directed narrative and then specific questions. Care should be taken to keep the open narrative portion of the interrogation "pure" in that, at most, only a probe such as "Do you recall anything else?" should be asked.
Information obtained via open narrative should be clearly identified as such and should not be confused with information obtained via directed narrative or specific questions. As questions arise later about the reliability of various aspects of a description, the information from open narrative should be considered more reliable than either directed narrative or specific questions.

**Directed narrative.** After freely recalling the characteristics of the offender, the eyewitness should be asked if he or she can recall other general characteristics not previously mentioned, such as sex, race, age, height, weight, hair colour, hair style, facial characteristics, clothing, and any distinctive characteristics. These questions must be asked in non-leading form and the witness must be cautioned to avoid guessing [Recommendation 3.8].

The general idea behind directed narrative is to focus the witness's attention to particular features that he or she has information about but overlooked in the open narrative. Although there is no research to support or refute me on this point, I recommend that the witness be given the entire list of variables in one request rather than ask for a response to each variable separately [Recommendation 3.8]. The rationale for this stems once again from the fact that the interrogator does not know what might be salient or easy for the witness to recall. Thus, a single question such as “Do you recall anything else, such as the person’s hair colour, hair texture, hair length, clothing or height?” might yield a response “Oh! Yes, I recall he was quite short.” If this question were split into five separate questions, the important fifth question concerning height might have followed a series of guesses regarding hair, clothing, and so on. In other words, even directed narrative ought to leave much up to the witness in terms of freedom to focus on variables most salient in memory. Of course, the features mentioned by the officer in this question ought not be redundant with those already mentioned by the witness during open narrative.

Definitive articles should be avoided in favour of the indefinite form. For example, a question such as “Did you see the weapon?” tends to promote false memories that the offender had a weapon when in fact he did not. Better to ask “Did you see a weapon?” because using the definite article “the” presupposes the existence of an object or feature whereas “a” or “an” makes no strong presuppositions (see Loftus, 1979).

Leading questions often are quite subtle and it requires considerable forethought to avoid using leading questions. For example, research shows that a question such as “How tall was he?” tends to
produce higher estimates than does the question "What was his height?" The latter question is the preferred question as it does not lead the witness to think of "tallness." Note, however, that even the latter question is totally inappropriate if the witness had not earlier indicated that the offender was male. The general point is to avoid questions that involve assumptions. This is a difficult task in many situations.

I recommend that officers form their directed narrative as a single question encompassing general factors not mentioned previously. Because the directed narrative is a single question (rather than a series of several questions) it should not be difficult to take the time and care necessary to assure that the question is in non-leading form.

Cautions against guessing should always be given when taking a directed narrative (and repeated when going on to ask specific questions). There are two main reasons to caution witnesses against guessing. First, the transition from open narrative to directed narrative conveys an implicit message to the witness that the officer is dissatisfied with the amount of information given thus far. In fact, however, the officer merely intends to cue the witness to report on some components that the witness remembers but failed to mention for some reason. The caution against guessing is a good way to lessen any unintended pressures on the witness. A second reason for cautioning the witness against guessing is that guessing promotes later errors in witnesses' recollections (Hastie, Landsman & Loftus, 1978). This research shows that confidence increases each time the witness is asked to recount the event and it appears that the witness tends to forget that an earlier response was merely a guess.

Specific questioning. If specific questions are asked, they should follow the directed narrative, they should be in non-leading form, and cautions against guessing should again be given [Recommendation 3.9]. The purpose of specific questions (e.g., "Did the person have a beard?") is to try to get a more complete description than that provided in the open and directed narratives. The officer must take great care in forming these questions.

It should be noted that a given question might be inappropriate in one situation and appropriate in another situation. For example, the question "What colour was the person's beard?" is totally inappropriate if the witness had not freely reported earlier that the person had a beard. However, if the witness had reported during the open or directed narrative that the person had a beard, the question may be considered appropriate. In the latter case, it would be best
to phrase the question as follows: "You described the person as having a beard. Do you recall the colour of the beard?" The general point here is that the officer must take great care in considering whether a specific question involves assumptions. If the witness had not reported that the person wore jeans, for example, it is entirely inappropriate to ask whether the person's jeans looked faded or new. All studies agree that leading questions, which involve assumptions, can later seriously distort eyewitness reports (e.g., see Loftus, 1979).

It must be kept in mind that specific questions, even when properly worded, will yield less accurate responses from witnesses than that obtained through narrative responses (e.g., Cady, 1924; Clifford & Scott, 1978; Lipton, 1977; Marquis, Marshall & Oskamp, 1972; Snee & Lush, 1941). The reasons for this should be obvious. First, the witness already has poured out the information most salient in memory prior to the specific questioning. For example, if the witness had a good memory for the perpetrator having facial hair, this would have come out in the open narrative or in the directed narrative. Generally, specific questions get at weaker memories as evidenced by the fact that they uncover memories that were not mentioned earlier. In addition, specific questions are requests for detail to things to which attention may have never been focussed. Research indicates, for example, that faces tend to be encoded in "holistic" form that is not conducive to a feature (e.g., nose, eyes, mouth) breakdown (Wells & Hryciw, 1984). In addition, some research suggests that asking a witness "to concentrate on some minor, obscure details of a face interferes with . . . the ability to obtain other more general and more useful bits of information about the face" (Hall, 1976, p. 17).

In spite of some problems inherent in the use of specific questions, the avoidance of leading questions and appropriate cautioning against guessing can yield useful information. The following are some concrete suggestions on how to avoid leading questions and some techniques for obtaining estimates from witnesses.

1. The use of the definite form for articles (e.g., the gun or the hat) should give way to the indefinite form (e.g., a gun or a hat) unless the object in question has already been reported by the witness to have existed.
2. The adjective form of a question should give way to a noun-form substitute. For example, instead of "How tall was the person?" the officer should ask "What was the person's height?" Similarly, the adjectives heavy, dark, muscular, old, and so on should give way
to noun-form questions involving the words weight, skin tone, body build and age.

3. Verb forms such as smashed, hit, collided, bumped and contacted convey implicit messages to the witness about how he or she is to reconstruct the event in question. Unlike the use of articles, wherein there is an indefinite, non-leading form, verbs do not have a neutral form. However, the question can still be shifted to a more neutral form. For example, instead of asking “Did the person run from the store?” the officer can ask “How did the person leave the store?”

4. Complex questions, such as those involving embedded questions, should be avoided. Research shows, for example, that a question such as “Was the moustache worn by the intruder light or dark brown?” versus “Did the intruder who was tall and had a moustache say anything to the professor?” are differentially misleading. Although both are leading questions, the latter produces more false reports of a moustache (in later questioning) than the former. Note that the latter question involves an explicit reference to a moustache but the question itself had nothing to do with a moustache. Complex questions often do nothing more than confuse the witness. Even worse is the fact that complex questions make it difficult to control for the subtle introduction of leading information.

5. Numerical estimates ought to be checked against concrete, visual comparisons. For example, a witness who estimates an offender’s height at six feet two inches, should be asked to point out how high the person would be if he were standing against a wall. The witness can then point to a place on the wall which can then be measured. Or the witness can be asked if the offender was taller or shorter than some other person who is in view at that time (e.g., a bystander). The general idea is that numerical estimates are often in error in circumstances where visual comparisons are not. As well, it should be noted that estimates of height and weight tend to be anchored by a person’s own height and weight (e.g., Bailey, Shinedling & Payne, 1970; Dunaway, 1973; Gorchynski, 1973; Williams, 1975). That is, tall people tend to overestimate the heights of others while short people tend to underestimate. As well, heavy persons tend to overestimate the weight of others while thin persons tend to underestimate others’ weights. A similar phenomenon appears to happen when people describe skin tone (Marks, 1943).
RECORDING QUESTIONS AND ANSWERS

It should not go unnoticed that police may also have difficulty remembering specific answers given by an eyewitness. The taking of notes is of course necessary, but there are two problems that police should take special care to avoid. First, the officer should avoid paraphrasing the eyewitness. For example, if an eyewitness says “His hands... I remember his hands were puny” the officer should not write down that the witness said the offender’s hands were “small.” “Puny” can mean weak without being small. Similarly, “mellow voice” may mean rich or pure in sound rather than soft. And “fair complected” can mean either unblemished or light coloured. As a general rule, paraphrasing leads to problems and should be avoided strictly.

A second problem with police notes is that police often fail to record the question that gave rise to a particular answer. This can create some problems later if the officer is called to testify in court. Also important is the need to know whether the information came from open narrative, directed narrative or specific questions because of the differential credibility of information obtained from these three forms of witness interrogation. Thus, all questions should be recorded, including those asked by the officer and any asked by the witness.

Ideally, eyewitness interrogations should be tape recorded [Recommendation 3.10]. This should not be done in lieu of taking notes, however, because notes can be reviewed immediately by the officer to aid in constructing the directed narrative question and the specific questions.
Composites

There are three main composite techniques that enable eyewitnesses to externalize a facial image. These are the Identi-kit or Photo-fit, sketch artist productions, and computer graphics. Regardless of the technique used, certain limitations have been found, some of which are severe. In general, research seems to indicate that composite productions are unlikely to be highly successful. This is because of the mismatch between the way people encode faces and the way the composite tasks require them to decode faces (Wells & Hryciw, 1984).

Most of the time, eyewitnesses will have examined a perpetrator's face at what has been described as a "holistic" level. For example, when an eyewitness encounters a perpetrator, the witness will examine the perpetrator's face with some thought in mind such as "Is he serious?", "Do I know him?", "Is he a robber?" Rarely would the eyewitness examine the perpetrator's face and ask "Does he have high cheekbones?" In other words, eyewitnesses typically encode faces in holistic form rather than at a feature level. Research shows that when people examine a face for the purpose of making global judgments (e.g., judgments of honesty or occupation), their Identi-kit reconstructions of the face are poor compared to when people judge the face on its physical features (Wells & Hryciw, 1984). Because
composite tasks are tasks requiring a feature-level analysis whereas eyewitnesses' memories for faces typically are at a holistic level, it is no surprise to find that people often perform poorly at composite tasks.

**WHEN TAKEN?**

*I recommend that composite tasks be used with great caution and should be reserved only for special cases for which there is good reason to believe that the eyewitness can perform well at the task [Recommendation 4.1].* There are numerous reasons for this recommendation. First, there is evidence indicating that verbal description from eyewitnesses, in spite of some problems with verbal descriptions, are more successfully decoded and matched to the intended face than are Photo-fit compositions (Christie and Ellis, 1981). (There is no reason to expect Identi-kit, the less sophisticated of the two systems, to fare any better than Photo-fit.) There are possible exceptions to this superiority of verbal descriptions over Photo-fit compositions. The case of an eyewitness with poor verbal skills or mutism, for example, might justify using a composite system.

A poor composite can create serious problems. In addition to the obvious problem of leading an investigation away from the true perpetrator, a poor composite can be used in some cases by defence counsel to argue that an eyewitness is unreliable, thereby weakening the prosecution's case.

*I recommend that composite techniques be used only when there is no suspect and the use of photographs has been or is likely to be unsuccessful. If there is more than one eyewitness, the one most likely to have encoded specific features should be used for the composite task with the remaining eyewitnesses being saved for more definitive identification methods such as a lineup [Recommendation 4.2].* The reasons for this recommendation stem mainly from the previous discussion where it is clear that Identi-kit and Photo-fit composites are generally poor because of joint problems with how people normally encode faces (versus the way that the composite task forces them to retrieve) and problems with the kits themselves. Note as well, however, that the above recommendation is stated in a way that includes sketch artists and computer graphics (i.e., it includes all composite techniques).

In addition to the fact that composite tasks require a "bottom up" procedure (i.e., begins with features or components and builds
up to a face), which proves to be difficult for eyewitnesses, there are other reasons why composites often turn out poorly. First, the limits and difficulties with the Identi-kit and Photo-fit will be discussed.

IDENTI-KIT AND PHOTO-FIT

The Identi-kit, a commercially produced and marketed product available from Smith & Wesson, is in common use in North American police departments. It consists of a manual, a booklet and a box of numbered transparencies of facial features. The booklet contains numbered photographs of each feature for which there is a corresponding transparency. There are 34 noses, 106 pairs of eyes, 177 hair styles, 9 types of moustaches, 37 lips, 26 chins, 16 brows and several ancillary transparencies (e.g., hats, glasses, complexion shading, age lines). Entries are grouped in the booklet and the transparency box according to features (e.g., all eyes together, all noses together) but within these groupings the entries are unsystematic (i.e., not grouped according to similarity).

Unlike the Identi-kit, the Photo-fit, which is used widely in the United Kingdom and other European countries, uses actual photographs of features. Also, the Photo-fit has more features from which to choose than does the Identi-kit and the Photo-fit organizes entries within features according to similarity. Photo-fit may or may not be superior to Identi-kit (see Yarmey, 1979). The problem is that both composite production devices have proven to yield poor likenesses under a wide variety of situations. For example, even under conditions in which the person is asked to construct a face while that face is in full view, the resultant Photo-fit is a poor likeness to the face (Ellis, Deregowski & Shepherd, 1975). This is apparently due to the fact that faces are multidimensional. That is, it is not a particular nose or set of eyes that make one face resemble another but the entire, complete set of features. On examining an Identi-kit or Photo-fit face and comparing it to another face, differences are difficult to locate at the feature level (e.g., should the nose be changed?). Indeed, the differences might not rest with any particular feature but rather with the relationship among features.

No composite kit that has a finite number of features can possibly come close to representing the variations that actually exist in a

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1 The Identi-kit Manual is sorely out of date. The section on the psychology of identification contains some old and questionable views on how memory works.
population of real faces. Both the Identi-kit and Photo-fit lack sufficient numbers of female features and both fail to capture racial differences adequately.

But the problem with the Identi-kit and Photo-fit is not merely that there are not enough features. In recent research, for example, people were shown an Identi-kit face and asked later to reconstruct that same face using the Identi-kit (Wells & Hryciw, 1984). The poor likeness that resulted could not be attributed to the Identi-kit lacking sufficient numbers of features because all of the features that constituted the face originally seen by the witnesses were in fact in the kit.

Research indicates that Photo-fit composites are no more accurate than freehand drawings made by persons with little or no artistic training (Ellis, Davies & Shepherd, 1978). And, as indicated earlier, verbal descriptions are superior to Photo-fit constructions in terms of allowing someone to use the information to find the intended face among a set of faces (Christie & Ellis, 1981). In general, commercially-available composite techniques receive very low marks by researchers who have conducted controlled studies on these techniques.

I recommend that regardless of what the operator’s manual might suggest, the order in which features are chosen in a composite task should be guided by the eyewitness [Recommendation 4.3]. The reasons for this are fairly obvious. A witness might recall that the person had a certain hair style but might not recall the mouth. If this is the case, then it would be detrimental to show the witness various mouths prior to showing the witness various hair styles. The features best remembered by the witness should be established first so as to provide a relatively accurate foundation on which to add other, less well remembered features.

SKETCH ARTISTS

Sketch artists can produce better likenesses than either the Identi-kit or Photo-fit, but this depends very much on the skills of the sketch artist and the quality of artist-witness communications. Also, sketch artists may have unintended negative effects that do not apply to the same degree to the Identi-kit and Photo-kit. Specifically, there is research showing that the use of a sketch artist can lower the accuracy of the eyewitness’s subsequent ability to identify the perpetrator from a lineup (Hall, 1976). This finding reinforces the previous recommendation that, in multiple-witness cases, only one witness be
used for the composite task while the remaining witnesses should be saved for a lineup or photo-spread.

The finding that a sketch artist can distort the eyewitness's memory for the face (Hall, 1976) should not be taken lightly. This finding was obtained even though the sketch artist was blind as to the true identity of the person he was drawing. More severe problems can exist if the sketch artist enters the situation with hunches about the identity of the perpetrator. As with all of the methods of identification, I recommend that the person taking the information from the eyewitness should have no prior knowledge of the perpetrator's identity. Specifically in the context of composites, I recommend that the composite task operator, whether using the Identikit, Photo-fit, sketch artist or computer graphics techniques, not be aware of the witnesses' prior descriptions nor of any other information about the alleged perpetrator except what is discerned through unbiased use of the composite technique [Recommendation 4.4]. Furthermore, if more than one eyewitness is given a composite task regarding the same perpetrator, a different composite operator should administer the composite task for each witness whenever practical [Recommendation 4.5].

COMPUTER GRAPHICS

It is too early to know whether modern computer graphics systems can overcome the problems inherent in the Identikit, Photo-fit and sketch artist renderings. A major advantage of computer graphics over the Photo-fit and Identikit is the ability of computer graphics to have an infinite variety of facial features due to the flexibility of graphics. Another advantage of computer graphics over the use of a sketch artist is the potential for unbiased, better-controlled testing. Unlike a sketch artist, the computer has no prior expectations or biases with regard to the identity of the perpetrator in question.

Unfortunately, the most serious problem remains regardless of whether computer graphics or one of the other composite systems is used. Specifically, it remains the case that human memory for faces is based primarily on holistic encodings, making feature-based retrieval extremely difficult. Somewhat more likely to be a breakthrough for computer graphics are systems that generate intact faces from verbal descriptions that can be sorted, rather than having the witness make judgments at the feature level. One such system is currently under development (see Lenorovitz and Laughery, 1984).
THE USE OF COMPOSITES

Composites from one eyewitness should not be shown to other eyewitnesses or potential eyewitnesses or released for public viewing (e.g., in newspapers) without compelling reasons [Recommendation 4.6]. The showing of a composite made by one eyewitness to another eyewitness is a form of unnecessary suggestion. The danger is that the second eyewitness will alter and/or incorporate the first eyewitness’s composite into memory. Because composites generally are poor likenesses and because independence of memory between eyewitnesses is desirable, there is normally no reason to justify one eyewitness seeing a composite made by another eyewitness.

A similar, but less absolute, rule applies to the idea of releasing a composite to newspapers, magazines or television. The visual media are anxious to receive such composites and often pressure police to release composites because they make “good news.” But the forensic costs can be considerable. Potential eyewitnesses in the general population, who may not have known at the time that they were eyewitnesses, will examine the composite closely and fill their memory gaps to “fit” the published composite. Errors in the composite will thereby spread from the original witness (who made the composite) to other witnesses.

In spite of these considerations, there may be many reasons for releasing a composite to the media. If, for example, there are good reasons to believe the composite is especially accurate, then some of the negative effects on other witnesses might be minimized. This might be the case if the witness knew the perpetrator previously or spent considerable time interacting with the perpetrator (as in abduction cases). Another situation in which releasing the composite to the media might prove acceptable is when it is certain that other eyewitnesses do not exist or that they are unlikely to see the composite.

Concern for protection of the public from an offender-at-large might itself be sufficient justification for releasing a composite to the visual media. When this is done, however, care should be taken to caution the media about the fact that the composite is only an approximation and that the perpetrator’s actual appearance is still somewhat in question [Recommendation 4.7].

