771	α.	C	т ,	•	•
The	Sins	Ω t	Inter	V1e	wing
1110		01	111101	110	** ***

Errors Made by Investigative Interviewers and Suggestions for Redress

John Yarbrough, Hugues Hervé, and Robert Harms

Ref: Yarbrough, J., Hervé, H. & Harms, R. (2013). The sins of interviewing: Errors made by investigative interviewers and suggestions for redress. In. B. S. Cooper, D. Griesel & M. Ternes (Eds.). *Applied issues in investigative interviewing, eyewitness memory, and credibility assessment* (pp. 59-98). New York: Springer.

The Sins of Interviewing:

Errors Made by Investigative Interviewers and Suggestions for Redress

Interviewing is the essence of law enforcement. The goal of an effective interview, be it with a victim, witness, informant or suspect, is to elicit complete and accurate information. Of course, the gathering of complete and accurate information is not unique to law enforcement. Psychologists and psychiatrists rely on fact-finding interviews to - among other activities - diagnose and treat mental illness, assess malingering, and determine risk of violence. The retail loss prevention and other industries use investigative interviews to gather data to identify, neutralize, assess and prevent thefts and frauds (see Chapter X, present volume, by Walsh and Bull). Leaders of countries and politicians rely on accurate information to make geopolitical and economic decisions and to navigate diplomatic relationships. The gathering of intelligence has always been critical to the military in times of both peace and war. In other words, many important decisions are made on a daily basis that depends on information gathered by people through interviews.

The importance of interviewing notwithstanding, most professionals receive little training in effective interviewing (e.g., fact finding, reading people, and evaluating truthfulness); and the training that is provided is too often based on anecdotal experience and faulty concepts, assumptions, theories and/or research findings based on inadequate or simplistic methodologies. As a result, interviewers are frequently left with an erroneous or simplistic view of human behaviour when trying to design an interview strategy or evaluate the credibility of statements. These realities were the experiences of the first and third authors, two veterans of the law enforcement profession. Despite having over 55 years of combined experience, the first and third

authors admittedly received little quality training in effective interviewing. It was not until the they started to make connections with other professionals - forensic psychiatrists, research psychologists, specially trained law enforcement agents, etc. - that the realization of the number of errors being made during interviews became apparent (e.g., by themselves, by others within law enforcement, and by professionals from other disciplines tasked with conducting investigative interviews). These collaborative efforts led to another important revelation: academics/researchers were making significant errors as well. These errors likely contaminated the training and therefore the work of front line staff (note: identifying the errors made by academics is outside the scope of this chapter. See Chapter X, present volume, by John Yuille, for further information; also see: Hervé, Cooper & Yuille, 2007).

This chapter examines the "Sins of Interviewing" that were identified as a result of the collaboration between law enforcement professionals, mental health professionals and academics. The "Sins of Interviewing" were originally developed by the first author. The list of "sins" started with a few and grew over time through experience and recommendations from mentors or associates, and all have since found empirical support. Fifteen sins are currently listed and they all have one variable in common: they detract from achieving the goal of an effective interview. That is, the goal of finding the truth - whatever it might be - and why the person believes it to be the truth. The fifteen sins are not meant to be an exhaustive list, and the sins are not meant to be mutually exclusive. The listed sins simply reflect the most common errors committed by interviewers. The following describes these 15 sins and their causes, as well as practical solutions for overcoming them.

Sin Number 1: Imposing the "Me" Theory of Personality

The "me" theory is based on the concept that many of us believe that how we see the world, how we make decisions, or how we behave is necessarily the same for all other human beings (Cooper, Hervé, & Yuille, 2009; Ekman, 2009). Clearly, this is not the case. Humans have variability in genetic expression, life experiences and sociocultural backgrounds that impact thinking, feeling and behaviour. Despite the heterogeneous nature of human beings, we nevertheless often rely on the "me" theory to try to understand the people around us. This may be due to the fact that the "me" theory provides us with a simple, automatic heuristic for making sense of other people and their actions (Stanovich, 2009). That is, it is much easier (i.e., it requires less mental effort or cognitive load) to make interpretations based on one's own viewpoints and experiences than to gather relevant data and test multiple hypotheses to make an informed decision about the person under scrutiny. The end result is a predisposition to make quick (or automatic) and simplistic interpretations about other people based on our own belief system and experiences.