Again, it should be emphasized that a poor composite can help exonerate the guilty party. Releasing a poor composite to the media can only exacerbate this problem. How is it determined whether a composite production is good or bad? I recommend that three sources
of information be used to judge the credibility of a composite: the witness’s own statement of the extent to which the composite satisfactorily captures his or her memory; the competence and objectivity of the composite operator; and situational factors surrounding the witness’s viewing conditions, with special regard for whether the witness attempted to encode specific features [Recommendation 4.8]. In each of these cases, however, cautious interpretation is required. Research shows that the eyewitness’s satisfaction with a composite is often a misleading index of the extent to which the composite matches the actual perpetrator. Composite operators, whether using the Identi-kit, Photo-fit or sketch artists, tend to always argue competence and objectivity on their part.

KEEPING RECORDS

An exact record of the composite should be kept so that these materials can be used in court should the court require them. This is true regardless of whether the composite proved critical in the identification of the defendant and regardless of the quality of the composite [Recommendation 4.9]. The use of a composite record in court generally is considered to have probative value. For obvious reasons, the defence is more likely to draw the court’s attention to a poor composite than a good composite and the prosecution is more likely to draw the court’s attention to a good composite than a poor composite. Police, however, should be neutral on this matter and keep an exact record of the composite regardless of its quality.

When using the Identi-kit or Photo-fit, it may be impossible to keep the transparencies intact because it creates missing entries in the kit. However, a good record of the transparency numbers and “notch locations” (e.g., up 2, down 1) via a good Xerox copy or photograph allows the composite to be reconstructed when needed. Similarly, computer graphics are coded in such a way as to retrieve a copy of the composite when proper records are made. The original copy of a sketch artist drawing should be kept along with one or more photographic copies to guard against loss.
Mugshots

A mugshot task is defined generally as one in which the eyewitness searches through a set of photographs for which there is no a priori suspect. Thus, a mugshot task is distinguished from a photo-spread primarily on the criterion of whether or not there is a suspect in the case. A mugshot task and a photo-spread also differ markedly in the number of photographs used—mugshot tasks use a larger number of photographs than are used in a photo-spread. The reason for the mugshot task having a larger number of photographs than does a photo-spread stems directly from the fact that there is no suspect in the case of mugshot tasks and the larger set of photographs increases the chances that the actual perpetrator will be encountered by the eyewitness. But the larger number of photographs used in mugshot versus photo-spread tasks should not be interpreted as an advantage or preference for mugshots over photo-spreads. There are several reasons why a photo-spread or a lineup should be used rather than a mugshot task whenever possible.

A major problem with mugshot tasks is that, because there is a large number of photographs to be viewed, the eyewitness might overlook the photograph of the actual perpetrator. This is especially true when the actual perpetrator's photograph occurs late in the series of photos viewed rather than earlier in the series (Laughery, Alexander
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& Lane, 1971). Equally problematic is the fact that mugshot sets in most police departments are of poor and inconsistent quality as well as being out of date. Thus, for example, a photograph of the actual perpetrator might be in the series of mugshots but because the photograph is several years old or it is of a quality that fails to capture the “look” of the perpetrator, it is not recognized as a photograph of the perpetrator. Finally, the sheer size of the mugshot series along with the poor quality of photographs increases the odds that the eyewitness will encounter a photograph that appears merely similar to the perpetrator resulting in a positive identification even though the identified person is innocent of the offence in question. A photo-spread helps minimize each of these three problems in that (a) the smaller number of faces encountered by the witness produces less interference, (b) having a known suspect allows special attention by investigators who can determine whether or not it resembles his current appearance and enables investigators to possibly take steps to correct any such problem and (c) the distractor photographs can be those of known-innocent persons, thereby allowing immediate disconfirmations of the identification of the majority of photographs.

WHEN?

As a result of the above-mentioned considerations, I recommend that mugshots be used only when reasonable attempts have been made to establish an a priori suspect and such attempts have failed [Recommendation 5.1]. In general, there is no good excuse for the failure of police to make concerted attempts to narrow the identification task down to that of a photo-display or lineup via the use of ancillary evidence that specifies a suspect.

One reason that might lead police to use mugshots prior to making a concerted effort toward establishing an a priori suspect is the idea of having the witness make his or her visual search while the witness’s memory is still “fresh.” But this reason must be balanced against several other considerations. For example, research suggests that most of the loss in memory for faces occurs very early after exposure to the face (i.e., within minutes or a few hours), with additional loss due to extended delay occurring quite slowly (e.g., Goldstein & Chance, 1971; Laughery, Fessler, Lenorovitz & Yoblick, 1974). Thus, there may be some justification for using a mugshot task prior to attempting to narrow down a suspect when the eyewitness had encountered the perpetrator only minutes previously. But, if the
witness's memory already is one or more days old, there is little reason to expect that further delay of a day or two would have much effect on the witness's memory.

In the case of multiple witnesses, I recommend that only one witness be given a mugshot task, the remaining witnesses being saved for a photo-spread or lineup [Recommendation 5.2]. The reasons for this recommendation are somewhat obvious. Given the earlier arguments favouring photo-spreads and lineups over mugshots, it would be unwise to have all witnesses observe mugshots. If the witness who views the mugshots identifies someone, the situation might then be construed as a case for which there is a suspect and the remaining witnesses can then be given a photo-spread or lineup that includes the suspect along with known-innocent distractors.

INSTRUCTING WITNESSES

At no time should a witness be led to believe that the actual perpetrator is in the set of mugshots. Indeed, I recommend that the witness be told that "We do not have a suspect at this point in time, but we would like you to view a set of mugshots to see if the person in question might be there" [Recommendation 5.3]. Failure to include such cautionary instructions places an undesirable pressure on the witness in that he or she may feel that it is necessary to choose someone from the mugshot set. This can result in the witness choosing someone who best fits their recollection whereas the actual perpetrator might not be in the mugshot set at all (Wells, 1984).

It also is desirable to warn witnesses that the perpetrator's appearance might have changed from the time his photograph was taken and the time the witness saw him. Such a warning can help the witness who may assume that the photographs are recent or that an exact match is required. Specifically, I recommend that the witness be told that "Some of these photographs are old; the addition or removal of facial hair, change of hair style or colour, effects of aging or temporary expression on the face might make recognition difficult" [Recommendation 5.4]. In fact, simple changes in hair style have profound negative effects on recognition performance (e.g., Laughery & Fowler, 1980; Patterson, 1978; Patterson & Baddeley, 1977). The presence or absence of spectacles also has negative effects on recognition performance (Baker, 1967).
NUMBER OF PHOTOS AND METHOD OF DISPLAY

There is no single number of photographs that can be said to be the best quantity for a mugshot identification task. However, there is a definite disadvantage to having eyewitnesses search through large numbers of mugshots. A study by Davies, Shepherd and Ellis (1979), for example, showed that having eyewitnesses search through a set of 100 mugshots (which did contain the target face) prior to searching through a set of 33 mugshots (which did not contain the target face) served to lower the likelihood of accurate identification. Typically, of course, the rationale for using a large number of mugshots is to help increase the likelihood that the perpetrator’s photo will be among the photographs in the mugshot set. Therefore, although cutting down the number of mugshots helps assure an identification of the perpetrator, it might also cut down the likelihood that the perpetrator’s photograph is in the set of mugshots.

Much of the practical problem encountered here has to do with the fact that most police jurisdictions have poor mugshot files. A large percentage of mugshots in use today could be deleted for numerous reasons. For example, some photographs are of persons currently serving terms in prison and who could not have committed the crime in question, many photographs will be of persons who bear no resemblance to the perpetrator, and it is not uncommon to find mugshots of deceased persons in mugshot files. Thus, it may be possible to use a pruning procedure prior to the eyewitness viewing a set of mugshots. In other words, exposing eyewitnesses to mugshots that could not possibly be photos of the perpetrator should not be considered a harmless activity; the more photographs a person must view prior to encountering the target photograph the less likely the person is to accurately identify the photograph (Laughery, Alexander and Lane, 1971). Therefore, pruning of mugshot books is one way to increase the likelihood of accurate identification while not decreasing the likelihood that the perpetrator is in the mugshot set. I recommend that mugshot sets be pruned periodically to eliminate photos of those who could not have committed any recent crime and that additional pruning be undertaken for a given case so as to eliminate photos of those who could not have committed the particular crime in question [Recommendation 5.5]. Ideally, no more than fifty photographs should be shown at any one time [Recommendation 5.6].

Related to this concern about the number of mugshots is a procedural concern over what happens if the witness chooses a mugshot
that occurs early in the set of photographs. This may occur because the perpetrator’s photograph appeared early in the sequence by chance. Or it can occur if the eyewitness merely chooses the first photograph of a person who has the “look” of the perpetrator (e.g., full beard, squinty eyes and looking “mean”). In the latter case, the eyewitness may fail to appreciate the fact that there could be many other persons with that same look later in the sequence of mugshots. Thus, a reasonable number of photographs should be shown to the witness even if the witness identifies someone almost immediately [Recommendation 5.7]. This “continued showing” procedure needs to be handled carefully. There is some risk that continued showing will imply to the witness that the officer thinks the witness is mistaken. This can be handled with a carefully-worded phrase such as “Our procedures recommend that you examine at least another twenty photographs, just so that you are sure.” When stated properly, such a request can come across clearly as a procedural issue rather than the request being perceived as a point of doubt about the accuracy or inaccuracy of the identification.

CONFIDENCE

Confidence was first discussed in Chapter 2 at which point several cautions were given. Generally, confidence does not seem to be a good indicator of accuracy. In other words, even if an eyewitness who makes an identification says he is “quite certain” about his identification, he might not be accurate (Wells & Murray, 1984). For similar reasons, the eyewitness who has little certainty in his identification might not be inaccurate. Nevertheless, there can be some probative value in specifically asking the witness how certain he or she is that they have identified the right person. This is especially true because any later statements of confidence by the witness are likely to be influenced by other variables. Staged-crime research suggests that the confidence of a witness can be inflated after the identification by irrelevant variables and this can distort the meaning of confidence (Wells, Ferguson & Lindsay, 1981).

Because of these considerations, I recommend that the eyewitness be asked about his or her certainty in the identification prior to the time in which extraneous variables can come into play [Recommendation 5.8]. This should be asked after the time that the witness has examined a sufficient number of photos (see the previous recommendation) but before any verbal or nonverbal cues could be
given by an officer regarding the officer’s opinion of the likely guilt or status of the identified person. The rationale for this seems rather obvious. If an officer indicates to a witness that the identified person was a “good one,” a “likely suspect” or a “well-known criminal,” subsequent indications of certainty by the witness are contaminated. It must be respected that it is for the witness alone to decide his or her certainty.

I recommend further that the witness’s statement of his or her certainty should be solicited neutrally with a statement request such as “How certain are you that this is the person who [committed the offence in question]?” [Recommendation 5.9]. There are numerous other ways to request a certainty statement in a neutral fashion, but a question such as “Are you absolutely positive?” may lead witnesses in various ways. Furthermore, witnesses’ certainty statements should not be paraphrased; rather they should be taken down in writing verbatim or the witness should write the statement or it should be tape recorded [Recommendation 5.10]. The temptation to paraphrase a witness’s certainty statement is difficult to suppress, but the police officer might be influenced by irrelevant variables and research indicates that witnesses’ self-rated certainty is more directly linked to the witnesses’ accuracy than are observer’s impressions of witnesses’ certainty (Well, Lindsay & Ferguson, 1979).

It could be recommended further that a witness not be given verbal or nonverbal cues regarding the officer’s opinion of the identified person even after the witness’s certainty statement has been recorded. The reason for this is that such opinions can influence subsequent identifications (e.g., from a live lineup) or courtroom statements of certainty by the eyewitness later. Nevertheless, I recognize the need by eyewitnesses to know at least some things about the status of the case in which they have become unwittingly involved. Thus, I have recommended things to tell the witness after the identification and certainty statements have been obtained and these are presented in the next section.

POST-IDENTIFICATION INSTRUCTIONS

Realizing the need for witnesses to have information about the case and their status as witnesses while recognizing the influence that some forms of information can have on any later identification, I recommend that witnesses who identify someone be thanked for the information provided but be told that any information regarding the
identified person will have to await further investigation. The witness should also be asked about his or her availability and willingness to view a live lineup later, should that prove necessary [Recommendation 5.11].

It is natural that in some cases witnesses will want to know more. It is not uncommon for a witness to ask “Did I pick a suspect?” or even “Did I pick the right guy?” The answer to such questions is quite clear. The officer must respond by saying something like “We had no prime suspect among these photographs; but we will check out the person that you identified.” Remember that this noncommittal response by the officer is important for several reasons. Suppose, for example, that it is later learned that the identified person has an iron-clad alibi or for some other reason is a non-suspect. In this case any prior encouragement (e.g., “Yes, it seems as though you chose the likely suspect”) would likely fixate the witness on his or her memory of the identified photograph. Any subsequent information obtained from the witness would reflect some of this influence.

Witnesses who do not identify someone from the mugshots should be told that their not seeing the perpetrator in the set of photos could be due to the condition of the photos or it could be due to the perpetrator not being contained in the set of photos [Recommendation 5.12]. This statement to the witness can serve to lessen the witness’s fear that he or she has somehow failed at the task. At this point the witness should also be asked if he or she thinks he or she could identify the perpetrator if the perpetrator was present among others in a live lineup [Recommendation 5.13]. This gives the witness the opportunity to indicate his or her reasons for not identifying someone and/or specifying the conditions under which an identification would or would not be possible. Furthermore, it gives the witness some idea of the possibility that he or she may be called again later to attempt an identification. Finally, it helps establish some closure to the witness-officer interaction at this point.

KEEPING RECORDS

The use of mugshots is associated with special problems in record keeping. Unlike an Identi-kit, which can be easily preserved (or reconstructed from numerical records), an ideal record of the mugshot task process requires a reproducible record (or the original copy) of the entire set of mugshots in their original order and method of display [Recommendation 5.14]. Yet, I recognize that this may be difficult
in many cases for various reasons. A minimal record of a mugshot task should include: the original of the chosen photograph; a detailed record of the number of photographs in total; the number of photographs the witness viewed in total; the position in which the identified person's photo appeared in the series; a full description of the method of display; a record of all instructions and questions of the witness; and a record of all responses from the witness [Recommendation 5.15].
Photo-Spreads

Unlike a mugshot task, which does not have an *a priori* suspect, a photo-spread has a suspect who is classified as such prior to conducting the photo-spread. As well, photo-spreads involve far fewer photographs than do mugshots. Generally, a photo-spread is preferable to mugshots because the load on the eyewitness is lower with photo-spreads (i.e., fewer faces to search) and because a photo-spread can be designed uniquely for fairness to the specific suspect. Also, under some circumstances photo-spreads are preferable to live lineups. These circumstances include: the availability of good photographic distractors but not good live distractors; the inability or unwillingness of the witness to view a live versus photographic lineup; the need for an immediate identification when a suitable live lineup would produce significant delays; if the suspect refuses to participate in a lineup; if the suspect is at large; or if the suspect's current appearance has changed dramatically since the witnessed event whereas a photo of the suspect's earlier appearance is available.

**WHEN GIVEN AND BY WHOM?**

A photo-spread should be used only when there is a definite suspect or suspects and when the balance of relevant factors has ruled out
a live lineup [Recommendation 6.1]. The relevant factors were mentioned above and will be dealt with in greater detail here. The phrase “balance of relevant factors” refers to the fact that it is a matter of judgment as to whether to use a live lineup or a photo-spread. Some of the relevant factors are sufficient in and of themselves to necessitate the use of a photo-spread rather than a live lineup. The refusal of a suspect to participate in a lineup is an example of a sufficient factor in that it is a suspect’s legal right to refuse such participation and such a refusal in itself renders impossible the prospect for a live lineup. Note that such a refusal may be construed by the courts as having some probative value. But the suspect’s reasons for such refusal may be varied, and might include a fear of being mistakenly identified. For this reason, suspects should be informed of the possibility that refusal to participate in a live lineup might leave the police no option other than to use a photo-spread. As well, a photo-spread rather than a live lineup should be used if the suspect is at large or if the witness is unable or unwilling to attend a live lineup [Recommendation 6.2].

Some factors that would lead to the use of photo-spreads rather than live lineups are less clear-cut and require good judgment. An example is when there are reasons to believe that the suspect would disrupt the lineup session. Such disruption could produce irreparable harm to any identification evidence. For example, if, while the witness is viewing the lineup the suspect begins to protest his participation, then the probative value of the witness’s identification is reduced dramatically. The prospect of going back to a photo-spread after having held a disrupted live lineup session should not be considered viable or meaningful, except if it involves either a different witness or the same witness, and a new suspect [Recommendation 6.3]. However, as discussed in Chapter 7, there are ways to avoid the likelihood that such disruptions could occur in the presence of the witness.

In earlier chapters I’ve noted how memory for faces decays with the passage of time. Of particular note is the fact that such decay is rapid in the first minutes or hours after the face has been witnessed, but is gradual in later days. Thus, there is little reason to be concerned with further delay of one or two days if more than 10 days have passed already since the witnessed event. As well, an additional delay of one week means very little memory decay if three or more months have passed already. However, an additional one-day delay means something quite significant if only two hours or less have passed since the witnessed event. Therefore, when deciding whether to use a photo-spread or to use a live lineup, an additional one- or two-day delay
required for a live lineup should not be considered a factor if 10 or more days have passed already since the witnessed event. [Recommendation 6.4].

Distractors (or "foils") are members of a lineup or photo-spread who are not suspects and, in fact, are known definitively to not be at risk in the lineup or photo-spread. That is, distractors are the known-innocent members of a lineup or photo-spread. More will be said about distractors later. Suffice at this point to note that one requirement of distractors is that they match the general description of the perpetrator as described by the witness. Sometimes this requirement is rather difficult to fulfill and it seems generally more difficult to fulfill this requirement with live lineups than with photographs. Therefore, the unavailability of suitable distractors for a live lineup should be a significant factor in deciding whether to consider using a photo-spread instead [Recommendation 6.5].

There may be times when a photograph of the suspect is more like the suspect's appearance at the time of the witnessed event than is his or her current appearance. Consider for example, that a witness describes an assailant as, among other things, full bearded. Suppose further that the suspect currently is clean-shaven but there are recent photos of him with a full beard. This might constitute sufficient grounds for preferring a photo-spread to a live lineup.

In the case of multiple witnesses, some witnesses should be "saved" for purposes of their viewing a live lineup [Recommendation 6.6]. As to the timing of a photo-spread, the same principle applies here as applies in all aspects of identification procedures: A photo-spread should be given at the earliest time possible following the determination of a definite suspect but only after having taken full consideration of the issues and alternatives and only within the constraints of the current recommendations [Recommendation 6.7]. In other words, although it is important to hold the photo-spread session sooner rather than later, this is no excuse for carelessness in following the recommendations herein nor is this justification for failing to consider the issues underlying the recommendations.

The possibility that the administrating officer might unintentionally influence the witness's behaviour via verbal or nonverbal cues necessitates that the officer be unaware which photo is of the suspect. If the officer is aware of which photo is of the suspect there may be some difficulty in making the case later on (e.g., in court) that such influences did not occur. Thus, the officer conducting the photo-spread should not be knowledgeable of whom the police
the case [Recommendation 6.8]. By the same logic, those who are aware of whom the police suspect should not be present when the photo-spread session takes place. If the officer administering the photo-spread cannot be fully blind as to whom the suspect is, then a sequential procedure of display must be avoided and the simultaneous procedure must be used (see the section on Simultaneous and Sequential Procedures in this chapter).

INSTRUCTING WITNESSES ON VIEWING

There is a general concern that instructions to witnesses, broadly defined, can strongly affect eyewitness’s response criteria. The response-criteria issue was discussed in Chapter 1 and the issue will be reviewed here as it relates to photo-spreads.

It is important to keep in mind that an act of memory retrieval (e.g., choosing a particular photograph as being the person in question) is a judgment process. That is, the eyewitness must compare what is stored in memory with the stimulus faces being presented in the photographs and judge the degree to which they match or do not match. Clearly, there are individual differences between people in terms of how close this match must be before the person is willing to make an identification (Hilgendorf & Irving, 1978). As well, some people focus more on a search for similarities (or points of match) whereas others focus more on searching for differences (or points of mismatch). No attempts should be made to alter people’s search strategies as doing so would likely yield untoward effects. As well, there are some instructional sets that have been demonstrated to be detrimental.

The main problem with some instructions to witnesses is that these instructions will produce “lax” criteria. Lax criteria means that the witness is prone to identify someone from the set of photographs merely because that person resembles the perpetrator. More than mere resemblance should be required before the witness makes an identification. Much of the problem here seems to rest with the possibility that the witness will make an identification merely because the person’s photograph resembles the perpetrator more than do the other photographs (Wells, 1984). This latter problem is called the “relative-judgment” problem because it is not the absolute match between the witness’s memory and the individual faces that is driving the witness’s judgment; instead it is the extent to which one face in the set is relatively better than another. The relative-judgment process is especially problematic if the true perpetrator is not among the set
of faces, in which case the relative-judgment process will always yield an identification and the identification will be false.

Because of the above considerations, when inviting witnesses to a photo-spread viewing, police should only suggest that they have a possible suspect and actively avoid indicating that the actual perpetrator is among the set of photographs [Recommendation 6.9]. Recent experiments indicate that immediately prior to viewing a photo-spread, witnesses should be told explicitly that the actual perpetrator may or may not be contained in the photo-spread [Recommendation 6.10]. Malpass and Devine (1981) conducted a staged crime study and found that instructions that said that the person is among the photographs yielded a much higher rate of false identifications than did instructions that said that the person may or may not be among the photographs. Importantly, although the latter instruction reduced the rate of false identifications, it did not affect the rate of accurate identifications. Thus, instructions that emphasize that the perpetrator may or may not be among the photographs appear to have little or no cost in terms of the likelihood of obtaining an accurate identification while reducing the likelihood of a false identification.

Some eyewitnesses will enter into a photo-spread situation with specific attitudes and beliefs that portend poorly for good performance. The eyewitness may be overly-cooperative and exhibit considerable deference to police authority (Ellison & Buckhout, 1981). This can result in a witness who is highly motivated to choose the person whom the police suspect. It almost seems too obvious to say, but police officers should in no way, verbally or gesturally, suggest to any witness whom they think the suspect is [Recommendation 6.11]. But even more is required than merely avoiding suggestions. The witness should be cautioned explicitly against guessing (Hilgendorf & Irving, 1978) [Recommendation 6.12].

Recent research shows that eyewitness identification accuracy can be improved by “reinstating the context” of the encoding situation. Reinstating the context simply means to either direct the witness’s attention back in time to the original event that he or she witnessed or to actually conduct the photo-spread in the location where the witnessing occurred originally. Although both of these approaches are forms of context reinstated, there is as yet no empirical evidence indicating that there is much to be gained from actually returning the witness to the original location (Wells & Turtle, 1985). (As well, there may be good reasons for not returning the witness to the original
setting as this setting might trigger interfering forms of anxiety or the setting may be intrinsically noisy (e.g., street corner) or distracting.) Empirical research does, however, support the view that eyewitnesses should be told to cast their minds back to the witnessed event, think about things that led up to their seeing the perpetrator, take their time and then study carefully all of the photographs in the photo-spread [Recommendation 6.13].

It will often be the case that no further instruction is necessary to elicit an identification at this point. However, it is sometimes necessary to elicit a response. If so, the witness should be asked to indicate whether or not he or she can positively identify anyone as the perpetrator [Recommendation 6.14]. The Devlin Report (1976) considered a recommendation in which the witness was asked three questions: Can you positively identify anyone as the person you saw?; If not, does anyone closely resemble the person you saw?; If not, can you say that the person you saw is not there? The Devlin Committee rejected this three-question approach, however, and I agree with their abandonment of this idea on several grounds. First, the suspect usually will bear some resemblance to the offender; otherwise he or she would not be present in the photo-spread. In addition, because all the photo-spread members should resemble the suspect in a general way (as discussed in the next section), it would be anomalous for the witness to reveal that the suspect resembles the offender but that the others do not.\(^1\) To these reasons listed by the Devlin Committee, I add that the second of these questions covertly encourages the witness to guess or at best to use a lax criterion for incriminating a suspect. Finally, the single question proposed here does not preclude the voluntary statement by a witness that he or she finds one person particularly close in resemblance to the perpetrator. That is, it is sometimes found that witnesses often will volunteer the information as to why they didn’t identify anyone and this will occur without imposing the questionable practice of asking the witness about the extent to which someone resembles the perpetrator.

I have discussed the issue of eyewitness certainty or confidence in Chapters 2 and 5. It was concluded that the confidence that a witness has in his or her identification probably has a much weaker connection to the accuracy of a witness than is commonly believed to be the

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\(^1\) There are reasons to disagree with the Devlin Committee’s recommendation on this point. As pointed out later, a good photo-spread is one in which foils resemble the witness’s prior description of the suspect rather than making the foils resemble the suspect’s appearance.
case (Deffenbacher, 1980; Leippe, 1980; Wells & Murray, 1984). In spite of the apparently low correlation between confidence and accuracy, the courts and others have a need to know about the certainty with which an eyewitness made an identification. The best time to assess the witness's certainty is immediately after the identification, as this precedes other events that can affect certainty and thus helps prevent spurious influences (see Hastie, Landsman & Loftus, 1978; Murray & Wells, 1982; Wells, Ferguson & Lindsay, 1981). Therefore, immediately following an identification the eyewitness should be asked to indicate how certain he or she is that the identified photograph is in fact the perpetrator [Recommendation 6.15]. As always, no cues of any kind should be given to the witness as to whether or not the identified person is the suspect in the case [Recommendation 6.15]. This latter recommendation holds true throughout the assessment of the witness's confidence, but it may also apply to many cases even after confidence is assessed. In this respect recall an earlier discussion in Chapter 5 considering the fact that cues to the witness regarding his or her performance in one identification task have implications for the witness's behaviour in subsequent identification tasks. Thus, if there is special need to move on to a live lineup, cues to the witness regarding his or her performance in the photo-spread task are contaminants for the live lineup.

NUMBER OF FOILS, THEIR SELECTION AND METHOD OF DISPLAY

The sufficient number of photographs for conducting a photo-spread is considerably lower than that required for mugshot tasks. The reason for this stems primarily from the fact that there is an a priori suspect and the remaining photo-spread members are known-innocent foils. Therefore, the probability that the suspect could be picked by chance are 1/N using a single-suspect photo-spread (where N is the total number of photographs). Because most eyewitnesses will have memories that allow them to operate above chance levels, a total number of 10 separate photos (9 known-innocent foils and one suspect) should be sufficient. This assumes, however, that the 9 foils are chosen in such a way as to meet the selection criteria defined below. These selection criteria call for lineup members to be “functional” in that they cannot be ruled out on the basis of the witness’s prior description. Normally, a photo-spread should be composed of the single suspect and nine or more functional foils [Recommendation 6.16]. If there is
more than one suspect, separate photo-spreads should be constructed for each suspect or, at the least, a new order of photos should be used for each witness [Recommendation 6.17]. If there is more than one photo of each suspect, there should be equal numbers of photos for each of the foils [Recommendation 6.18]. In order for a foil to be functional, it must be chosen using criteria that do not make it an obvious non-alternative for the eyewitness. These criteria should always include sex, race and approximate age; usually included are hair colour, hair style, facial hair, complexion, height, weight (assuming these are part of the witness's description) and other characteristics mentioned by the witness. As a general rule, a good photo-spread is one in which a person who merely used the eyewitness's prior description of a suspect/offender could not pick him or her out of the photo-spread (Doob & Kirshenbaum, 1973; Malpass, 1981; Wells, Leippe & Ostrom, 1979).

A functional foil in a photo-spread is a photo of a known-innocent person who matches the general physical characteristics of the perpetrator as described earlier by the witness [Recommendation 6.19]. At this point a problem emerges as I attempt to formulate some guiding principles regarding certain issues encountered in selecting foils. First note that the above definition of a functional foil is based on the witness's description of the perpetrator rather than being based on the suspect's appearance. This is a subtle yet important distinction. Consider, for example, the situation in which a witness gave no particular description of the suspect's complexion nor mentioned the presence of scarring. If police have a suspect who matches the general description except that he has a scar on his face, should the police choose only foils who have such a scar? According to the above definition of a functional foil the answer would be "no." This is because the above definition identifies a good foil as one that matches the witness's description of the perpetrator rather than the appearance of the suspect. At first glance it would seem that the selection of foils should be based on the suspect's appearance in his or her photo. The problem with such an approach, however, is that matching the foils' appearance to that of the suspect serves merely to make the memory task more difficult. There is no good theoretical reason to believe that making a memory task more difficult per se improves the information value of the witnesses' responses. On the other hand, there is a good reason to require that the foils match the witness's description of the perpetrator. Specifically, if the foils do not match the witness's prior description to police, then the witness could merely reason who
it is that the police suspect. If none of the foils fully match the witness’s prior description then the photo-array is as useless as showing a single photo of the suspect with no foils.

The previous paragraph described reasons for choosing foils according to the witness’s prior description of the perpetrator rather than according to the characteristics of the suspect. Nevertheless, there may be a need in some cases for additional protection for the innocent suspect because the innocent suspect might otherwise stand out as distinctive in the photo-spread. In other words, it is possible that the foils match the general description provided by the witness and yet the suspect’s photo stands out as a distinctive member of the photospread. Sometimes this occurs because the foils are unduly homogeneous whereas the suspect’s photo is from a different file set. Or the suspect’s photo may be distinctive because he or she has an unusual characteristic (e.g., scar) which, while not mentioned in the witness’s prior description, clearly makes the suspect stand out unduly. The latter case is particularly problematic and I recommend that if suitable foils cannot be found then the photos of foils may be altered so as to reveal features or marks similar to those revealed by the suspect. In other words, if for some reason the suspect stands out as a distinctive member in the photo-spread, steps should be taken to minimize this problem either through the selection of additional foils or alteration of existing foils [Recommendation 6.20].

Normally, it is unwise to alter the suspect’s photograph for any reason except to eliminate any appearance of the suspect’s name, arrest information, and so on. Consider, for example, a case in which the suspect has a noticeable scar. One way to make the suspect less distinctive in the photo-spread is to cover the scar on the suspect’s photograph and, in turn, the same place might then be covered on each of the foils. The problem with such an approach is that a potential memory cue for the witness has been effectively removed. It is better to alter the foils by artistic means so that they too display a scar similar to that of the suspect.

SIMULTANEOUS AND SEQUENTIAL PROCEDURES

There are two main methods of display for photo-spreads. The simultaneous method is one in which the photos are mounted on a display board. The sequential method is one in which the photos are presented to the witness one at a time. Recent research has demonstrated that the sequential method is superior in that the
likelihood of inaccurate identification is lower with the sequential than with the simultaneous method while the likelihood of accurate identification is the same with both methods (Lindsay & Wells, 1985). However, this result derives from a sequential procedure in which (a) the witness is unaware of how many photos are to be presented and (b) the witness makes a yes/no identification decision on each photo prior to viewing the next photo. Furthermore, the sequential procedure demands that the officer administering the photo-spread not be aware of whom the police suspect in the case; this is because unintentional nonverbal influence is more likely with the sequential than with the simultaneous method of display. If the sequential method of display is used, each photograph shall be numbered on the back, the witness should not be told how many photos there are in total for viewing, each photo shall be handed to the witness from a concealed stack and the witness should be required to make an identification decision on each photo prior to reviewing the next photo [Recommendation 6.21]. Although the Lindsay and Wells (1985) study showed no evidence for "order effects" (i.e., wherein a photo appearing first or last in the sequence was more or less likely to be chosen), it may be wise to avoid placing the suspect in the first or last position of the sequence so as to prevent certain arguments from defence counsel at a later time. If the witness chooses someone from the sequence, the officer should continue through the sequence until all photos have been viewed. The officer may go through the sequence a second or third time if the witness requests a second or third viewing. If there is more than one witness, the suspect's position in the sequence should be changed for each witness [Recommendation 6.22].

If the simultaneous procedure is used, photos should be affixed firmly to a board in such a way as to not draw attention to any particular photo. The photos should be numbered clearly on the board for ease and clarity of identification [Recommendation 6.23]. As with the sequential procedure, there is no clear evidence that the suspect's location has any bearing on the likelihood of its being chosen. However, it may be wise not to locate the suspect's photo in the first or last position of the display. If there is more than one witness, the position of the suspect in the photo-spread should be changed for each witness [Recommendation 6.24].

Regardless of whether the sequential or simultaneous procedure is used, the display should not include other information such as arrest dates, file numbers, and so on [Recommendation 6.25]. If such information appears on the photo, it should be covered with opaque
tape and such tape should cover the equivalent space on each photo in the set.

**BLANK PHOTO-SPREADS**

A blank photo-spread is one in which there is no suspect. That is, each person in the photo-spread is a known-innocent foil in the case. The use of a blank photo-spread is a special procedure which helps guarantee that the witness(es) is not merely choosing the photo-spread member who most looks like the perpetrator. The procedure is one in which the witness(es) first receives a blank photo-spread (using the simultaneous method) with normal instructions (i.e., instructions that the actual perpetrator may or may not be contained in the photo-spread, etc.) followed by the actual photo-spread in which there is a suspect. Recent research shows that the likelihood of an innocent suspect being falsely identified is greatly diminished using the blank photo-spread procedure (Wells, 1984). Good eyewitnesses (i.e., those likely to identify the perpetrator when they see his or her photo) tend to pass over the blank photo-spread whereas poor eyewitnesses (i.e., those with poor memory for the perpetrator) often will choose someone from the blank photo-spread.

If blank photo-spreads were used routinely by police they might lose their effectiveness in the long run due to public knowledge that the suspect always appears in the second photo-spread. Thus, I recommend that blank photo-spreads be used only occasionally. When using a blank photo-spread, instructions to the witness should be given as though it were a photo-spread that includes a suspect. Regardless of whether or not the witness identifies someone from the blank photo-spread, a photo-spread containing a suspect should then be administered. When administering the second (actual) photo-spread the witness should again be given the usual instructions [Recommendation 6.26].

Blank photo-spreads should not be given when there is no actual photo-spread to also be administered. In other words, a blank photo-spread should not be used for the purpose of discrediting a witness. Instead, the philosophy behind the use of blank photo-spreads is (a) to protect the innocent suspect from a witness who merely is guessing and/or (b) to bolster the credibility of a witness by demonstrating that he or she rejected an entire set of photos prior to identifying that of the suspect.

The requirements for selecting photos for a blank photo-spread
are not as strict as those for an actual photo-spread because there is no suspect in a blank photo-spread whose due process can be violated. However, there should be at least one member of the blank photo-spread who matches the general description of the perpetrator in order for the blank photo-spread to effectively serve its purpose [Recommendation 6.27]. Requirements for the actual photo-spread, which follows a blank photo-spread, are identical to those described in “Number of Foils, Their Selection and Method of Display” and “Simultaneous and Sequential Procedures” [Recommendation 6.28].

One of the potential costs to using a blank photo-spread procedure is that a witness will choose someone from the blank photo-spread and thereby lose considerable credibility even if he or she goes on to choose the suspect in the subsequent actual photo-spread. However, it should also be kept in mind that the “successful” witness (i.e., one who rejects the blank lineup and then identifies the suspect from the subsequent actual lineup) is a witness whose credibility has been bolstered to a highly persuasive level. Eyewitness experts would have no solid grounds for questioning the credibility of the latter witness and might even be willing to testify for the prosecution to the effect that the procedure followed was exceptionally fair and reliable.

LATER IDENTIFICATION ATTEMPTS

Research generally supports the idea that photographic identifications rarely are changed by subsequent identification procedures even if the original photographic identification was of an innocent person (e.g., see Gorenstein & Ellsworth, 1980). This means that errors in photo-spread procedures cannot be corrected by subsequent identification procedures and that subsequent identification procedures have little or no “information value” beyond what has been obtained already. Thus, if there is reason to believe that a jurisdiction will require identification from a live lineup, a live lineup should be preferred in the first place. On the other hand, I recommend that any positive photographic identifications be followed routinely by a live lineup whenever practical [Recommendation 6.29] because the witness will be called upon to make an identification of the accused at trial in any event and the live lineup would constitute a fairer test for the accused and a greater challenge of the witness’s memory than an in-court identification.

Often there is no identification from a photo-spread and, therefore, there may be a need to conduct subsequent photo-spreads.
As a general rule, if a photo-spread fails to produce an identification of a suspect, subsequent photo-spreads should contain no one who appeared in a previous photo-spread unless it is presented to a different witness [Recommendation 6.30]. It is useless at best and possibly misleading to repeat any prior photograph. If the witness has failed to identify a photograph of the suspect on a previous occasion, there is no reason to expect better memory at a later time. In addition, a subsequent photo-spread that includes a previously-viewed photograph might produce an identification of that photograph for a spurious reason, namely the witness may perceive the person in the photo to be familiar merely because of the prior photo-spread viewing and mistakenly confuse that memory with memory for the original perpetrator. If there is a reason to believe that the witness failed to identify the suspect because the suspect’s photograph failed to capture his or her “live” appearance, a live lineup may be conducted subsequently using the same suspect but the probative value of this procedure will be considered negligible [Recommendation 6.31]. Police must reasonably expect this procedure to be called into question in court because, in all likelihood, the suspect is the only one who will have appeared in both the photo-spread and the live lineup.