Obviously, relying on the "me" theory to make sense of other people has its limitations. First, it often leads to erroneous judgements about the thoughts, feelings and/or actions of others (Cooper et al., 2009; Ekman, 2009). This is especially true when trying to apply the "me" theory to people who are markedly different from us, such as individuals from different cultures or subgroups, with psychiatric problems, and/or with developmental delays. Second, when it leads to correct judgements, it typically reinforces poor interviewing skills (e.g., using automatic thought processes rather than critical thinking skills; believing that the behaviour you share in common with the interviewee is a reliable sign of deception; e.g., Stanovich, 2009). In fact, when

the "me" theory leads to a correct interpretation, it tells us more that the person being evaluated is similar to us than anything about our interpretation and related assumptions.

Not surprisingly, police officers, like everyone else, are not immune to the influence of the "me" theory. That is, it is not uncommon in law enforcement to see or hear interviewers relying on their own personal beliefs and assumptions as a way of judging truthfulness during an investigative interview. For example, an officer who averts his/her eye gaze (i.e., looks away) when lying may wrongly believe that anyone who looks away when making a statement must be lying. Consequently, the truth teller who looks away to collect his/her thoughts could be wrongfully labeled as deceptive, while the liar who maintains eye contact throughout his/her statement could be wrongfully deemed as honest.

The "me" theory can also impact how an interviewer interprets verbal content. When an interviewee tells a story that contains elements that contradict the interviewer's preconceived assumptions about offending or offenders, our experience suggests that the interviewer is prone to disbelieve that statement. For example, during the investigation of a serial offender who had committed multiple residential sexual assaults in a small town in the southern United States, one of the victims reported that, after being sexually assaulted, the offender sat on the bed and asked her where she went to high school. After she answered him, the offender told her that he had attended the same school and asked if "Mr. Johnson" was still the principal. Why would the offender say that? Surely, he must have known that this would be a clue to his identity. An investigative interviewer following the "me" theory could have dismissed this victim's statement as untruthful because s/he (i.e., the investigative interviewer) simply could not believe that an offender would make such a mistake. In this case, after the offender was identified, the school's

records confirmed that he had told the victim the truth. He had indeed attended the same high school as the victim and "Mr. Johnson" was the principal at that time.

The "me" theory may also be responsible, at least in part, for the development of questionable interviewing practices. For example, a popular assumption in the field of interviewing in the last century was that innocent people do not confess to offences they did not commit (Drizin & Leo, 2004; Kassin et al., 2010a). We now know that this assumption is erroneous and that there are numerous reasons why innocent people may falsely confess to crimes (Gudjonsson, Sigurdsson, Sigfusdottir, & Asgeirsdottir, 2008; Kassin, Appleby, & Perillo, 2010b). It is possible that this assumption was developed in the context of the "me" theory: since there is absolutely no way "I" would ever confess to something "I" did not do, anyone who confesses to a crime must be guilty of that crime. Unfortunately, this assumption has created a context in which some investigative interviews have felt justified in using whatever means necessary to gain a confession.

The take home message is: "Don't use your personal views to judge other people's behaviour." This statement was, in fact, one of the first training messages the first author learned from his mentor, Dr. Bennett Blum, a forensic psychiatrist. As Dr. Blum explained, attempting to answer the question "why would the offender do that" from a perspective other than that particular offender presupposes that both the interviewer and the offender share similar values, ethics, experiences and behavioural traits. This is normally not the case. Irrespective of who is being interviewed, the best defense against the "me" theory is knowledge. The more the interviewer knows about the people s/he is dealing with and the topic under investigation (e.g., violent crimes, fraud, terrorism, etc.), the easier it will be for the interviewer to consider other

hypotheses - hypotheses that take into account the perspective of the interviewee and the context in which the offence took place.

Sin Number 2: Misunderstanding Memory

The second "sin" of interviewing relates to the lack of understanding that many law enforcement personnel have about memory. This is surprising given the importance of memory to police work (see Chapter X, present volume, by Hervé, Cooper, & Yuille). By definition, the goal of an investigative interview is to mine the interviewee's memory (i.e., the truth as s/he knows it). This holds true irrespective of whether the interviewee is a victim, witness, informant or suspect. In many cases, particularly in child sexual abuse contexts, the victim's memory is often the only evidence that an alleged crime has been committed (Daylen, van Tongeren Harvey, & O'Toole, 2006). Therefore, the importance of understanding how memory works cannot be overstated. In fact, it could be argued that investigators should treat offence-related memories as part of the crime scene (M. St. Yves, personal communication, December 19th, 2011). Would crime scene investigators (CSIs) be sent to a scene without any understanding of evidence collection? Would CSIs be allowed to contaminate the crime scene or only collect part of the evidence? The answers here are easy: no. Yet, investigative interviewers are often not held to the same standards with respect to collecting memory-based evidence.