KEEPING RECORDS

Clear and accurate records should be kept regarding all factors pertinent to the recommendations contained in this chapter. This includes the reasons for using a photo-spread rather than a live lineup, instructions given to the witness(es), an exact copy of all photo-spreads used including the position and order of all photos whether identifications were made or not, the witness’s(es’) identification decisions, remarks by the witness(es) and the witness’s(es’) stated confidence at the time [Recommendation 6.32].

A common mistake in keeping records occurs when a witness makes no identification from a photo-spread or when a witness identifies a distractor. Such events are sometimes thought to have no probative value but empirical research and probability theory clearly show otherwise (Wells & Lindsay, 1980). Thus, records of the photo-spread, instructions to the witness, and all other records that are kept in cases where the witness identifies the suspect should also be kept in cases where the witness identifies someone other than the suspect and in cases where the witness identifies no one.
Most of the logic governing a properly constructed lineup is directly analogous to a photo-spread. In both cases there is a single suspect, distractors must be chosen carefully, the witness must be informed that the true perpetrator may or may not be in the lineup, and so on. The live lineup, of course, is more difficult and time consuming to execute properly than is the photo-spread. Furthermore, a potential for disruption exists with the live lineup. Nevertheless, a good lineup is preferred to a good photo-spread for several reasons. First, an identification from a lineup prevents arguments that the witness merely has identified a photograph rather than a person. As well, the witness is given the opportunity to use body cues such as weight, height, build and any other cues more effectively than can be discerned in photographs. Movement cues and mannerisms may also aid the recognition process when using lineups whereas these cues are absent when using a photo-spread.

In spite of these obvious reasons for preferring a lineup to a photospread, experiments have generally failed to demonstrate superior performance by eyewitnesses when they identify from a live lineup versus a colour photo-spread (see Shepherd, Ellis & Davies, 1982, Chapter 12). It seems peculiar that live lineups have not been shown to be superior to photo-spreads in terms of identification.
accuracy. Until more extensive research is conducted I can only speculate as to why the work of Shepherd, Ellis and Davies (1982) failed to demonstrate the superiority of live lineups. One possibility is that the eyewitnesses in their experiment were given particularly favourable viewing conditions at the time of encoding, thereby making their memory good enough to identify the target persons regardless of the testing mode. Indeed, accuracy of identification in the Shepherd, Ellis and Davies study was 89% for the live lineup and 92% for the colour photo-spread. Thus, for witnesses with good memories for the perpetrator, it may not matter whether a photo-spread or a live lineup is used, especially if the photograph of the perpetrator is a good colour likeness of the perpetrator. (Note: a condition using black and white photo-spreads yielded only 81% accuracy in the Shepherd et al. study.)

WHEN?

A lineup should be used in preference to photo-spreads or other techniques unless the suspect is at large or unwilling to participate, there are reasons to believe the suspect will disrupt the lineup session, the witness is unwilling or unable to view a live lineup, suitable distractors cannot be found, the lineup would delay the witness’s ability to attempt an identification while the memory is fresh or there is some other compelling reason [Recommendation 7.1].

It was mentioned in the previous chapter that it is the suspect’s right to refuse to participate in a lineup. Although it can be debated whether or not a suspect ought to have this right of refusal, it would solve no problems to force suspects to participate, especially because an unwilling suspect would likely disrupt the lineup session by any of a variety of means. In such cases, it is best to resort to a well-conducted photo-display. In cases where there is some reason to believe that the suspect will disrupt the session, simple procedures can be introduced to help assure that the witness(es) do not view the disruption. For example, by using a one-way mirror, the lineup can be staged prior to the witness entering the viewing area. The suspect, thinking that the witness is viewing him or her at that time, could then be given some time to display any disruptive tendencies. If no disruption occurs after a reasonable time lapse, the witness can then be brought into the viewing room.

Witnesses are sometimes unwilling to view a live lineup. Often this is due to a fear that the perpetrator will see the witness. The typical solution is to assure the witness that he or she can observe
from behind a one-way mirror or from a darkened area. Unfortunately, most witnesses will realize that this form of protection from identity can only be temporary because an accused has the right to know the identity of his or her accuser at some point. Thus, although the guarantee of anonymity can be calming for witnesses, some witnesses may need further guarantees of protection which go beyond the domain of the current concern with identification.

In addition, some witnesses prefer not to view a live lineup because of the profound anxiety they anticipate from seeing the perpetrator again. For these witnesses, guarantees of anonymity and/or protection are not the issue. Instead, they fear reliving the episode, a fear that may not appear rational to many involved observers, but is a true fear nevertheless. The officer has two main options at this point. First, the officer can try to bring the witness to the point of viewing the live lineup by taking the witness through small graduated steps in a manner analogous to what clinical psychologists call "systematic desensitization" (Wolpe, 1958). The idea is to simply create a list of small steps toward identification such as: (a) discuss the lineup session at a hypothetical level, (b) discussing a time at which the lineup session might occur, (c) agreeing on a specific time for the lineup session, (d) showing the witness the identification and viewing rooms without lineup members present, (e) moving slowly toward the viewing room, pausing whenever the witness appears anxious, and so on. The general point is to make each step a small one and to stop and repeat an earlier step if the witness becomes too anxious. In addition, the officer should provide reassurance and relaxation instructions at each step. Jurisdictions that have access to a clinical psychologist may find him or her quite helpful in these cases. The other main alternative is to use a photo-spread instead of a live lineup as this should produce less anxiety.

A common reason for using photo-spreads instead of live lineups is that suitable distractors cannot be found for the live lineup. Such a reason is sufficient for deciding to use a photo-spread and I endorse this reason strongly. However, sometimes the "no suitable distractors" argument is premature in that such distractors could have been found given more time and effort. Recall from the previous chapter that additional time delays of one or two days ought not be considered critical as regards the quality of the witness's memory if 10 or more days have passed already since the witnessed event. Although there are no clear-cut rules on these issues, I suggest that officers keep in mind a "20% rule-of-thumb" to wit; if significant further
improvements can be made to the identification process at the cost of further delay in testing the witness’s memory, the improvements should be made as long as the delay adds no more than 20% to the time already passed since the witnessed event. Note that the 20% rule-of-thumb refers to further improvements once minimally acceptable procedures have been established. The 20% rule-of-thumb does not refer to the total time required to put together an acceptable identification procedure, which might be many times greater.

INSTRUCTING WITNESSES ON VIEWING

The discussion in Chapter 6 on instructing witnesses with regard to viewing photographs applies to lineups as well. The two main concerns are that the witness not be led to believe that the actual perpetrator is definitely in the lineup, and that no information be given as to whom the police suspect. The main problem with witnesses believing that the actual perpetrator is in the lineup is that such a belief results in considerable pressure on the witness to choose someone from the lineup. Although it can be argued that such pressure is desirable if the actual perpetrator is in fact in the lineup, police can never be totally certain of that fact. Indeed, if police are totally certain that the perpetrator is in the lineup, there is no need for the lineup. In any case, due process considerations lead me to recommend strongly that when inviting to view a lineup police should only suggest that they have a possible suspect and actively avoid indicating that the actual perpetrator is in the lineup that the witness is being asked to view [Recommendation 7.2].

Most witnesses will assume that police have considerable amounts of incriminating evidence against a suspect, otherwise a lineup would not be held. Although this often is a reasonable assumption, notice how the witness would be prone to approach the lineup situation with a frame of mind akin to "The guy is there . . . now if I can only figure out who it is." Given this frame of mind, the witness would be satisfied and persuaded if he or she could only figure out whom it is that the police suspect, regardless of whether or not the witness’s memory is adequate to choose the suspect on grounds of memory alone. Thus, it is important to make salient the idea that the actual perpetrator might not be in the lineup and this should be done immediately prior to viewing the lineup, regardless of whether or not it was also done previously. My recommendation is that immediately prior to viewing a lineup, witnesses should be told explicitly that the actual perpetrator
may or may not be contained in the lineup [Recommendation 7.3]. Support for this comes primarily from Malpass and Devine (1981) who showed that such a statement reduces the likelihood of false identifications when the actual perpetrator is not in the lineup while it has no detrimental effect on accurate identification rates when the perpetrator is in the lineup.

Further relieving witnesses of perceived pressure to choose someone from the lineup would be a specific statement to avoid guessing. As discussed in Chapters 1 and 6, some eyewitnesses have lax criteria for making an affirmative response. The forensic import of an identification demands more than a “best guess” strategy or a “looks-like-the-guy” strategy. Indeed, if a lineup is properly constructed, there will always be someone who resembles the perpetrator on some basis. Precisely what constitutes a sufficient level of resemblance to justify a positive identification is not discernible through research at this time. However, I strongly recommend that witnesses should be cautioned explicitly against guessing [Recommendation 7.4]. Thus, there are three statements that when properly given should suffice as cautions: (i) the police should have only a possible suspect, (ii) the perpetrator may or may not be in the lineup, and (iii) the witness should avoid guessing.

In spite of precautions to witnesses discussed thus far, witnesses tend to look closely at police for some kind of clue as to whom the police suspect. Obviously, police should in no way, verbally or gesturally, suggest to any witness whom they think the suspect is [Recommendation 7.5]. The best way to deal with this issue is to have an officer who is not involved in the case (and, therefore, does not know which lineup member is the suspect) conduct the lineup session.

As discussed in Chapters 1 and 6, “context” is a critical aspect in all memory retrieval tasks. Just as it is difficult for some people to remember where he or she left his or her car keys without thinking of the context in which the keys were most recently encountered, so too it is difficult for an eyewitness to remember a person’s characteristics without some recollection of the context of the witnessed event. There are two general ways to characterize what is meant by context. First, there is the physical context such as a building, room, objects and other physical aspects of the original witnessing situation. But there also is the psychological context such as feelings and thoughts that the witness had while witnessing the situation. The evidence regarding the role of physical context is scant, but what little evidence exists fails to support the idea that reinstatement of physical
context is important (Wells & Turtle, 1985). Reinstatement of psychological context, however, may be considerably beneficial (Malpass & Devine, 1981). *I recommend that the witness be told to “Cast your mind back to the context surrounding the incident. Think about what the surrounding environment looked like at the scene such as the rooms, the weather, how you were feeling and what you were thinking about. Recall things as they happened and then reverse the order to recall things from end to beginning. Try to recall the scene from different perspectives that you may have had or adopt the perspective of others who were present.”* [Recommendation 7.6] (adapted from Geiselman, Fisher, MacKinnon & Holland, 1985).

Prior to the witness viewing the lineup, some guarantees should be in place to prevent the suspect from possibly disrupting the lineup session. This was discussed previously but deserves mentioning again at this point. Perhaps the simplest solution is to run the lineup twice, first without a witness viewing and then with a witness viewing. Because a proper procedure is one in which the lineup members cannot see the witness, the lineup members can be led to believe that the witness(es) are present at initial viewing. Any disruption is likely to occur at that point; lack of disruption at the initial session (without witness) should represent sufficient assurance that a witness could then be brought in for viewing.

At the point of viewing the lineup it often will be the case that no further instructions are necessary to elicit a response from the witness. Sometimes, however, the witness will await a request for identification. In such cases *the witness should be asked to indicate whether or not he or she can positively identify anyone as the perpetrator* [Recommendation 7.7]. Under no circumstances should a witness be asked to judge who most looks like the perpetrator or whether anyone could possibly be the perpetrator. These are the types of “relative judgments” that the current recommendations are trying to avoid. There is always one lineup member who best resembles the perpetrator relative to other lineup members and a request for such a judgment is a form of identification pressure that is not acceptable.

At several points I have discussed the question of eyewitness certainty. As a general rule, the certainty or confidence with which an eyewitness makes an identification has little or no relationship to the accuracy of the identification (Wells & Murray, 1984). I have described several reasons for the weak or nonexistent certainty-accuracy relationship, including individual differences between witnesses (Brown, Deffenbacher & Sturgill, 1977), the tendency for
viewing conditions to affect accuracy of memory but not confidence (Lindsay, Wells & Rumpel, 1981), and the tendency for some things to affect eyewitness confidence but not eyewitness accuracy (Wells, Ferguson & Lindsay, 1981). Nevertheless, investigators, prosecutors and the courts have a need to know about the certainty with which an eyewitness has made his or her identification. Research indicates that the best time to assess eyewitness certainty is immediately after the identification. This is because other events that occur after identification have spurious effects on the eyewitness's certainty (see Hastie, Landsman & Loftus, 1978; Murray and Wells, 1982; Wells, Ferguson & Lindsay, 1981). Therefore, I recommend that immediately following an identification the eyewitness should be asked to indicate how certain he or she is that the identified person is in fact the perpetrator [Recommendation 7.8]. As with the identification itself, no cues of any kind should be given to the witness as to whether or not the identified person is the suspect in the case [Recommendation 7.9].

This latter point, giving no cues as to whom the suspect is prior to asking the witness about his or her certainty, is particularly important. Imagine the meaningless of asking the witness about his or her certainty if he or she were first told that he or she identified a known-innocent foil. Although not quite as meaningless, asking a witness about his or her certainty after informing him or her that he or she identified the suspect has similar interpretational problems. Specifically, such information is “extra-memorial” in the sense that the witness's certainty is influenced by the officer's decision to tell the witness that he or she chose the suspect rather than the witness basing his or her certainty on the degree of match between the identified person and the witness’s memory of the perpetrator.

NUMBER OF FOILS AND THEIR SELECTION

I discussed some general ideas about foils in the previous chapter on photo-spreads. The selection of foils is at least as important as are instructions to witnesses and both the selection of foils and instructions to witnesses are based on a common premise. That premise is that there should be no clues to the witness(es) as to whom the police suspect is in the lineup. Foils should be selected primarily for the purpose of making sure that this premise holds.

It is natural to first consider the number of foils required for a lineup. Obviously, if there are no foils (i.e., a show-up) then the
basic premise is violated because it is apparent who the suspect is. But the addition of foils per se does not guarantee that the premise is not violated. A foil must play a functional role rather than merely a nominal role in order to serve its intended purpose (Wells, Leippe & Ostrom, 1979). A functional foil in a lineup is a known-innocent person who matches the general physical characteristics of the perpetrator as described earlier by the witness [Recommendation 7.10]. Any lineup member who fails to meet this functional criterion is not counted when considering the number of foils in a lineup.

Ambiguity arises in deciding what constitutes the general physical characteristics that must be used in the definition of a functional foil. In part this is answered by the latter part of the definition of a functional foil, to wit "as described earlier by the witness." Thus, if the witness mentioned height, weight, age and facial hair, then these characteristics must be used to define who is or is not a functional foil. If the witness had not previously mentioned eye colour, on the other hand, then eye colour is not a relevant criterion for deciding who is or is not a functional foil.

It is important to note that a functional foil is not defined in reference to the characteristics of the suspect. Instead, it is defined in reference to the characteristics of the perpetrator as defined by the witness. Thus, a suspect might not match the foils in various ways. Suppose, for example, a witness described a perpetrator as tall, dark hair, mid 30s in age, Caucasian and average weight. In this case no mention was made of facial hair. Suppose further that a suspect in the case has a moustache. In this situation, foils who match the witness's general description are functional foils regardless of whether or not they have moustaches.

Why is a foil accepted as "functional" even when he or she doesn't match an obvious facial characteristic of the suspect? The key to answering this question requires that we again examine the pervasive premise that the lineup be conducted so that it is not apparent to the witness who it is that the police suspect. Because the witness did not rule out persons with or without moustaches in the previous description given to the police, the witness could not guess who the police suspect on the basis of whether or not a given lineup member has a moustache.

Although the characteristics of the perpetrator are not directly relevant to the definition of a functional foil, they are relevant to an evaluation of whether the lineup is satisfactory overall. A concern exists that the suspect not appear distinctive in a lineup. Using the previous example, even though the use of foils without facial hair
is adequate at one level, the fact that the suspect has a moustache (whereas all other lineup members do not) makes the suspect distinctive among the entire set.

If for some reason the suspect would stand out as a distinctive member in the lineup, steps should be taken to minimize this problem through the selection of additional foils, or in some cases, the alteration of existing foils [Recommendation 7.11]. The idea of adding (or replacing) foils to avoid situations where the suspect would appear distinctive in the lineup is relatively straightforward. However, it is not always an easy solution. A scar on the face of the suspect, a handlebar moustache or a goatee are sufficiently rare in the population to make it difficult to find suitable foils. This might be a situation where it is advisable to use a photo-spread rather than a lineup. In some cases, however, a make-up artist can add facial hair or the appearance of a scar to the foils.

It should be noted that altering the appearance of the suspect as a means of meeting functional size requirements or as a way to lessen the distinctiveness of the suspect is not advisable [Recommendation 7.12]. The main reason for not altering the suspect's appearance is that doing so may serve only to diminish the memory cues available to the eyewitness.

On the other hand, there are some special cases that may require the occlusion of some aspect of the suspect's appearance in order to conduct a fair lineup. If the suspect is missing a leg, for instance, then a screen should be used which can block the witness's view of the lineup members' legs as well as the legs of the foils.

At this point I am prepared to recommend a minimal size to the lineup. All lineups, except blank lineups, normally should consist of at least six functional foils in addition to the suspect [Recommendation 7.13]. By having at least six functional foils, the second major concern (that the suspect not appear distinctive in the lineup) will tend to be met automatically in most cases. As well, it assures that a witness who is merely guessing has a reasonably low chance of selecting the suspect. Note that the number of six refers to functional foils. When in doubt about how functional a given foil will be, it may be best to leave that foil in the lineup and add new foils as well. Usually, a lineup can be conducted without much difficulty with up to 10-12 lineup members. Beyond that range, however, logistical and other problems arise.

Generally, the public and some court jurisdictions have a suspicious view of the practice of using police officers as foils in lineups.
Numerous arguments can be made against the use of police as foils. It can be argued, for example, that police might overtly or subconsciously assist the witness in identifying the suspect due to their sharing of their colleague’s interests in the apprehension of criminals. Even when this is not true, the appearance of fairness in the process of using police as foils is lacking in the minds of potential jurors and the public in general. Therefore, I advise against using police as foils in lineups [Recommendation 7.14].

The possibility of foils overtly or subconsciously assisting the witness in identifying the suspect is lessened if the foils are unaware of which lineup member is the suspect. This is another argument against using police as foils because they often will know which lineup member is the suspect. Whenever possible, the foils should not be aware of the identity of the suspect [Recommendation 7.15]. This does not mean that a foil should be kept unaware about his or her own status; a foil could be told from the outset that he or she is not a suspect in the case.