The following provides the main properties/characteristics of memory that all investigative interviewers should know, as well as some of the common sins committed by memory-uninformed interviewers (for further details, see Chapter X, present volume, by Hervé et al.; Hervé et al., 2007; Schacter, 1996, 2001; Yuille & Daylen, 1998).

First, memory for personally experienced events is reconstructive, not reproductive (Schacter, 1996). That is, we do not have an exact video recording of past events stored in our brains that we can freely play back at any time. If we did, we would have totally accurate recall but we would likely eventually run out of storage space for new memories. Instead, we only encode or store information that is important to us and reconstruct our memories piece by piece in a manner consistent with the cues that elicited or triggered them. The good news about this method is that we do not have any storage issues. The bad news is that this process is imperfect and prone to error (Hervé et al., 2007; Schacter, 1996, 2001). By imperfect, we mean that memory is incomplete because individuals simply cannot pay attention to everything of investigative importance (e.g., to the behaviours of all present during a crime). By prone to error, we mean that, each time a memory is recalled and, therefore, reconstructed, it is susceptible to being distorted by a host of factors. As Schacter (2001) notes, "in the process of reconstruction we add on feelings, beliefs, or even knowledge we obtained after the experience" (p. 9).

The knowledge that can distort one's memory need not be self-generated; in reality, it is often suggested by others, including interviewers. For example, when a witness to an event spontaneously recalls the details of an event or is interviewed and asked to recall the details of an event, the resulting product becomes a reconstruction of the stored parts and pieces of the memory being elicited, not a single reproduction of the memory. When the memory is reconstructed and verbalized, the quality and quantity of the actual memory becomes vulnerable to influences from external sources, such as the questions posed or information supplied to the witness that was not part of his/her original memory. Thereafter, this newly reconstructed memory is re-stored, only to be reconstructed and influenced again when the witness is reinterviewed at a later time (Hervé et al., 2007; Schacter, 1996).

Despite the fact that memory is reconstructive in nature and, therefore, incomplete and error prone, many inexperienced and experienced interviewers continue to believe that memory is like a video recording. As a result, they become frustrated when the results of an interview are not as expected (e.g., when a witness does not provide a smooth, linear "play back" of everything that happened during the offence). Many also fail to understand the malleable nature of memory and, therefore, the impact their own questions will have on the interviewee's memory, a sin further discussed below.

Second, our memory is best for events of personal significance (Christianson, 1992; Schacter, 1996). While most experiences are quickly forgotten because they are routine, mundane or unimportant, events of personal significance, either positive or negative, may be retained for months or even years (see Chapter X, present volume, by Hervé et al.). This may be due to several factors, including the fact that events of personal significance are, by their very nature, emotional events and emotions serve as powerful memory cues. Furthermore, events of personal significance are more likely to be retold or discussed over and over again, a process that is known to reinforce memory (Hervé et al., 2007; Schacter, 2001).

One error made by improperly trained interviewers is in defining what is significant from their own perspective (i.e., according to the "me" theory) or from the perspective of the investigation (e.g., what evidence is "needed" to catch and convict the suspect), rather than from the perspective of the interviewee (i.e., what s/he found to be especially significant and, therefore, memorable). A victim of fraud, for example, may not know that s/he was being defrauded (i.e., at the time the fraud was being committed) and, therefore, may have little to no memory of the event (i.e., as it was not originally encoded as memorable; Tollestrup, Turtle, & Yuille, 1994). The longer the time between this type of event and its recall, the more likely it will

be forgotten (e.g., in part or in whole). Unfortunately, a well-meaning interviewer may wrongly assume that the victim should recall the incident and consequently pressure the victim to provide information related to the fraud - information that is likely to be inaccurate and, therefore, lead the investigation down the wrong path.

Another error that novice and improperly trained interviewers sometimes make is changing topics when an interviewee becomes emotional during a retelling. This typically reflects the interviewer's discomfort dealing with emotional subjects and, unfortunately, serves to disrupt the reconstruction of memory. Emotions are a powerful cue to memory and, therefore, can serve to elicit important offence-related details. As such, the interviewer should allow the interviewee to express his/her emotions while providing their narrative. Of course, if a victim or witness becomes overwhelmed by their emotions (i.e., cries uncontrollably or is so angry or agitated that communication is disrupted), it would be appropriate to temporarily change topics (Hervé et al., 2007; Morrison, 2008).

Third, memory is not a discreet entity. Rather, it is a set of processes. There are, in fact, different types of processes and different types of memories, including the following (Schacter, 1996, 2001): (1) Procedural memory (i.e., memory for psychomotor functioning, such as walking, sexual behaviour, etc.); (2) Semantic memory (i.e., memory for general knowledge, such as math, physics, chemistry, geography, etc.); (3) Narrative memory (i.e., memory for personally experienced events, such as committing violence or being the victim of violence); (4) Script memory (i.e., memory for routine events, such as our typical morning routine); and (5) Prospective memory (i.e., memory for future events, such as going to a hockey game).

Narrative memory (also referred to as episodic or autobiographical memory; Schacter, 1996, 2001) is typically the type of memory at the focus of most investigations. It may be about a

single event at a single location, such as witnessing a car accident or a bank robbery; or it may be about a series of events, such as multiple meetings and discussions among conspirators to commit some type of action. In the latter case, multiple locations, multiple dates, multiple participants, and multiple acts could be involved and recalled. The second most likely type of memory to surface during an investigation is a script memory. We develop scripts for routine events, such as our typical drive to work or our typical family dinner. Likewise, some victims and offenders may develop scripts for repeated acts of violence that they interpret as routine (e.g., repeated acts of sexual or domestic violence; see Chapter X, present volume, by Hervé et al.). Remember not to fall prey to the "me" theory when it comes to the definition of routine. It is not what you believe to be routine, but what the interviewee believes to be routine.

The distinction between a narrative and script memory is often lost on improperly trained interviewers. However, the distinction is crucial. With all other factors being equal, the quality and quantity of information within a narrative memory will be greater than that in a script memory (Schacter, 1996, 2001). For example, a victim who was sexually assaulted on one occasion may provide a great deal of information about the offender (e.g., what he was wearing, his approach behaviour, what he was saying, etc.), the offence (e.g., sequence of events, particular behaviours), and the location of the assault (e.g., place, time, and other contextual details) because of the uniqueness of the event. In contrast, a victim of repeated sexual assaults by the same perpetrator in the same context may only provide generalities about the offence script or how it "usually" happened because of the routine nature of these events (e.g., he used to come into my room at night, usually after drinking beer; he would start by turning off the light and taking my panties off, etc.). If the interviewer falsely believes that s/he is dealing with a

¹ This is not to say that the other types of memories do not surface during an investigation. For example, a serial sex offender may spontaneously show how he tied up his victims, thereby displaying procedural memory.

narrative memory when, in fact, s/he is facing a script, s/he may become frustrated by the lack of details provided by the interviewee and perhaps become suspicious. Under this circumstance, the improperly trained interviewer may be at risk of asking leading or suggestive questions and, therefore, of contaminating the victim's memory. Instead, when dealing with a script memory, it is best to simply ask the interviewee how the offending typically occurred. Once the script is known, it may be possible to get information about a particular episode by asking if there was a time when the offending unfolded in a different manner (e.g., when an act of domestic violence is interrupted by the unexpected presence of a child; when a sexual offence of a child is interrupted by the non-offending parent unexpectedly returning home). This is called a script violation (Schacter, 1996, 2001). Script violations are significant departures from how events typically unfold and, therefore, are memorable. The interviewer can use script violations to cue memory for a particular episode by asking the interviewee if s/he recalls anything more about the particular incident in which the script was violated. This process can be repeated until no further script violations and/or episodes come to mind.

Fourth, narrative memory is often piecemeal (i.e., only parts and pieces of the actual event are recalled; Hervé et al., 2007; Loftus, 1979; Schacter, 1996, 2001). As noted above, when an event is unfolding, a witness cannot pay attention to every facet of the event, and different witnesses may focus on different parts of the event. Later, when recalling the event, the witness may fill in the holes in his/her memory with information that makes the memory seem complete but may, in fact, be inaccurate (Yuille, 2007). Filling in the gaps is typical of social interactions and often relies on our semantic memory or our scripts. In other words, if a witness did not see a particular act during an event (e.g., the perpetrator's car swerve prior to hitting the victim), that witness might still assume that the particular act occurred (i.e., the car swerved prior

to impact) based on his/her general knowledge and/or typical experiences with similar events (i.e., motor vehicle accidents). While an improperly trained interviewer would likely not stop (and may even sometimes encourage) witnesses to fill in the gaps, properly trained interviewers know to instruct witnesses to only report on what they saw and heard (Fisher & Geiselman, 1992; Hervé et al., 2007). Another effective way to avoid having a witness fill in the gaps is to first find out what s/he was paying attention to and then only ask questions about this information. Remember that many cooperative witnesses will provide information when questioned by officers, irrespective if they actually have a memory for what is being asked.