SIMULTANEOUS AND SEQUENTIAL PROCEDURES

The traditional lineup uses a simultaneous procedure. That is, the lineup members appear as a group, each visible to the witness at one time. A sequential procedure is one where the witness views one lineup member at a time with knowledge that there are several lineup members to be viewed. Empirical research on the sequential procedure is scant; only one published experiment comparing the sequential and simultaneous procedures has been conducted to date (Lindsay & Wells, 1985). This experiment produced results that favoured the sequential procedure in that the sequential model yielded fewer false identifications than did the simultaneous procedure whenever the perpetrator was absent from the lineup but it did not reduce accurate identifications when the perpetrator was present in the lineup.

This does not necessarily mean that the sequential procedure is preferred over the simultaneous procedure at this time for several reasons. First, conclusions about the efficacy of one procedure over another should not be based on a single experiment, especially when the conclusions of that experiment run against standard procedure. In addition, the sequential procedure has a large number of possible variations and involves additional instructions to witnesses that require a priori decisions by officers as to how they are going to choose among
these variations. For example, should the witness be told how many lineup members they will view? Should the witness be required to make a yes/no decision on first viewing of each lineup member? If the witness makes a positive identification of one of the first lineup members viewed, should the witness be required to also view the remaining lineup members? In the Lindsay and Wells (1985) experiment, witnesses were led to believe that there were 12 persons to be viewed when in fact there were only 6, witnesses were required to decide whether or not each person was the perpetrator at the time that the person was first viewed, and witnesses were required to view the remaining lineup members (in order) even if a positive identification was made early in the sequence. Because this was a very specific procedure, it is not clear whether or not the advantage of the sequential over the simultaneous procedure is specific to this rigid sequential procedure.

The psychological rationale for the sequential procedure being better than the simultaneous procedure is based on Wells's (1984) notion of "relative versus absolute" judgments in memory. Wells argued that many witnesses are prone to making their identification decision according to a criterion of who best resembles the perpetrator relative to the other lineup members. This is in contrast to a more absolute criterion of whether or not the lineup member in question is in fact the perpetrator. The relative-judgment criterion is dangerous to the extent that the true perpetrator is absent from the lineup because there will always be someone who best resembles the perpetrator relative to other lineup members. Lindsay and Wells (1985) argued that the sequential procedure could be a powerful means of preventing the use of a relative-judgment criterion because it would force witnesses to compare each lineup member to their recollection of the perpetrator using some absolute standard rather than considering who most looks like the perpetrator. The fact that the sequential procedure proved superior to the simultaneous procedure when the perpetrator was absent from the lineup (but not when the perpetrator was present in the lineup) strongly supports this view of how to help prevent false identifications. Nevertheless, I am not yet willing to argue a preference for the sequential procedure on the basis of only a single experiment.

Because the research on the sequential procedure to date has been limited to one specific version of the sequential procedure, it is recommended that the simultaneous procedure normally be used instead of a sequential procedure. If a sequential procedure is used, the witness should be led to believe that there are more lineup members
than will in fact be presented, the witness should be required to make yes/no decisions on each lineup member on initial viewing, and the witness should be required to view the remaining lineup members even if a positive identification is made early in the sequence [Recommendation 7.16]. The rationale for leading the witness to believe that there are more lineup members than in fact exist is based on more than just the Lindsay and Wells (1985) study. The idea is that if the witness knew that he or she was about to view the last person in the sequence, he or she might be prone to choose that person by an ill-conceived notion of the process of elimination.

Both the simultaneous and sequential procedures require some decision regarding the position in which the suspect should be placed. Interestingly, there is no empirical evidence to indicate that a person is more likely to be chosen in one position versus another for either the simultaneous or sequential procedures. In the sequential lineup study, for example, the perpetrator was placed in the first, third or fifth position, but the rates of identification did not differ over these three positions (Lindsay & Wells, 1985). In spite of evidence suggesting that the position of a suspect in a lineup makes no difference to the likelihood that he or she is identified, I recommend that the suspect should be allowed to choose the position in which he or she will appear in the lineup and be explicitly informed of this right [Recommendation 7.17]. This prevents the suspect or the suspect’s attorney from arguing later that the position assigned to the suspect was chosen strategically by police for purposes of facilitating an identification of the suspect.

Regardless of whether the sequential or simultaneous lineup procedure is used, all lineup members must be fully briefed about how they are to conduct themselves at the appearance. They should be told to look straight ahead, maintain a demeanour befitting the seriousness of the proceedings, and to neither speak nor engage in movements except as requested by the supervising officer [Recommendation 7.18].

**COMPELLED ACTIONS AND CLOTHING**

A primary advantage of lineups over photo-spreads is the opportunity for the witness to observe movements (e.g., the walk of lineup members) or to listen to the voices of lineup members. There are two important ideas to keep in mind about compelled actions. First, there should be some pre-lineup discussion with the suspect about the possibility that the suspect will be asked to speak certain words
or engage in certain actions [Recommendation 7.19]. The purpose of such discussion is to prevent the possibility that the suspect will refuse such requests during the lineup session. Such refusal during the lineup session would prove disruptive in most instances and call into question the utility of the entire lineup session. It must be remembered that the suspect cannot be forced to appear in the lineup and similarly cannot be forced to speak or engage in certain actions. The "voluntary" nature of lineups suggests that the reasonable precautions be taken to ensure that the suspect understands what is involved or is likely to be involved so that the suspect doesn't change his or her mind at an inappropriate moment.

When a witness requests some action on the part of lineup members (e.g., having the lineup members say "Give me your money"), each lineup member must be asked to engage in the action in the order in which they appear in the lineup, which is left to right in a simultaneous lineup [Recommendation 7.20]. This must be the case even if the witness is asking only for one of the lineup members to engage in the action. The rationale for this is based on the assumption that some witnesses may not fully appreciate the fact that some characteristic (e.g., a particular gesture, gait or deep voice) is perhaps quite common and that it also characterizes other persons in the lineup.

How lineup members should be dressed is an issue that has received some recent treatment in the experimental psychology literature (Lindsay & Walbridge, 1985). In this experiment, eyewitnesses to a staged crime were shown (a) a lineup in which the perpetrator or a substitute were dressed similarly to how the perpetrator was dressed originally while the foils were dressed differently or (b) all lineup members were dressed similarly to how the perpetrator was dressed originally or (c) all lineup members were dressed in a way that did not resemble the way the perpetrator was dressed originally. Of these three conditions, the first produced the poorest performance on the part of witnesses with the latter two yielding similar levels of performance. At first glance these results may appear counter-intuitive. However, it must be remembered that dressing the suspect in clothes like those worn by the perpetrator (while dressing foils differently) serves to facilitate the eyewitness only if the suspect is guilty. If the suspect is innocent, then this serves to inflate the rate of false identifications. Indeed, if only the suspect (and not the foils) is clothed in a manner resembling the perpetrator, then the lineup is unduly suggestive. All lineup members should be similarly clothed regardless of whether or not the clothing is thought to be similar to that worn
by the perpetrator at the original time of witnessing [Recommendation 7.21]. The notion of “similarly clothed” carries with it the idea of “similarly fit.”

A special case arises when police believe that they have acquired the actual clothing worn by the perpetrator. There are three choices in this situation. First, the suspect can be asked to don that clothing for the lineup, in which case comparable clothing must be worn by the foils. In this case, comparable clothing is defined as clothing that fits the general description of the clothing worn by the perpetrator as described previously by the witness(es). For example, if the witness had previously described the perpetrator as wearing blue jeans torn below the knee, it is not sufficient that foils merely wear blue jeans; those jeans must also be torn below the knee.

The second alternative refers to situations in which the clothing item is so unusual that no comparable item can be found, for example, a particular mask or hat. In cases of a distinctive item of apparel, each lineup member must be asked to don the item in their order of appearance in the lineup, which is left to right in a simultaneous lineup [Recommendation 7.22].

MULTIPLE WITNESSES

I discussed multiple-witness situations in previous chapters for various reasons. For example, in Chapter 3, I discussed the need to separate witnesses as soon as possible so as to prevent their influencing each other. In Chapter 6, I discussed the need for changing the suspect’s position in photo-spreads for each witness. The general concern is that the information obtained in multiple-witness cases be collected from each witness independently of the other witnesses. Thus, witnesses should be placed in separate rooms from each other prior to their viewing the lineup and should not be allowed to interact until all witnesses have viewed the lineup, made any identification and given their statement of certainty [Recommendation 7.23].

Further protection for the suspect can be achieved by using different foils for each eyewitness so that any subtle biases in one lineup would not carry over to the next witness. In most cases, however, this will prove impractical due to the overriding requirements for a lineup with at least six functional foils. However, the suspect should be allowed to change positions in the lineup for each new eyewitness, and the suspect should be explicitly informed of this right [Recommendation 7.24].
BLANK LINEUPS

A blank lineup is a lineup that contains only foils. A blank lineup normally would be followed by a traditional lineup which contains a suspect among a new set of foils. The purpose of a blank lineup is to "screen" eyewitnesses who are prone to either guess or who are prone merely to pick the most likely person in the lineup. As well, a blank lineup can be an effective safeguard against an unscrupulous witness whose goal is to identify someone other than the true perpetrator because of the witness's involvement in the crime in question.

Recent experimental data illustrate the efficacy of a blank lineup procedure (Wells, 1984). In this experiment, staged-crime eyewitnesses were asked to attempt to identify the perpetrator using standard instructions (e.g., there is a possible suspect, the true perpetrator may or may not be present). Half of the witnesses were tested in the traditional way with a lineup that did or did not contain the perpetrator. The other half were first presented with a blank lineup for which standard instructions also were given. After identifying someone or not, the blank lineup group was then given the traditional lineup. Of those who were given the traditional lineup first, approximately 35% made correct decisions (i.e., identifying the perpetrator when he was present or indicating he was not there when the perpetrator was absent). Of the 37.5% who incorrectly identified a foil in the blank lineup, approximately 38% made correct decisions on the second (traditional) lineup. Of the 62.5% who did not identify someone from the blank lineup, approximately 68.5% made correct decisions on the second (traditional) lineup. Therefore, even though a significant proportion of the witnesses incorrectly identified a foil in the blank lineup, foil identification errors are relatively harmless because they are known to be errors (rather than "hidden" errors). Furthermore, the overall effect of the blank lineup on error rates for the actual (second) lineup was positive in that it reduced errors.

In spite of the apparent benefits of using a blank lineup prior to the actual lineup, blank lineup procedures should be reserved for cases in which there is some reason to believe that the eyewitness is overly-prone to identify someone who merely resembles the perpetrator, is likely to guess, or who has some possible motive to intentionally choose the wrong person [Recommendation 7.25]. It may be worth noting that routine use of a blank lineup preceding an actual lineup may become common knowledge and thereby lose its
effectiveness or create unintended effects. As well, some police jurisdictions might object to blank lineups in principle because there is some element of "trickery" involved.

Because there is no possibility of a false identification of a suspect occurring with a blank lineup, *blank lineups may be composed of as few as four persons, only one of whom need match the general characteristics of the perpetrator as described previously by the witness(es)* [Recommendation 7.26]. As the experimental data showed (Wells, 1984) it is not necessarily true that a witness who identifies someone from a blank lineup will prove to be a poor witness when presented with a second (actual) lineup. Therefore, even *if a witness identifies someone from the blank lineup, the witness may be invited to view a subsequent lineup in which there is a suspect* [Recommendation 7.27]. In the event that the witness makes an identification of someone in the blank lineup, the witness should not be told that the identified person is not a suspect. In addition, the standard instructions for lineups must be given again prior to the second lineup. *Normally, the second lineup, which contains the suspect, will not include any members of the blank lineup* [Recommendation 7.28].

The Devlin Committee (1976) was concerned that blank lineups may exacerbate the very problem that blank lineups were intended to solve. Specifically, they feared that if the witness failed to identify someone in the first lineup, the witness would perceive even more pressure to choose someone in the second (actual) lineup than would be the case if the actual lineup were presented alone. There are three reasons why I feel that this is not a significant problem. First, the experimental evidence showed that the use of a blank lineup decreased the frequency of identifications in the second lineup (Wells, 1984). Second, the standard instructions must be repeated prior to presentation of the actual (second) lineup and these instructions include reference to the possibility that the actual perpetrator may not be present and to avoid guessing. Finally, witnesses *should at no time be informed as to the number of lineups that they will view*, leaving open the perception that a third lineup might follow [Recommendation 7.29].

**LINEUPS AT LOCATION AND SIMULATING CONDITIONS**

There may be times when the location at which an event was witnessed has particular significance in terms of the "intrinsic context" of that location. Intrinsic context refers to aspects of the context or witness setting which are inevitably processed when the stimulus is
processed. “Extrinsic context” refers to irrelevant aspects of the witness setting, that is, aspects of the situation that are not inevitably linked to the processing of the stimulus. It is generally thought that intrinsic context is important for facilitating retrieval because it guides the person back to the interpretation of the stimulus that the witness had when first witnessing the stimulus.

There are, however, several concerns about trying to make use of intrinsic context. First, it is not clear on an *a priori* basis which contexts or context factors are intrinsic and which are extrinsic. When considering an eyewitness identification case, a factor is unlikely to be intrinsic unless the perpetrator actually interacts with that factor. For example, the mere fact that an object such as an automobile was in a witness’s field of vision while the witness observed the perpetrator commit an act probably does not make the automobile context intrinsic to the witness’s memory of the perpetrator. On the other hand, if the perpetrator was observed changing the licence plate, then that activity on that (or a similar) car in that (or a similar) location might produce better identification performance by the eyewitness. Even under these conditions it is not clear that the context is in fact intrinsic. A further concern is that returning the eyewitness to the original location might, in some cases, trigger levels of anxiety in the witness that interfere with successful memory retrieval. Returning the eyewitness to the original location can also result in a loss of control over extraneous aspects of the environment such as noise or lighting conditions. Finally, returning to the original location makes it difficult if not impossible to allow the witness to not be seen by the lineup members. Therefore, *I recommend that lineups normally should not be held at location unless there is something intrinsic about the context of the location that would facilitate the witness’s memory, the location would not raise the witness’s anxiety to an impairing level, extraneous factors such as noise can be reasonably controlled, and the witness’s desire to not be seen by the lineup members is not placed in jeopardy* [Recommendation 7.30].

Simulating conditions refers to attempts to create a lineup identification environment similar to the witnessing environment (as opposed to the original witnessing environment itself). The rationale for simulating conditions is the same as the rationale for lineups held at location, namely it might facilitate the witness’s memory. Simulating the witnessing conditions has some possible advantages over lineups held at location. First, simulating conditions may evoke less anxiety on the part of the witness than would returning to the witnessing
location. As well, extraneous, distracting aspects of the original location (e.g., noise levels) could be controlled in the simulated setting. Finally, the witness can view the lineup from a darkened area or one-way glass in the simulated setting, thereby protecting the witness from view by the lineup members in a way that may not be possible in the original location. Therefore, when there is something intrinsic about the witnessing context that would facilitate the witness's memory, consideration should be given to stimulating the intrinsic factor(s) rather than holding the lineup at location [Recommendation 7.31].

Perhaps the most common witnessing-context factor that might be important for lineup identification is lighting. I will use lighting conditions in order to illustrate some points to consider when simulating conditions. First, it should be noted that there is no scientific evidence to indicate that eyewitnesses who viewed a perpetrator under impoverished lighting conditions are best tested by using lighting conditions that are similarly impoverished. In other words, the best lighting conditions for conducting a lineup should be normal, well-lit conditions, regardless of the original lighting conditions. Most likely, there will be certain situations where the original lighting conditions will prove best for recognition and other situations where well-lit, normal lighting conditions will prove best. For example, if the original lighting conditions produced distinctive shadows because of unique facial features, then simulating these lighting conditions might prove better than well-lit conditions. Unfortunately, it isn’t clear when, if ever, such conditions exist. The simple solution, therefore, is to conduct the lineup under both sets of conditions, i.e., the well-lit conditions and the simulated condition. Therefore, when a simulated condition is one that impoverishes the visual aspects of the lineup (e.g., via low lighting levels, increased distance between witness and lineup members), then the witness should view under both the impoverished and optimal conditions prior to making an identification [Recommendation 7.32]. Of course it should also be the case that each lineup member is treated equally with regard to the simulated conditions.

SUBSEQUENT LINEUPS

If a witness identifies a foil or makes no identification, there sometimes is a tendency for investigating officers to want to conduct a subsequent lineup with that same suspect and a new set of foils. If it is also the same witness, then this is an unacceptable practice.
In this case a problem exists at several levels. First, the witness may notice that only one person is common to both lineups (i.e., the suspect). This, in turn, makes the suspect distinctive and thereby violates the basic premise of a functional lineup. Alternatively, the witness might not notice that the suspect in the second lineup also appeared in the first lineup. In this case, the witness might select the suspect out of the second lineup because he or she looked familiar. The latter phenomenon, called "unconscious transference," has been shown to happen under certain experimental conditions (see Loftus, 1976).

Potentially less problematic would be to repeat the lineup with the same foils as well as the same suspect. In this case the suspect is not distinctively a member of both lineups. As well, the phenomenon of unconscious transference would be spread equally across lineup members, foils as well as suspect. However, I recommend against repeating the same lineup for two main reasons. First, repeating the same lineup can be construed as a form of pressure on the witness to choose someone. In addition, if the witness chooses the suspect in the second lineup, jury and judge will become suspicious of the process, they will wonder why the witness didn’t choose the person when the witness viewed the suspect previously, and it may appear that the investigators were overly-eager to obtain an identification. An exception to this may be when the witness identifies the suspect in the first lineup and the lineup is repeated later in order to reconfirm the original identification.

Because of these considerations, if a witness does not identify anyone in a lineup or identifies a foil, any subsequent lineup(s) presented to that witness should not contain any members, foils or suspect, who were in the previous lineup(s) [Recommendation 7.33].

KEEPING RECORDS

Clear and accurate records should be kept regarding all factors pertinent to the recommendations contained in this chapter [Recommendation 7.34]. This includes what the witness was told when initially invited to view the lineup, instructions to the witness immediately preceding the witness’s viewing of the lineup, the witness’s verbal statement of identification, the question asked of the witness regarding the witness’s certainty and the witness’s response to the certainty question. Each of these should be written in notes verbatim rather than in summary or paraphrased form. A colour photograph or videotape of all lineups should be taken with the identity of all
foils and the suspect clearly recorded. Any alteration to the appearance of the suspect or foils should be documented plenarily. Instructions to the suspect and foils prior to the lineup session should be fully recorded. Any deviations from the standard simultaneous lineup held in a normal viewing room should be justified by recording the rationale in the form of a prior report [Recommendation 7.34]. For example, if a sequential lineup is used or a lineup is held at location, reasons for this should be laid out in writing prior to conducting the lineup. All compelled actions must be fully described in notes or preferably recorded on videotape. In general, all matters of relevance to issues discussed in this chapter should be fully recorded in notes and by photographic or videotape means when possible [Recommendation 7.34].