Fifth, memory is not formed in a vacuum. The memory for a significant event will have been surrounded by the memories for a whole array of relatively irrelevant events and experiences (e.g., from the perspective of the interviewer) that took place before, during, or after the event under investigation (Fisher & Geiselman, 1992; Schacter, 1996, 2001). The event in question may also trigger memories for other completely unrelated events (Hervé et al., 2007). It is not uncommon for improperly trained interviewers to become frustrated when interviewees provide such information rather than focus on the details of the event under question (e.g., an alleged offence), which may lead the interviewer to interrupt the interviewee. This is a mistake for three reasons. First, this may negatively impact rapport, a sin discussed below. Second, this may disrupt the reconstructive process under way. Since memory is cued, personally significant but seemingly irrelevant details may assist in the reconstructive process of memory for the event in question. Third, since memory is cued, the emergence of "irrelevant" information during an investigative interview in which "relevant" information is also provided adds credibility to the witness' statement (see Chapter X, present volume, by Griesel, Ternes, Schraml, Cooper, & Yuille; Hervé et al., 2007; Yuille 1990). In contrast, when such "irrelevant" information surfaces

in the absence of any significant "relevant" information, the credibility of the witness' statement is diminished. A related issue is that memory of an event is a process in which some, if not all, of the five human senses are involved (Fisher & Geiselman, 1992). Information is obtained and stored through sight, smell, hearing, taste, and tactile experience. While these senses do not equally contribute to memory encoding, those senses that were involved in the formation of the memory may serve as important cues for later recall. An interviewer can help the interviewee exhaust his/her memory by cueing the interviewee to recall what s/he saw, smelled, heard, tasted and/or touched to elicit further event-related details (Yuille, Cooper, & Hervé, in press).

Sixth, memory reconstruction is impacted by several cognitive processes. Knowing these can help interviewers better understand why narrative memories are often imperfect and prone to error. It also helps them to avoid pursuing lines of question that may contaminate their witness' memory. Schacter (2001) describes seven cognitive/memory processes (i.e., "the seven sins of memory") that all interviewers should know: transience, absent-mindedness, blocking, misattribution, suggestibility, bias and persistence. Transience, absent-mindedness and blocking are sins of omission: the inability to recall a particular piece of information. Misattribution, suggestibility, bias and persistence are sins of commission: some memory is present but it is either inaccurate or intrusive (e.g., unwanted). Each of these sins of memory and how they may impact an investigative interview are described below.

1. Transience refers to the decay of memory over time. This is the process behind normal forgetting. While a witness may have a detailed memory of an offence minutes after its occurrence, his/her memory may decay over time. This is why it is important to interview

² Although these are called "sins of memory," Schacter (2001) points to the fact that these processes have both advantages and disadvantages when it comes to memory formation and retention.

³ Schacter (2001) provides further insight into the various causes and consequences of these sins, as well as ways to minimize their influence.

witnesses as quickly as possible following an event. We note that the memory "may" be prone to decay; that is, in some cases, a witness may have a remarkable memory for an event (i.e., a memory that evidences a great deal of detail, accuracy and consistency over time; see Yuille & Daylen, 1998). This may be due to, for example, frequent recollection of the event or to the nature of event (see persistence below for further details). Another important characteristic of transience is that different types of information may decay at different rates. In general, irrelevant or peripheral information (e.g., other witnesses) will decay at a faster rate than relevant or central information (e.g., what the perpetrator was doing; Christianson, 1992). Again, it is important to not fall prey to the "me" theory: what is peripheral and what is central information is in the eye of the beholder (see Chapter X, present volume, by Hervé et al.; Hervé et al., 2007).

- 2. Absent-mindedness "involves a breakdown at the interface between attention and memory" (Schacter, 2001, p.4). As noted above, witnesses simply cannot focus on everything that happens in their environment. Absent-mindedness may also occur at the time of recall. In this case, the witness may focus only on some aspects of his/her memory and, therefore, not provide a full account of what s/he remembers. For example, a victim may only report on what she believes to be most important: the sexual assault. She may not, however, spontaneously provide information regarding how the offender gained access to her (e.g., grooming behaviour) and/or what happened thereafter (e.g., how and where the ejaculate was disposed of). It is the job of the interviewer to cue these additional details.
- 3. Blocking refers to an inability to recall what one wants to and/or should recall. In this case, the witness may try to recall something that is in memory but is simply unable to retrieve it. Blocking may be involved in cases of dissociative amnesia (i.e., the inability to

recall all or parts of a traumatic event; American Psychological Association [APA], 2000). While issues concerning assessing the credibility of amnesia in victims, witnesses and offenders are beyond the scope of this chapter, it is important to note that a good understanding of memory is crucial to this task (see Chapter X, present volume, by Hervé et al.; Hervé et al., 2007; Porter, Birt, Yuille, & Hervé, 2001). There are two other types of blocking that are relevant to the interviewing context: retrieval inhibition and active forgetting. The former refers to the finding that selectively recalling certain events or parts of events can interfere with (or inhibit) the recall of the non-remembered information (Schacter, 2001). This occurs when, for example, a victim or witness is questioned selectively about only certain aspects of the event in question (e.g., an offence) at the exclusion of other aspects of the event. Over time, the information that was not canvased may become more difficult to elicit. Active (or directed) forgetting occurs when a person consciously avoids cues that could elicit a memory (Yuille & Daylen, 1998). Although little is known about this phenomenon, it is a strategy reported by some victims of trauma. In cases of both retrieval inhibition and active forgetting, the end result is the weakening of the cues available to access a memory. While an improperly trained interviewer may become frustrated and leading when facing situations in which blocking occurs, the well trained investigator will know of and utilize memory enhancing techniques to overcome blocking (e.g., the Cognitive Interview; Fisher & Geiselman, 1992). A knowledgeable and experienced interviewer will also know that spontaneous expressions of poor memory may be a clue to credibility (see Chapter X, present volume, by Griesel et al.; Yuille, 1990). A good understanding of memory helps the interviewer to differentiate likely true claims of poor memory from potentially false claims made to avoid discussing a particular topic.

4. Misattribution occurs when a person recalls aspects of an event correctly but misattributes the source (or origin) of the memory (Schacter, 2001). For example, a bystander may believe s/he saw what the offender was wearing when, in fact, this information was provided by another witness. Alternatively, a witness may misattribute seeing someone during the event in question (e.g., an offence) when, in fact, s/he had seen him/her at some other time or place. In other words, interviewees may "have sketchy recollections of the precise details of previous experiences - when and where they encountered a person or object" (Schacter, 2001, p. 93). According to Schacter, "A strong sense of general familiarity, together with an absence of specific recollections, adds up to a lethal recipe for misattribution" (p. 97). Fortunately, misattribution can be minimized by encouraging interviewees to only report what they specifically remember and by discouraging guessing and/or filling the gaps. Misattribution also points to the importance of both investigating the source of memories and corroborating this information. Otherwise, interviewers may risk focusing on false leads, including focusing on the wrong "suspect."

5. Suggestibility refers to the fact that memory can be contaminated by other people via leading questions, comments, or suggestions, or from misleading information from other sources (e.g., written materials, pictures, the media). Children and the developmentally delayed are especially susceptive to suggestions (Drizin & Leo 2004; Yuille et al., in press). Remember that memory is reconstructive and incomplete. Accordingly, each time a memory is reconstructed, it can be influenced by leading or suggestive questions or comments (Bruck, Ceci, & Hembrooke, 1998), particularly for information that was not encoded and/or that was affected by transience or blocking (Hervé et al., 2007). It is imperative that interviewers avoid leading/suggestive questions (see Sin Number 9 below). The role of the interviewer

should be to cue memory, not lead it. Suggestibility is also the reason why it is important to separate witnesses to an event as quickly as possible. Otherwise, they may discuss their personal experiences and contaminate each other's memories.