The above recommendation regarding the keeping of records is not restricted to cases where the witness identifies the suspect. Instead, it applies to all cases where a witness viewed a lineup regardless of whether or not the suspect was identified. The relevance of keeping such records even if a foil was identified or no one was identified often is apparent only later and, therefore, such records should be kept regardless of whether or not the suspect was identified.
Identification of Voice, Clothing and Other Objects

As a general rule, the identification of voice, clothing or other objects should be conducted in a manner that is directly analogous to conducting a photo-spread or lineup. In other words, there should be foils (e.g., other voices) which are selected according to criteria that are similar to those used for selecting foils for a photo-spread or lineup and instructions to witnesses should also follow a prescribed procedure. If, for example, a witness is played a recording of a suspect’s voice without functional foil voices, then it is a “voice show-up.” Clearly this is unduly suggestive and therefore improper.

VOICE IDENTIFICATION TECHNIQUES

If a witness both visually viewed the perpetrator and heard the perpetrator’s voice, the voice identification usually will be conducted as part of the live lineup as described in Chapter 7 under the heading “Compelled Actions and Clothing.” Therefore, voice identification procedures usually will be confined to cases where the witness was exposed to the perpetrator’s voice but had little or no visual contact with the perpetrator.
Unlike photo-spreads and lineups, where there is a choice between using a simultaneous versus a sequential procedure, voice lineups necessarily are sequential.

Should live voice lineups be conducted or high fidelity tape recordings be used? In terms of recognition performance, it appears to make little difference (Pollack, Pickett & Sumby, 1954). Generally, the identification of speakers’ voices is resistant to the influence of various media, even if the medium filters selected portions of the frequency spectrum. A recording has the additional advantage of control over variables that help to make the voice lineup a functional set of voices for testing the witness. For example, if the witness described the perpetrator’s voice as having a slur, then the foils could have several chances at creating such a slur if audiotape were used, whereas a live voice lineup may become spoiled by a foil’s poor performance. Furthermore, the suspect could easily disguise his or her voice in a live voice lineup. If a taped voice lineup were used, however, police could use an audiotape of the suspect’s natural voice taken from a prior interview with the suspect. As a result of these considerations, I recommend that police should usually avoid live voice lineups and instead use a tape-recorded voice lineup [Recommendation 8.1].

In the previous chapter I discussed the issue of simulating conditions as they pertained to live lineups. An analogous question arises with voice lineups, especially as it relates to cases involving the use of the telephone. Suppose, for example, the witness had heard the perpetrator’s voice over the telephone. Should the voice lineup be filtered through the telephone, as the witness had heard originally, or should a high-quality direct recording for the voice lineup be sought? Research indicates that there is nothing to be gained from using a telephone voice lineup regardless of whether or not the voice was originally heard over the telephone (Rathborn, Bull & Clifford, 1981). Thus, I recommend that high-fidelity direct recordings be used in voice lineups even if the voice originally was heard by the witness in a degraded form (e.g., over the telephone) [Recommendation 8.2]. This does not prevent investigations from also using the degraded form by having the witness first listen to the high-quality recording and then listening to the degraded version prior to attempting an identification.

Foil voices should be selected so as to match the general characteristics of the perpetrator’s voice as described previously by the witness(es) in order to be considered functional foils [Recommendation 8.3]. Sometimes this will require foils to simulate a characteristic of the voice. For example, if the perpetrator was described as having
a British accent, it may be difficult to find enough suitable foils with British accents. Actors from a local theatre group are a good source of foils for unusual voices. However, if foils are simulating a voice characteristic, it is wise to give the witness’s description of the perpetrator’s voice to a group of naive persons and have them listen to the taped sequence of voices to see if they can pick out the suspect’s voice. Obviously, these naive listeners should choose the suspect’s voice no more frequently than that expected by chance.

Each member of the voice lineup should utter the same words and the speech sample should be at least ten words [Recommendation 8.4]. The logic of voice identification is that it is based on how words are spoken rather than what words are spoken. By having all voice lineup members utter the same words, there is no opportunity for defence counsel to later argue that the particular words spoken accounted for the witness identifying the suspect’s voice. As for the length of the speech sample, research indicates that the size of the speech sample makes little difference as long as it is one sentence or longer (Bull & Clifford, 1984). Police investigators generally seem to prefer to have lineup members utter words that the perpetrator was alleged to have used on the assumption that the witness would best recognize the perpetrator’s voice under such conditions. Research has not been directed at this idiographic-linguistic viewpoint, but it would appear to be a safe assumption.

There should be at least six functional foil voices used in a voice lineup [Recommendation 8.5]. There is no single number of foils that can be described definitively as the optimal or proper number. However, research on voice lineups by Bull and Clifford (1984) indicates that “6 distractors are all that are required . . . given that these 6 voices bear some similarity to the suspect’s [voice]” (p. 111). The latter part of this quote is particularly important. It is not the number of voices per se that is critical to the adequacy of a voice lineup; instead, the critical issue rests with the “functional capability” of those voices in conjunction with the number of voices. Obviously, it would be better to have four functional foil voices than to have eight foil voices that are not functional.

Witnesses must be told prior to their listening to the voice lineup that police have only a possible suspect and the perpetrator’s voice might or might not be contained in the sequence of voices [Recommendation 8.6]. This instruction is necessary for voice lineups for the same reasons it was necessary for photo-spreads and visual lineups, namely it takes pressure off of the witness for making a choice.
and it reflects the reality that the suspect might not be the actual perpetrator. Such instructions can decrease the likelihood of false identifications in voice lineups (Clifford, Bull & Rathborn, 1980).

**Witnesses should listen to the entire voice lineup even if they select a voice that occurs early in the sequence** [Recommendation 8.7]. Identifying a voice from a sequence is not only a positive action but also a rejection of other voices. Thus, the witness should hear all of the voices in the sequence. Furthermore, if the witness selects a voice early in the sequence, for example, the second voice, and is not exposed to the remaining voices, defence counsel could argue that the functional size of the voice lineup was only two, regardless of how many voices remained to be heard.

**The position of the suspect’s voice should be changed for each witness in multiple-witness cases and placing the suspect’s voice in the first position should be avoided in all cases** [Recommendation 8.8]. Research on voice lineups indicates that witnesses are more likely to pick the first voice heard than they are to pick subsequent voices (Clarke & Becker, 1969; Doehring & Ross, 1972). Therefore, placing the suspect’s voice first in the sequence would likely be argued by defence counsel as a bias in the procedure. The reasons for varying the position of the suspect’s voice for each witness in multiple-witness cases are the same as those outlined in Chapter 6 regarding varying the position of the suspect’s photograph in a photo-spread. In general, any biases due to where the suspect’s voice appears in the sequence would tend to be cancelled out by the fact that the position was different for each witness.

**The officer(s) conducting the voice lineup session should not know which voice is that of the suspect** [Recommendation 8.9]. By having the voice lineup session conducted by someone who is unaware of which voice is that of the suspect, the procedure is free of actual or alleged influence attempts. There are three levels at which failure to use “neutral” officers can create problems. First, an involved officer might intentionally influence an uncertain witness via verbal or gestural means. Second, an involved officer might unintentionally or even unconsciously influence a witness. Third, an involved officer might not have influenced the witness at all, but defence counsel might persuasively argue that such an influence was in fact present in the session. Any of these three levels can create problems and are best avoided by using officers who are naive as to the identity and positioning of the suspect’s voice in the sequence.

**After the witness listens to the entire sequence of voices, the**
witness should be asked if he or she can positively identify any voice as that of the perpetrator and, if so, how certain he or she is that the identified voice is in fact that of the perpetrator [Recommendation 8.10]. The witness can, of course, listen to the tape sequence a second time or more if necessary. However, if the witness goes through the sequence of voices twice without a positive identification, he or she should be reminded that the perpetrator’s voice might or might not be in the sequence of voices.

As in the case with photo-spreads and visual lineups, a blank voice lineup may be used if there is some reason to believe that the witness is overly-prone to identify someone’s voice on the basis of mere resemblance, is likely to guess or who has a possible motive to intentionally choose the wrong person [Recommendation 8.11]. A blank voice lineup may be composed of as few as four voices because there is no opportunity for a false identification (i.e., all are voices of known-innocent persons) and only one of these voices need match the general characteristics of the perpetrator’s voice as described previously by the witness(es). The second (actual) voice lineup, which contains the suspect, can be given to the witness regardless of whether or not an identification occurred for the blank voice lineup. However, the actual voice lineup will not include any members of the blank voice lineup except the person (if any) identified in the blank voice lineup. The witness should not be told that the identified person (if any) from the blank lineup was not the suspect prior to holding the second (actual) lineup [Recommendation 8.12]. The general theory and guidelines for blank voice lineups is analogous to that for blank visual lineups and the reader is referred to “Blank Lineups” in Chapter 7 for more discussion on blank visual lineups.

Voice lineup records. Clear and accurate records of the voice lineup must be taken. This includes the exact tape used in the voice identification, a list of the general voice characteristics that were used for generating foil voices, names and addresses of persons who served as foil voices, all instructions given to the witness(es) regarding the voice identification task, the number of times the witness(es) listened to the voice sequence, who conducted the voice lineup session(s) and whether or not they knew which voice was that of the suspect, the precise words of the witness regarding his or her identification, and any other relevant factors [Recommendation 8.13]. Again, paraphrasing the words of the witness(es) should be avoided and this is best accomplished by audiotaping or videotaping the voice lineup session. As with visual identification tasks, clear and comprehensive records
should be kept even if the witness identifies no one or identifies a foil voice.

IDENTIFICATION OF CLOTHING AND OTHER OBJECTS

In Chapter 7, I discussed the issue of how lineup members should be clothed. Recall that all lineup members should be dressed similarly regardless of whether or not the clothing is thought to be similar to the clothing worn by the perpetrator at the time of the witnessed event. Furthermore, if the clothing item is distinctive, it is inappropriate to have only the suspect don the distinctive item; instead, all lineup members must don the item in turn. It should be noted, however, that these procedures (e.g., having all lineup members don a particular clothing item) are not clothing identification procedures. Instead, clothing is being used in these cases to aid the witness(es) in identifying the perpetrator. In a traditional lineup, as described in Chapter 7, it is a person rather than clothing that is being identified, regardless of how the suspect and foils are dressed.

A “pure” clothing identification procedure involves no identification of persons. Instead, articles of clothing are shown to the witness for the sole purpose of identifying the clothing worn by the perpetrator. Clothing identification procedures can have probative value to the extent that the clothing in question can be linked to the suspect through independent forms of evidence.

The general guidelines governing clothing lineups are directly analogous to those involved in a person lineup as described in Chapter 7. Therefore, the reader is referred back to Chapter 7 for a more detailed rationale of these guidelines. These guidelines apply not only to the identification of clothing, but also to other objects such as guns, knives, masks, gloves, and so on. In general, any object that can be linked to the suspect on independent evidence and which the witness believes he or she can identify should be put in an object lineup with at least four functional foils. A functional foil in an object lineup is one that matches the general characteristics of the object as described previously by the eyewitness(es) [Recommendation 8.14]. A situation calling for an object lineup might arise if the perpetrator was wearing a mask. Suppose, for example, the mask was described as a blue ski hat with the eyes cut out, pulled down over the face. Suppose further that a legal search of a suspect’s residence yields such a hat-mask. Finding such a hat-mask at a suspect’s residence itself has some probative value, but the identification of that particular hat-mask from a series
of functional foil hat-masks would be of even higher probative value. In this case the foil hat-masks would all have to be blue ski hats with the eyes cut out. However, they need not all be of the same material, same size or have the same size or shape of the eye cut-outs. That is, a functional object foil need not be designed or chosen so as to match the object that is linked to the suspect; instead the functional foil should match the prior description of the object as given earlier by the witness(es).

An additional requirement is that the object that is linked to the suspect should not stand out as unique among the objects in the lineup [Recommendation 8.15]. Using the hat-mask example from the previous paragraph, the suspect's hat-mask should not be the only one that is old, dirty, and so on. If the eyeholes in the suspect's hat-mask were 1 inch in diameter, the eyeholes in the other hat-masks could not all have diameters of 2 inches or \( \frac{1}{2} \) inch. However, there could be two dirty hats (the suspect's and one other), one hat with \( \frac{1}{2} \)-inch holes, one with \( \frac{1}{2} \frac{1}{2} \) inch holes, one with 2-inch holes, and so on. As a general rule, a sample of people who were not witnesses should be unable to pick out the suspect's hat-mask from the foil hat-masks at a level exceeding chance even if they are given the description provided by the witness(es).

When inviting witnesses to view an object lineup, police should only suggest that they have an object (the object can be named) that is possibly linked to the perpetrator [Recommendation 8.16]. Immediately prior to having the witness view the object lineup, the witness should be told explicitly that the object in question may or may not be contained in the object lineup. Witnesses should be cautioned explicitly against guessing and police should in no way, verbally or gesturally, suggest to any witness which object has been linked to the suspect [Recommendation 8.17]. Again, the rationale for these procedures is directly analogous to those described for person lineups in Chapter 7. Further to these procedures, I recommend that the witness be told to "Cast your mind back to the context surrounding the incident. Think about what the surrounding environment looked like at the scene such as the rooms, the weather, how you were feeling and what you were thinking about. Recall things as they happened and then reverse the order to recall things from end to beginning. Try to recall the scene from different perspectives that you may have had or adopt the perspective of others who were present" (adapted from Geiselman, Fisher, MacKinnon & Holland, 1985) [Recommendation 8.18].
The witness should be asked to indicate whether any of the objects can be positively identified as the object in question and to indicate so by touching the object. At this point the witness should be asked how certain he or she is that the identified object is in fact the object in question [Recommendation 8.19]. As discussed at several points in this book, the certainty expressed by the witness is meaningless if the witness is given overt or covert clues as to whether the identified object is the suspect's prior to the witness stating his or her level of certainty.

Either a simultaneous or sequential procedure can be used in object lineups. If a sequential procedure is used the object associated with the suspect should normally not appear first in the sequence, the witness should not be told how many objects in total there will be in the sequence, and the entire sequence should be viewed even if the witness chooses an object prior to the last object being viewed [Recommendation 8.20]. In multiple-witness cases, the location of the object associated with the suspect should be changed for each eyewitness regardless of whether a simultaneous or sequential procedure is used [Recommendation 8.21].

Blank-object lineups may be used if there is some reason to believe that the eyewitness is overly-prone to identify an object that merely resembles the object in question, the eyewitness is likely to guess, or the eyewitness has a possible motive to intentionally choose the wrong object [Recommendation 8.22].

Keeping records. Clear and accurate records should be kept regarding all factors pertinent to object identification as discussed in this chapter. This includes exact instructions given to witnesses, the witness’s(es’) prior description of the object, the exact words and actions used by the witness in identifying the object and stating his or her certainty, and quality colour photograph or videotape of the object lineup [Recommendation 8.23]. It is preferable as well that the foil objects themselves be kept as part of the record whenever practical. As mentioned at many other points in this book, paraphrasing the witness(es) should be avoided in favour of capturing the exact words of the witness(es), preferably with audiotape or videotape. These records should be kept regardless of whether or not the witness identifies the object associated with the suspect.
Hypnosis

It is important to keep in mind that the practice of using hypnosis as an aid to memory retrieval for eyewitnesses is controversial. On the one hand, there are celebrated cases in which hypnosis has been hailed as the major determinant of the breakthrough in the investigation. Examples include the Chochilla kidnapping case and the Boston strangler case. On the other hand, there is scientific evidence that hypnosis does not improve memory retrieval and may even distort memory reports (see Orne, Soskis, Dinges & Orne, 1984). In general, the community of scientific psychology does not believe that hypnosis is an effective aid to memory retrieval when appropriate control groups are used (Hilgard & Loftus, 1979), whereas forensic hypnotists tend to argue otherwise (Reiser, 1976; 1979). Rather than side with one view or the other, this chapter attempts to reconcile these alternative perspectives by specifying certain conditions in which hypnosis may be a practical, useful tool and conditions in which hypnosis is best avoided.

Hypnosis was first introduced to legal settings early in this century but was generally rejected by the courts as an unreliable method for discerning truth. Later, however, hypnosis received increased credibility because of its apparent therapeutic effectiveness and its recognition in 1958 and 1960 by the American Medical Association and
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the American Psychological Association, respectively. The major forensic thrust for using hypnosis with eyewitnesses began in 1972 with the Los Angeles Police Department. In 1975-1976 there were 13 carefully selected and trained Los Angeles Police Department personnel involved in an experimental investigative project (Reiser, 1980) and it is now estimated that well over 5,000 officers in the United States have been trained in forensic hypnosis. In 1979 the International Society of Hypnosis, the American Society of Clinical Hypnosis and the Society for Clinical and Experimental Hypnosis adopted a resolution that strongly opposed the training of police officers as hypnotechnicians and the use of hypnosis by police officers. I will not dwell on this conflict between the various police departments that use police hypnotists and the various international hypnosis societies that oppose this practice. However, the issue is too complex to pass off merely as a battle for professional turf. The U.S. Federal Bureau of Investigation, Department of Treasury, Army, Navy and Air Force have adopted policies that investigative hypnosis be administered exclusively by individuals trained in medicine or psychology with specific expertise in hypnosis (Orne, Soskis, Dinges & Orne, 1984). Thus, these major organizations, which have studied the issues extensively, agree that the issues are such that the various hypnosis societies are correct in opposing the idea that police officers be active hypnotechnicians.

There are many issues to be considered regarding the use of hypnosis with eyewitnesses. First, the use of hypnosis with an eyewitness might result in that witness’s testimony being suppressed in part or in whole at trial. Although jurisdictions vary in how they will likely treat the issue of hypnotically-refreshed testimony, the trend in the American courts clearly runs against the admission of hypnotically-refreshed testimony. There are various perspectives that have been taken in recent years. The Minnesota Supreme Court ruled against the admissibility of hypnotically-refreshed testimony in State v. Mack (1980) and numerous state supreme courts have followed with similar rulings (e.g., Maryland in Collins v. State, 1981; Massachusetts in Commonwealth v. Kater, 1983; Pennsylvania in Commonwealth v. Nazarovitch, 1981; Michigan in People v. Gonzales, 1982; California in People v. Shirley, 1982; Arizona in State v. Mena, 1981; Nebraska in State v. Palmer, 1981; North Carolina in State v. People, 1985; and Indiana in Strong v. State, 1982). Recently the Arizona Supreme Court modified its earlier decision in Collins v. Superior Court of State of Arizona (1982) by ruling that the witness’s testimony could be allowed on matters
that the witness was able to recall and relate prior to hypnosis. The general thrust of this is that police should be cautious about using hypnosis with an eyewitness in that they might find that witness’s testimony excluded in part or in whole from any subsequent trial. My recommendation is that police should consider hypnosis with eyewitnesses only as a last resort with the expectation that testimony obtained through hypnosis is likely to be of investigative value only and not of probative value to the courts [Recommendation 9.1]. This is not such a serious problem in multiple-witness cases because investigators might feel that they are safe in “spending” one witness while saving the other witnesses.

Controlled scientific research indicates that hypnosis has no special powers for improving memory retrieval and might even increase the likelihood of pseudomemories (see Orne, Soskis, Dingis & Orne, 1984 for a review). Given that hypnotized individuals can sometimes report on “previous lives” or “future lives” (Kline & Guze, 1951), it should surprise no rational person that hypnosis can produce pseudomemories. One source of false memories under hypnosis is external. Specifically, some studies show that the hypnotized person is more susceptible to leading questions than is the waking person (Putnam, 1979; Zelig & Beidleman, 1981). Even in the absence of leading questions researchers have reported significant increases in incorrect responding from hypnotized subjects due to shifts in response criteria (see Klatzky & Erdelyi, 1983). A response-criterion shift under hypnosis results in increases in both accurate and inaccurate recollections. In other words, hypnosis can increase the total amount of information recalled, but much of that increase can be attributable to increases in inaccurate information. It is for this reason that hypnosis may be of investigative value (in that it can generate leads) but it may not be of much probative value.

Because of the research evidence indicating that people might be especially prone to incorporate suggestive information (e.g., overly influenced by leading questions) under hypnosis, the hypnotist should be an expert who is impartial and independent of the law enforcement investigators, prosecution and defence [Recommendation 9.2]. This does not mean that the hypnotist must never have had prior professional contact with these persons as this would preclude using an expert more than once.

In general, it should not be expected that an eyewitness will be able to recall relevant facts under hypnosis that he or she could not recall in the waking state unless the witness has been traumatized by
the witnessing experience. Even for traumatized witnesses there is no scientific evidence to indicate that the recalled memories are not contaminated by pseudomemories. However, at least at a theoretical level the use of hypnosis might relax the witness and allow for the recall of things that are psychologically too painful to relive in the waking state. Because hypnosis usually will be reserved for eyewitnesses whose memories appear to be blocked by anxiety, serious consideration should be given to avoiding the use of hypnotists who are not psychiatrists, psychologists or equivalently qualified mental health professionals [Recommendation 9.3].

The increased suggestiveness of a person under hypnosis makes it important that the hypnotist not have a vested interest in the investigation outcome and only the hypnotist and the witness should be present during the preinduction, hypnosis and posthypnosis session. This in turn requires that the entire session must be audiotaped (minimally) or videotaped (preferably); this includes the preinduction interview as well as all breaks that are taken. A time recording should be included to ensure continuity of the recording device. The video camera should be focused to include both the hypnotist and the witness. The use of videotape might require a technician to also be present in the room. In such cases, the technician should not have any knowledge of the case [Recommendation 9.4].

A problem with the previous recommendations can arise when investigators familiar with the case have questions that need to be resolved. Investigators familiar with the case may watch the hypnosis session behind one-way glass or over a video-monitor and submit questions in writing to the hypnotist at regularly-scheduled breaks [Recommendation 9.5]. These breaks should occur at natural points such as at the end of the prehypnosis interview, at the end of free narrative recall, and so on.

The hypnotic induction and memory retrieval techniques used should be of a standard form. I recommend the following (after Orne, Soskis, Dinges & Orne, 1984): Prior to hypnosis induction, the hypnotist should elicit a free narrative description of the facts as the witness remembers them [Recommendation 9.6]. This provides a baseline for judging the extent to which the hypnosis aids in the uncovering of additional memories. In addition, it provides a record of what the witness was able to recall without hypnosis so that, if a court admits the witness's testimony on matters that he or she could recall prior to induction, there is a relevant record. Finally, witnesses are sometimes able to recall more when questioned by a psychiatrist or psychologist.
Therefore, if significant new information emerges during the preinduction interview, consideration should be given to not induce hypnosis so that the testimony is not tainted in the eyes of the court. The session should include sufficient test suggestions to allow assessment of the witness's hypnotic responsivity. Following induction, the hypnotist should suggest an appropriate cognitive strategy to aid focusing on the events in question and call for a free narrative report. Care must be taken to avoid interrupting the witness, asking specific questions or otherwise injecting new information at this point. If needed detail is absent from the free narrative a more directive technique can be used as long as full care is taken to avoid the problems with directed narrative and specific questions as described in Chapter 3 [Recommendation 9.7].

One of the potential problems with hypnosis is that jurors may incorrectly assume that events recalled under induction are extremely reliable and thereby give a witness more credibility than is warranted (Wells, 1984). That is a problem for the courts to resolve by excluding such testimony, using appropriate cautionary instructions or in some other way countering this "overbelief" problem. However, a related problem concerns the extent to which the witness himself or herself comes to believe what was recalled under hypnosis. Research indicates that eyewitnesses' confidence in their answers can inflate inappropriately as a function of hypnosis, especially for highly hypnotizable people (Dywan, 1983; Putnam, 1979; Sheehan & Tilden, 1983; Timm, 1982; Zelig & Beidleman, 1981). Thus, investigators should be especially skeptical of ascribing much meaning to a witness's certainty in his or her memories when those memories were aided by hypnosis [Recommendation 9.8].

Investigators must keep in mind that hypnotic recall is not like replaying a "videotape" stored in the mind even though a metaphor of this form has been used by proponents (Reiser, 1980). To assume that the witness has stored all information (or that what is stored and retrieved is accurate) is an assumption that violates the basic principles of how memory operates (see Chapter 1). Finally, investigators must understand that, contrary to popular assumption, untrained persons can simulate hypnosis and fool hypnotists who are very experienced (Orne, 1977; Sheehan & Perry, 1976). This can allow a person to mislead authorities into accepting his or her version of the events. In spite of the fact that many clinicians believe that they can easily detect simulation, empirical research indicates that they cannot.
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Committee on Child Abuse.


Appendix
Procedural Recommendations

CHAPTER 3 — OBTAINING DESCRIPTIONS

DESCRIPTIONS FROM WHOM?

3.1 Normally, police should obtain descriptions from all potential eyewitnesses. These eyewitnesses should first be separated so that they do not hear the descriptions provided by other eyewitnesses. Those who are unable to provide descriptions should be noted and recorded.

3.2 Separation of witnesses. Witnesses should be separated as soon as possible so as to avoid their influencing one another’s descriptions.

DESCRIPTIONS TAKEN BY WHOM?

3.3 Whenever possible, descriptions should be taken by a different officer for each eyewitness in a given case.
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DESCRIPTIONS: WHEN?

3.4 Descriptions should be taken at the first reasonable opportunity from all witnesses. A second or third description from a given eyewitness can be taken prior to conducting an identification task (e.g., photo-spread, lineup) if deemed to serve a useful purpose.

DESCRIPTIONS: HOW SHOULD THEY BE TAKEN?

3.5 Questioning should follow a sequence of asking (a) about the witness’s opportunity to observe followed by (b) open narrative questions (c) directed narrative questions and (d) specific questions. Questions asked as well as answers given should be recorded carefully, preferably by the use of tape recordings.

3.6 Opportunity to observe. First, ask the witness about his or her opportunity to observe the offender, including such things as what directed his or her attention to the person, the duration of the observation, distance from the person, lighting conditions and whether there were any obstacles to clear observance.

3.7 Open narrative. After the witness describes his or her opportunity to observe, the witness should be asked to describe the offender. No specific questions or directives should be given at this point.

3.8 Directed narrative. After freely recalling the characteristics of the offender, the eyewitness should be asked if he or she can recall other general characteristics not previously mentioned, such as sex, race, age, height, weight, hair colour, hair style, facial characteristics, clothing, and any distinctive characteristics. These questions must be asked in non-leading form and the witness must be cautioned to avoid guessing. The witness should be given the entire list of variables in one request.

3.9 Specific questioning. If specific questions are asked, they should follow the directed narrative, they should be in non-leading form, and cautions against guessing should again be given.

RECORDING QUESTIONS AND ANSWERS

3.10 All questions should be recorded, including those asked by the officer and any asked by the witness. Ideally, eyewitness interrogations should be tape recorded.
CHAPTER 4 — COMPOSITES

WHEN TAKEN?

4.1 Composite tasks should be used with great caution and should be reserved only for special cases for which there is good reason to believe that the eyewitness can perform well at the task.

4.2 Composite techniques should be used only when there is no suspect and the use of photographs has been or is likely to be unsuccessful. If there is more than one eyewitness, the one most likely to have encoded specific features should be used for the composite task with the remaining eyewitnesses being saved for more definitive identification methods such as a lineup.

IDENTI-KIT AND PHOTO-FIT

4.3 Regardless of what the operator’s manual might suggest, the order in which features are chosen in a composite task should be guided by the eyewitness.

SKETCH ARTISTS

4.4 The composite task operator, whether using the Identi-kit, Photo-fit, sketch artist or computer graphics techniques, should not be aware of the witnesses’ prior descriptions nor of any other information about the alleged perpetrator except what is discerned through unbiased use of the composite technique.

4.5 If more than one eyewitness is given a composite task regarding the same perpetrator, a different composite operator should administer the composite task for each witness whenever practical.

THE USE OF COMPOSITES

4.6 Composites from one eyewitness should not be shown to other eyewitnesses or potential eyewitnesses or released for public viewing (e.g., in newspapers) without compelling reasons.

4.7 Care should be taken to caution the media about the fact that the composite is only an approximation and that the perpetrator’s actual appearance is still somewhat in question.

4.8 Three sources of information should be used to judge the credibility of a composite: the witness’s own statement of the
extent to which the composite satisfactorily captures his or her memory; the competence and objectivity of the composite operator; and situational factors surrounding the witness’s viewing conditions, with special regard for whether the witness attempted to encode specific features.

KEEPING RECORDS

4.9 An exact record of the composite should be kept so that these materials can be used in court should the court require them. This is true regardless of whether the composite proved critical in the identification of the defendant and regardless of the quality of the composite.

CHAPTER 5 — MUGSHOTS

WHEN?

5.1 Mugshots should be used only when reasonable attempts have been made to establish an a priori suspect and such attempts have failed.

5.2 In the case of multiple witnesses, only one witness should be given a mugshot task, the remaining witnesses being saved for a photo-display or lineup.

INSTRUCTING WITNESSES

5.3 At no time should a witness be led to believe that the actual perpetrator is in the set of mugshots. The witness should be told that “We do not have a suspect at this point in time, but we would like you to view a set of mugshots to see if the person in question might be there.”

5.4 The witness should be told that “Some of these photographs are old; the addition or removal of facial hair, change of hair style or colour, effects of aging or temporary expressions on the face might make recognition difficult.”

NUMBER OF PHOTOS AND METHOD OF DISPLAY

5.5 Mugshot sets should be pruned periodically to eliminate photos of those who could not have committed any recent crime and additional pruning should be undertaken for a given case so as
to eliminate photos of those who could not have committed the particular crime in question.

5.6 Ideally, no more than fifty photographs should be shown at any one time.

5.7 A reasonable number of photographs should be shown to the witness even if the witness identifies someone almost immediately.

CONFIDENCE

5.8 The eyewitness should be asked about his or her certainty in the identification prior to the time in which extraneous variables can come into play.

5.9 The witness’s statement of his or her certainty should be solicited neutrally with a statement request such as “How certain are you that this is the person who [committed the offence in question]?”

5.10 Witnesses’ certainty statements should not be paraphrased; rather they should be taken down in writing verbatim or the witness should write the statement or it should be tape recorded.

POST-IDENTIFICATION INSTRUCTIONS

5.11 Witnesses who identify someone should be thanked for the information provided but should be told that any information regarding the identified person will have to await further investigation. The witness should also be asked about his or her availability and willingness to view a live lineup later, should that prove necessary.

5.12 Witnesses who do not identify someone from the mugshots should be told that their not seeing the perpetrator in the set of photos could be due to the condition of the photos or it could be due to the perpetrator not being contained in the set of photos.

5.13 The witness should also be asked if he or she thinks he or she could identify the perpetrator if the perpetrator was present among others in a live lineup.

KEEPING RECORDS

5.14 An ideal record of the mugshot task process requires a reproducible record (or the original copy) of the entire set of
mugshots in their original order and method of display.

5.15 A minimal record of a mugshot task should include: the original of the chosen photograph; a detailed record of the number of photographs in total; the number of photographs the witness viewed in total; the position in which the identified person’s photo appeared in the series; a full description of the method of display; a record of all instructions and questions of the witness; and a record of all responses from the witness.

CHAPTER 6 — PHOTO-SPREADS

WHEN GIVEN AND BY WHOM?

6.1 A photo-spread should be used only when there is a definite suspect or suspects and when the balance of relevant factors has ruled out a live lineup.

6.2 A photo-spread rather than a live lineup should be used if the suspect is at large or if the witness is unable or unwilling to attend a live lineup.

6.3 The prospect of going back to a photo-spread after having held a disrupted live lineup session should not be considered viable or meaningful, except if it involves either a different witness or the same witness and a new suspect.

6.4 When deciding whether to use a photo-spread or to use a live lineup, an additional one- or two-day delay required for a live lineup should not be considered a factor if 10 or more days have passed already since the witnessed event.

6.5 The unavailability of suitable distractors for a live lineup should be a significant factor in deciding whether to consider using a photo-spread instead.

6.6 In the case of multiple witnesses, some witnesses should be “saved” for purposes of their viewing a live lineup.

6.7 A photo-spread should be given at the earliest time possible following the determination of a definite suspect but only after having taken full consideration of the issues and alternatives and only within the constraints of the current recommendations.

6.8 The officer conducting the photo-spread should not be knowledgeable of whom the police suspect in the case.
INSTRUCTING WITNESSES ON VIEWING

6.9 When inviting witnesses to a photo-spread viewing, police should only suggest that they have a possible suspect and actively avoid indicating that the actual perpetrator is among the set of photographs.

6.10 Immediately prior to viewing a photo-spread, witnesses should be told explicitly that the actual perpetrator may or may not be contained in the photo-spread.

6.11 Police officers should in no way, verbally or gesturally, suggest to any witness whom they think the suspect is.

6.12 The witness should be cautioned explicitly against guessing.

6.13 Eyewitnesses should be told to cast their minds back to the witnessed event, think about things that led up to their seeing the perpetrator, take their time and then study carefully all of the photographs in the photo-spread.

6.14 The witness should be asked to indicate whether or not he or she can positively identify anyone as the perpetrator.

6.15 Immediately following an identification the eyewitness should be asked to indicate how certain he or she is that the identified photograph is in fact the perpetrator. No cues of any kind should be given to the witness as to whether or not the identified person is the suspect in the case.

NUMBER OF FOILS, THEIR SELECTION AND METHOD OF DISPLAY

6.16 A photo-spread should be composed of the single suspect and nine or more functional foils.

6.17 If there is more than one suspect, separate photo-spreads should be constructed for each suspect or, at the least, a new order of photos should be used for each witness.

6.18 If there is more than one photo of each suspect, there should be equal numbers of photos for each of the foils.

6.19 A functional foil in a photo-spread is a photo of a known-innocent person who matches the general physical characteristics of the perpetrator as described earlier by the witness.

6.20 If for some reason the suspect stands out as a distinctive member in the photo-spread, steps should be taken to minimize this problem either through the selection of additional foils or alteration of existing foils.
SIMULTANEOUS AND SEQUENTIAL PROCEDURES

6.21 If the sequential method of display is used, each photograph shall be numbered on the back, the witness should not be told how many photos there are in total for viewing, each photo shall be handed to the witness from a concealed stack and the witness should be required to make an identification decision on each photo prior to viewing the next photo.

6.22 If the witness chooses someone from the sequence, the officer should continue through the sequence until all photos have been viewed. The officer may go through the sequence a second or third time if the witness requests a second or third viewing. If there is more than one witness, the suspect’s position in the sequence should be changed for each witness.

6.23 If the simultaneous procedure is used, photos should be affixed firmly to a board in such a way as to not draw attention to any particular photo. The photos should be numbered clearly on the board for ease and clarity of identification.

6.24 If there is more than one witness, the position of the suspect in the photo-spread should be changed for each witness.

6.25 Regardless of whether the sequential or simultaneous procedure is used, the display should not include other information such as arrest dates, file numbers, and so on.

BLANK PHOTO-SPREADS

6.26 Blank photo-spreads should be used only occasionally. When using a blank photo-spread, instructions to the witness should be given as though it were a photo-spread that includes a suspect. Regardless of whether or not the witness identifies someone from the blank photo-spread, a photo-spread containing a suspect should then be administered. When administering the second (actual) photo-spread the witness should again be given the usual instructions.

6.27 There should be at least one member of the blank photo-spread who matches the general description of the perpetrator.

6.28 Requirements for the actual photo-spread, which follows a blank photo-spread, are identical to those described in "Number of Foils, Their Selection and Method of Display" and "Simultaneous and Sequential Procedures."
LATER IDENTIFICATION ATTEMPTS

6.29 Any positive photographic identifications should be followed routinely by a live lineup whenever practical.

6.30 If a photo-spread fails to produce an identification of a suspect, subsequent photo-spreads should contain no one who appeared in a previous photo-spread unless it is presented to a different witness.

6.31 If there is a reason to believe that the witness failed to identify the suspect because the suspect’s photograph failed to capture his or her “live” appearance, a live lineup may be conducted subsequently using the same suspect but the probative value of this procedure will be considered negligible.

KEEPING RECORDS

6.32 Clear and accurate records must be kept regarding the reasons for using a photo-spread rather than a live lineup, instructions given to the witness(es), an exact copy of all photo-spreads used including the position and order of all photos whether identifications were made or not, the witness’s(es’) identification decisions, remarks by the witness(es), and the witness’s(es’) stated confidence at the time.

CHAPTER 7 — LINEUPS

WHEN?

7.1 A lineup should be used in preference to photo-spreads or other techniques unless the suspect is at large or unwilling to participate, there are reasons to believe the suspect will disrupt the lineup session, the witness is unwilling or unable to view a live lineup, suitable distractors cannot be found, the lineup would delay the witness’s ability to attempt an identification while the memory is fresh or there is some other compelling reason.

INSTRUCTING WITNESSES ON VIEWING

7.2 When inviting witnesses to view a lineup, police should only suggest that they have a possible suspect and actively avoid indicating that the actual perpetrator is in the lineup that the
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7.3 Immediately prior to viewing a lineup, witnesses should be told explicitly that the actual perpetrator may or may not be contained in the lineup.

7.4 Witnesses should be cautioned explicitly against guessing.

7.5 Police should in no way, verbally or gesturally, suggest to any witness whom they think the suspect is.

7.6 The witness should be told to “Cast your mind back to the context surrounding the incident. Think about what the surrounding environment looked like at the scene such as the rooms, the weather, how you were feeling and what you were thinking about. Recall things as they happened and then reverse the order to recall things from end to beginning. Try to recall the scene from different perspectives that you may have had or adopt the perspective of others who were present.”