- 6. Bias reflects memory contamination of another kind, most notably that which is self-imposed. Our current knowledge and beliefs exert powerful influences on how we remember our past. In essence, our current thoughts, beliefs and emotions serve as filters through which we interpret and potentially rewrite our past. "The result can be a skewed rending of a specific incident, or even of an extended period of our lives, which says more about how we feel *now* than about what happened *then*" (Schacter, 2001, p. 5; italics in the original). The properly trained interviewer will know this and, therefore, focus on eliciting facts (e.g., who did what to whom) and stay clear of (or at least place less weight on) subjective interpretations of past events. The properly trained interviewer will also know the significant influence of stereotypes on interviewees (Brewer & Wells, 2011).
- 7. In the present context, persistence relates to the repeated recall of events/memories that we do not want to remember. Persistent memories are typically associated with experiences that the interviewee deems stressful/traumatic in nature and are, therefore, experienced as negative and intrusive. Although typically discussed in relation to victims and witnesses, it is important to note that offenders can be traumatized by their own offences and, therefore, experience persistence (Cooper, Cuttler, Dell, & Yuille, 2006; Pollock, 1999). This process accounts for why some interviewees have remarkable memories. When interviewing someone who experiences such intrusive, persistent memories, it would be important to monitor his/her emotional state. By definition, these memories are about traumatic events and their recollection could re-traumatize the individual. While a detailed review of trauma and

memory is outside the scope of this chapter, it is important to note that trauma can have a variety of effects on memory, from amnesia to remarkable memories (see Chapter X, present volume by Hervé et al.; Hervé et al., 2007; Yuille & Daylen, 1998).

Seventh, in light of the above discussion on memory, it should now be clear that memory for past events should evidence variability over time, with memory for peripheral information being more variable than for central information (Conway, 1997; Erdelyi & Kleinbard, 1978). Yet, many improperly trained interviewers wrongly believe that memory should remain consistent over time and, consequently, view any deviations as a sign of deception. The reconstructive nature of memory in combination with the various sins of memory generally do not allow for perfect recollections from one time to another, although there are some exceptions to this (e.g., when an individual has retold the event numerous times or s/he experiences memory persistence; Hervé et al., 2007). When there are no deviations from one retelling to another, then the memory should be viewed with suspicion as this may reflect rote memory (i.e., memorizing a story, such as when making a false claim of victimization or a false alibi; Yuille, 1990). This raises another important topic to canvas during an interview: the history of the person's memory. This concerns how many times has the person thought about, dreamt about, written and/or discussed his/her memory for the event under investigation, as well as what kind of questions that were asked of him/her during retellings (Hervé et al., 2007). This information may help the interviewer sift facts from fiction. Gaining the history of the interviewee's memory is especially important in the investigative interviewing context.

Finally, all investigative interviewers should be familiar with the Undeutsch hypothesis, which stipulates that the quality and quantity of memories for personally experienced events differ from the quality and quantity of fabricated events (Undeutsch, 1989). This is why probing

poorly prepared false accounts typically results in little to no additional details. Simply put, the person making a false claim cannot pull from memory the amount or type of details that are typical of personally experienced events. The Undeutsch hypothesis led to the development of Criteria-Based Content Analysis (CBCA), a tool that, in essence, translated what is known about memory into a set of specific criteria associated with truth telling (see Chapter X, present volume, by Griesel et al.; Vrij, 2005; Yuille, 1990). This tool is one of the most validated methods for assessing credibility (Colwell, Hiscock, & Memon, 2002; Lamb et al., 1997; Ruby & Brigham, 1997; Steller, 1989; Steller & Koehnken, 1989; Vrij, 2005).

As the above discussion demonstrates, the more one knows about memory, the easier it is to elicit it and the easier it is to assess its credibility. In contrast, the less one knows about memory, the easier it is to contaminate it and/or the more likely one is to fail to elicit information crucial to the event in question.

Sin Number 3: Misunderstanding Lying and Truth Telling

As with the previous sin, the third "sin" of interviewing reflects the lack of understanding that many interviewers have about the nature and characteristics of lying and truth telling (Akehurst, Kohnken, Vrij, & Bull, 1996; Vrij, 2004). Indeed, even though most people believe that they can accurately identify deception, research with professionals from various backgrounds (e.g., judges, lawyers, psychologists, police, etc.) has shown that most people do no better than chance when trying to distinguish truth from lies in a standard laboratory task (Ekman & O'Sullivan, 1991; Porter, Woodworth, & Birt, 2000). This is especially problematic in the investigative interviewing context given that assessing the credibility of statements from victims, witnesses, informants and suspects is central to the investigative process. The bottom line is that,

to effectively assess credibility, interviewers need to understand what the truth looks like, what clues to lies looks like and how to assess these variables in their day-to-day work (Cooper et al., 2009; Ekman, 2009; Porter & ten Brinke, 2010; Vrij, 2000; Yuille, 1989).