7.7 The witness should be asked to indicate whether or not he or she can positively identify anyone as the perpetrator.

7.8 Immediately following an identification the eyewitness should be asked to indicate how certain he or she is that the identified person is in fact the perpetrator.

7.9 No cues of any kind should be given to the witness as to whether or not the identified person is the suspect in the case.

NUMBER OF FOILS AND THEIR SELECTION

7.10 A functional foil in a lineup is a known-innocent person who matches the general physical characteristics of the perpetrator as described earlier by the witness.

7.11 If for some reason the suspect would stand out as a distinctive member in the lineup, steps should be taken to minimize this problem through the selection of additional foils or in some cases the alteration of existing foils.

7.12 Altering the appearance of the suspect as a means of meeting functional size requirements or as a way to lessen the distinctiveness of the suspect is not advisable.

7.13 All lineups, except blank lineups, normally should consist of at least six functional foils in addition to the suspect.

7.14 Using police as foils in lineups is not advisable.

7.15 Whenever possible, the foils should not be aware of the identity of the suspect.
SIMULTANEOUS AND SEQUENTIAL PROCEDURES

7.16 The simultaneous procedure normally should be used instead of a sequential procedure. If a sequential procedure is used, the witness should be led to believe that there are more lineup members than will in fact be presented, the witness should be required to make yes/no decisions on each lineup member on initial viewing, and the witness should be required to view the remaining lineup members even if a positive identification is made early in the sequence.

7.17 The suspect should be allowed to choose the position in which he or she will appear in the lineup and be explicitly informed of this right.

7.18 Regardless of whether the sequential or simultaneous lineup procedure is used, all lineup members must be fully briefed about how they are to conduct themselves at the appearance. They should be told to look straight ahead, maintain a demeanour befitting the seriousness of the proceedings and to neither speak nor engage in movements except as requested by the supervising officer.

COMPELLED ACTIONS AND CLOTHING

7.19 There should be some pre-lineup discussion with the suspect about the possibility that the suspect will be asked to speak certain words or engage in certain actions.

7.20 When a witness requests some action on the part of a lineup member, each lineup member must be asked to engage in the action in the order in which they appear in the lineup, which is left to right in a simultaneous lineup.

7.21 All lineup members should be similarly clothed regardless of whether or not the clothing is thought to be similar to that worn by the perpetrator at the original time of witnessing.

7.22 In cases of a distinctive item of apparel, each lineup member must be asked to don the item in their order of appearance in the lineup, which is left to right in a simultaneous lineup.

MULTIPLE WITNESSES

7.23 Witnesses should be placed in separate rooms from each other prior to their viewing the lineup and should not be allowed to
interact until all witnesses have viewed the lineup, made any identification and given their statement of certainty.

7.24 The suspect should be allowed to change positions in the lineup for each new eyewitness, and the suspect should be explicitly informed of this right.

BLANK LINEUPS

7.25 Blank lineup procedures should be reserved for cases in which there is some reason to believe that the eyewitness is overly-prone to identify someone who merely resembles the perpetrator, is likely to guess, or who has some possible motive to intentionally choose the wrong person.

7.26 Blank lineups may be composed of as few as four persons, only one of which need match the general characteristics of the perpetrator as described previously by the witness(es).

7.27 Even if a witness identifies someone from the blank lineup, the witness may be invited to view a subsequent lineup in which there is a suspect.

7.28 Normally, the second lineup, which contains the suspect, will not include any members of the blank lineup.

7.29 Witnesses should at no time be informed as to the number of lineups that they will view.

LINEUPS AT LOCATION AND SIMULATING CONDITIONS

7.30 Lineups normally should not be held at location unless there is something intrinsic about the context of the location that would facilitate the witness’s memory, the location would not raise the witness’s anxiety to an impairing level, extraneous factors such as noise can be reasonably controlled, and the witness’s desire to not be seen by the lineup members is not placed in jeopardy.

7.31 When there is something intrinsic about the witnessing context that would facilitate the witness’s memory, consideration should be given to simulating the intrinsic factor(s) rather than holding the lineup at location.

7.32 When a simulated condition is one that impoverishes the visual aspects of the lineup (e.g., via low lighting levels, increased distance between witness and lineup members), then the witness
should view under both the impoverished and optimal conditions prior to making an identification.

SUBSEQUENT LINEUPS

7.33 If a witness does not identify anyone in a lineup or identifies a foil, any subsequent lineup(s) presented to that witness should not contain any members, foils or suspect, who were in the previous lineup(s).

KEEPING RECORDS

7.34 Clear and accurate records must be kept regarding what the witness was told when initially invited to view the lineup, instructions to the witness immediately preceding the witness’s viewing of the lineup, the witness’s verbal statement of identification, the question asked of the witness regarding the witness’s certainty and the witness’s response to the certainty question. Each of these should be written in notes verbatim rather than in summary or paraphrased form. A colour photograph or videotape of all lineups should be taken with the identity of all foils and the suspect clearly recorded. Any alteration to the appearance of the suspect or foils should be documented plenarily. Instructions to the suspect and foils prior to the lineup session should be fully recorded. Any deviations from the standard simultaneous lineup held in a normal viewing room should be justified by recording the rationale in the form of a prior report. All compelled actions must be fully described in notes or preferably recorded on videotape. In general, all matters of relevance to issues discussed in this chapter should be fully recorded in notes and by photographic or videotape means when possible.

CHAPTER 8 — IDENTIFICATION OF VOICE, CLOTHING AND OTHER OBJECTS

VOICE IDENTIFICATION TECHNIQUES

8.1 Police should usually avoid live voice lineups and instead use a tape-recorded voice lineup.

8.2 High-fidelity direct recordings should be used in voice lineups even if the voice originally was heard by the witness in a
degraded form (e.g., over the telephone).

8.3 Foil voices should be selected so as to match the general characteristics of the perpetrator’s voice as described previously by the witness(es) in order to be considered functional foils.

8.4 Each member of the voice lineup should utter the same words and the speech sample should be at least ten words.

8.5 There should be at least six functional foil voices used in a voice lineup.

8.6 Witnesses must be told prior to their listening to the voice lineup that police have only a possible suspect and the perpetrator’s voice might or might not be contained in the sequence of voices.

8.7 Witnesses should listen to the entire voice lineup even if they select a voice that occurs early in the sequence.

8.8 The position of the suspect’s voice should be changed for each witness in multiple-witness cases and placing the suspect’s voice in the first position should be avoided in all cases.

8.9 The officer(s) conducting the voice lineup session should not know which voice is that of the suspect.

8.10 After the witness listens to the entire sequence of voices, the witness should be asked if he or she can positively identify any voice as that of the perpetrator and, if so, how certain he or she is that the identified voice is in fact that of the perpetrator.

8.11 A blank voice lineup may be used if there is some reason to believe that the witness is overly-prone to identify someone’s voice on the basis of mere resemblance, is likely to guess or who has a possible motive to intentionally choose the wrong person.

8.12 A blank voice lineup may be composed of as few as four voices and only one of these voices need match the general characteristics of the perpetrator’s voice as described previously by the witness(es). The second (actual) voice lineup, which contains the suspect, can be given to the witness regardless of whether or not an identification occurred for the blank voice lineup. However, the actual voice lineup will not include any members of the blank voice lineup except the person (if any) identified in the blank voice lineup. The witness should not be told that the identified person (if any) from the blank lineup was not the suspect prior to holding the second (actual) lineup.

8.13 Voice lineup records. Clear and accurate records of the voice lineup must be taken. This includes the exact tape used in the voice identification, a list of the general voice characteristics
that were used for generating foil voices, names and addresses of persons who served as foil voices, all instructions given to the witness(es) regarding the voice identification task, the number of times the witness(es) listened to the voice sequence, who conducted the voice lineup session(s) and whether or not they knew which voice was that of the suspect, the precise words of the witness regarding his or her identification, and any other relevant factors.

IDENTIFICATION OF CLOTHING AND OTHER OBJECTS

8.14 Any object that can be linked to the suspect on independent evidence and which the witness believes he or she can identify should be put in an object lineup with at least four functional foils. A functional foil in an object lineup is one that matches the general characteristics of the object as described previously by the eyewitness(es).

8.15 The object that is linked to the suspect should not stand out as unique among the objects in the lineup.

8.16 When inviting witnesses to view an object lineup, police should only suggest that they have an object (the object can be named) that is possibly linked to the perpetrator.

8.17 Immediately prior to having the witness view the object lineup, the witness should be told explicitly that the object in question may or may not be contained in the object lineup. Witnesses should be cautioned explicitly against guessing and police should in no way, verbally or gesturally, suggest to any witness which object has been linked to the suspect.

8.18 The witness should be told to "Cast your mind back to the context surrounding the incident. Think about what the surrounding environment looked like at the scene such as the rooms, the weather, how you were feeling and what you were thinking about. Recall things as they happened and then reverse the order to recall things from end to beginning. Try to recall the scene from different perspectives that you may have had or adopt the perspective of others who were present."

8.19 The witness should be asked to indicate whether any of the objects can be positively identified as the object in question and to indicate so by touching the object. At this point the witness should be asked how certain he or she is that the identified object is in fact the object in question.
8.20 Either a simultaneous or sequential procedure can be used in object lineups. If a sequential procedure is used the object associated with the suspect should normally not appear first in the sequence, the witness should not be told how many objects in total there will be in the sequence, and the entire sequence should be viewed even if the witness chooses an object prior to the last object being viewed.

8.21 In multiple-witness cases, the location of the object associated with the suspect should be changed for each eyewitness regardless of whether a simultaneous or sequential procedure is used.

8.22 Blank-object lineups may be used if there is some reason to believe that the eyewitness is overly-prone to identify an object that merely resembles the object in question, the eyewitness is likely to guess, or the eyewitness has a possible motive to intentionally choose the wrong object.

8.23 Keeping records. Clear and accurate records must be kept, including instructions given to witnesses, the witness’s(es’) prior description of the object, the exact words and actions used by the witness in identifying the object and stating his or her certainty and a quality colour photograph or videotape of the object lineup.

CHAPTER 9 — HYPNOSIS

9.1 Police should consider hypnosis with eyewitnesses only as a last resort with the expectation that testimony obtained through hypnosis is likely to be of investigative value only and not of probative value to the courts.

9.2 The hypnotist should be an expert who is impartial and independent of the law enforcement investigator, prosecution and defence.

9.3 Serious consideration should be given to avoiding the use of hypnotists who are not psychiatrists, psychologists or equivalently qualified mental health professionals.

9.4 Only the hypnotist and the witness should be present during the preinduction, hypnosis and posthypnosis session. The entire session must be audiotaped (minimally) or videotaped (preferably); this includes the preinduction interview as well as all breaks that are taken. A time recording should be included to ensure continuity of the recording device. The video camera
should be focussed to include both the hypnotist and the witness. The use of videotape might require a technician to also be present in the room. In such cases, the technician should not have any knowledge of the case.

9.5 Investigators familiar with the case should watch the hypnosis session behind one-way glass or over a video-monitor and submit questions in writing to the hypnotist at regularly-scheduled breaks.

9.6 Prior to hypnosis induction, the hypnotist should elicit a free narrative description of the facts as the witness remembers them.

9.7 The session should include sufficient test suggestions to allow assessment of the witness’s hypnotic responsivity. Following induction, the hypnotist should suggest an appropriate cognitive strategy to aid focussing on the events in question and call for a free narrative report. Care must be taken to avoid interrupting the witness, asking specific questions or otherwise injecting new information at this point. If needed detail is absent from the free narrative a more directive technique can be used as long as full care is taken to avoid the problems with directed narrative and specific questions as described in Chapter 3.

9.8 Investigators should be especially skeptical of ascribing much meaning to a witness’s certainty in his or her memories when those memories were aided by hypnosis.
Glossary

**absolute judgment**: A process whereby an eyewitness compares each lineup or photo-spread face to his or her memory for the perpetrator (rather than comparing these faces to each other; see relative judgment problem).

**acquisition**: The initial perception of an event during which information is encoded, laid down or entered into a person’s memory system.

**bias**: An attitude either for or against a theory, hypothesis or explanation, which unconsciously influences an individual’s judgment.

**blank lineup**: A lineup without suspects which usually precedes the actual lineup.

**cognition**: A general term that encompasses all the various modes of knowing an individual may have including perceiving, remembering, imagining, conceiving, judging, reasoning, thoughts and ideas.

**composite task**: A task in which a witness is required to construct a face from its individual features (e.g., nose, eyes, chin) by describing them to a sketch artist or choosing them from an Identi-kit or Photo-fit.

**correct rejection**: A witness’s decision to not make an identification
when in fact the real perpetrator is not present in the lineup.

cues (retrieval cues): Internally or externally generated stimuli (such as objects, words or thoughts) that help a person to retrieve a memory.

directed narrative: A technique of questioning witnesses by guiding or directing their attention to particular aspects of their memory (e.g., “Now, going back to the gun, was there anything peculiar about it?”).

distractor/foil: A member of a lineup or photo-spread who bears a resemblance to the suspect but who is known by the lineup constructors to be innocent of the offence at hand.

empirical: Relying on objective, verifiable observations and experiments.

encode: The process by which information is first stored or represented in a person’s memory.

estimator variables: Variables in eyewitnessing that affect eyewitness accuracy and that are not under the control of the criminal justice system. The role of such factors in a criminal case can at best only be estimated, e.g., witness’s opportunity to observe the offender.

expectations: Four types of expectations have been identified: 1) cultural expectations or stereotypes; 2) expectations from past experiences; 3) personal prejudices and 4) momentary or temporary expectations. When any of these are present, they can distort perception; the perceptual material that enters stored memory will accordingly be distorted in a manner consistent with the expectation.

false alarm: The identification of an innocent suspect from a lineup as the perpetrator of the crime.

foil (see distractor).

functional foil: A distractor person, object or voice in a lineup that resembles the characteristics of the actual perpetrator, object or voice as described previously by the eyewitness(es).

gestalt: 1) A whole form or figure, 2) a branch of psychology in which perception and behaviour is viewed as an integrated whole, greater than the sum of its parts.

hit: The correct identification of the actual perpetrator from a lineup.

holistic: Perceiving or remembering an object (e.g., a face) as an integrated whole rather than perceiving or remembering the individual features or parts of the object.

independence: Independent eyewitnesses are those who have not
interacted directly or through a second party to giving statements about what they have witnessed. Independent questioning of witnesses requires that each witness be questioned by a different police officer.

**leading question:** A question that suggests a particular answer to the witness or a question that assumes a fact that is not yet established.

**long-term memory:** The relatively permanent storage of information — storage that continues even when the information is not being used.

**miss:** The failure to identify the actual perpetrator from a lineup.

**non-identification:** Failure to identify anyone or the identification of a distractor from a lineup or photo-spread.

**open-ended question:** A question that does not restrict the witness to a specific response category such as "yes" or "no" but merely opens the way for more recall (e.g., "And what happened after that?").

**open narrative:** A technique of questioning witnesses in which there are no specific cues or specific questions provided by the questioner. The witnesses are asked merely to recall in their own words everything that they can remember about the witnessed event.

**opportunity to observe:** Features of an event and the witness's physical relation to the event that help or hinder the witness's acquisition of pertinent facts (e.g., distance and lighting).

**perception:** The process of becoming aware of objects, qualities or relations by way of the sense organs. While sensory content is always present in perception, what is perceived is influenced by set and prior experience, so that perception is more than a passive registration of stimuli.

**probability:** A mathematical way of defining the likelihood that something is true or that something will happen.

**random assignment:** A technique used in experimental research that guarantees that each person in the experiment has an equal chance of being in each condition of the experiment.

**recall:** A method of retrieval in which the individual is required to reproduce the information previously presented.

**rehearsal:** To recycle information in short-term memory. The process facilitates the short-term recall of information and the transfer into long-term memory.

**reinstatement of context:** The use of verbal cues or physical
environment to reconstruct the psychological experience that existed at the time of witnessing so as to help the witness retrieve memories of the witnessed event.

**relative judgment problem:** A problem in viewing lineups and photo-spreads in which the eyewitness has a tendency to choose the person who most looks like the perpetrator compared to the other lineup members (*see absolute judgment*). The problem with relative judgments is that such a strategy promotes false identifications whenever the actual perpetrator is not in the lineup or photo-spread.

**reliability:** The degree to which a test will yield the same result if repeated a second time under the same circumstances.

**response criterion:** Individual differences among people that affect the willingness of the witness to make an identification. People with a low, or lax, criterion are more likely to make an identification (often a false alarm) compared to people with a high criterion who are hesitant to make an identification (thereby risking a high rate of misses).

**retention:** The storage of memory; the maintaining of information in memory.

**retrieval:** The process of obtaining memory from storage in the brain.

**sequential/serial procedure:** The procedure by which witnesses view photos, objects or lineup members one at a time and are required to make a yes/no decision after viewing each individually.

**short-term memory:** A type of memory with a somewhat limited capacity; items must be consciously rehearsed to be retained in short-term memory.

**simultaneous procedure:** The procedure by which witnesses view sets of photos, objects or lineup members simultaneously and are required only to make an identification after viewing a whole set.

**specific question:** A question designed to establish a particular fact (e.g., “Was he wearing a jacket?”).

**stage:** Developmental periods which usually follow a progressive systematic sequence.

**statistically significant:** The trustworthiness of an obtained statistical measure as a statement about reality. A statistically significant result is one that is very unlikely to be due to chance factors.

**stereotype:** An overgeneralized, often false, belief about a group of people in which a person assumes that every member of the group possesses a particular trait.
**system variables**: Variables in eyewitnessing that are or can be under the direct control of the criminal justice system, e.g., length of time between the initial criminal event and subsequent testimony.

**systematic desensitization**: A behaviour therapy technique in which anxiety-producing situations are imagined (or confronted in reality) while the person is in a state of deep relaxation. The technique begins with relatively non-anxious situations and progresses slowly to more highly charged situations. Gradually the situation becomes dissociated from the anxiety response.

**trace-decay view of forgetting**: The view that forgetting is due to the passage of time, regardless of the type of intervening experiences.

**trait**: A persisting characteristic or dimension of personality according to which individuals can be rated or measured.

**unconscious transference**: The term used to refer to the phenomenon in which a person who is seen in one situation is confused with or recalled as a person who was seen in a second situation.

**weapon-focus effect**: Refers to the situation in which a crime victim is faced with an assailant who is brandishing a weapon. The weapon appears to capture a good deal of the victim’s attention, resulting in, among other things, a reduced ability to recall other details from the environment, to recall details about the assailant, and to recognize the assailant at a later time.

**Yerkes-Dodson law**: The law states that strong motivational states such as stress or other emotional arousal facilitate learning and performance up to a point, after which there is a decrement. The point at which performance begins to decline is determined by the difficulty of the task.
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