The "truth" is whatever information the person being interviewed believes to be true (Cooper et al., 2009; Ekman, 2009). Can a person who is being interviewed give information that is not true and yet not be lying? The answer, of course, is yes. Every day, many people provide false and erroneous information to others, information that they believe is true but, in fact, is not. As noted above, one's memory is fallible for a variety of reasons. Accordingly, it is important to understand that false information can be supplied quite innocently during an interview. For example, the interviewee may believe that some tidbit of information is correct and report it honestly, yet the information may ultimately prove to be false. Because the individual "believes" the information, s/he will not experience any of the emotional and/or cognitive consequences typically associated with lying (Cooper et al., 2009; Ekman, 2009; Undeutsch, 1989). This is why it is important to understand the nature of memory, to cue memory and not lead it, and to stop interviewees from filling in the gaps.

A "lie" is whatever information the person being interviewed intentionally reports as truthful but knows to be false (Cooper et al., 2009; Ekman, 2009). While there are many contexts in which lying is of little consequences and/or acceptable (e.g., lying to your partner about a surprise birthday party; deception in laboratory research), this is not the case in the investigative interviewing context. This is important to note because "high stake" lies are likely to have more significant emotional and/or cognitive consequences for individuals than "low stake" lies (Frank & Ekman, 1997; Porter & ten Brinke, 2010).

People lie about a variety of issues (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996; Ekman, 2009; Ford, 2006; Spidel, Hervé, Greaves, Cooper, & Hare, 2003). An emotional lie is an intentional misrepresentation of one's true emotional state. The suspect who states - with a red face, clenched teeth and abrupt tone - that he "WASN'T ANGRY" at his missing spouse is an example. An opinion lie is an intentional misrepresentation of the true opinion held by the liar. A chronic spousal abuser who states, "It's wrong to hit women," is an example. Another example would be the suspect who, after being asked "What should happen to someone who committed this type of crime," timidly states, "I ... I think that an apology and treatment would best serve everyone." A factual lie is a false denial of a fact, action, or experience or a false assertion of a fact, action, or experience, such as a false alibi or a false claim of victimization. An intent lie is a denial of an intention to do something in the future or a false claim that the liar will not do something in the future. Claims such as "I would never lie to you" have been made many times by many liars. National security professionals are especially concerned with intent lies - e.g., the terrorist who falsely claims that he/she is entering the country to attend a local auto show.

There are several methods used by interviewees to intentionally mislead interviewers (Ekman, 2009; Ford, 2006). The two most common are concealment (i.e., leaving out true information) and falsification (i.e., presenting false information as if it were true). This is why witnesses are asked in Court, "Do you swear to tell the truth, the whole truth, and nothing but the truth?" This oath implies that there are several ways that misleading information can be supplied by a witness to the trier of fact (i.e., judge or jury). Not only could a liar intentionally misstate a fact ("... the truth"), but they could intentionally withhold truthful information ("... the whole truth), or they could also mix a lie in with a lot of truth ("... and nothing but the truth").

Although various methods of lying exist, experience suggests that simply withholding truthful

information is the method most used by successful liars. The reason for this is simple: it is much easier to say nothing than to invent a story. This is why it is often what is not said or what is skipped over that is often most revealing. When inventing, the liar has to create a credible story (e.g., an alibi) and then remember the false information in case the topic resurfaces later in the interview or in a subsequent interview. Moreover, if the lie is particularly complicated, there is a lot to remember the next time the same lie is told. This is why asking an interviewee who you suspect of lying via falsification to repeat his/her story can be a useful tool in assessing his/her credibility.

While certain types of lies may be easier to detect than others (e.g., emotional lie vs. factual lie; falsification vs. concealment), it is important to understand that the business of evaluating truthfulness is complex (Ekman, 2009; Griesel & Yuille, 2007; Vrij, 2000). The main reason for this is that there are no emotional, cognitive, behavioural and/or physiological signs that a person displays when lying that s/he does not also display under other circumstances (e.g., when stressed). That is, both truth-telling and lying have emotional and/or cognitive consequences (Cooper et al., 2009; Yuille, 1989). When telling the truth, the emotional and cognitive responses tend to be consistent with the content of the story and/or contextual demands. For example, the truthful witness who is being interviewed shortly after a robbery may display heightened emotional arousal stemming from his/her recent experience, while the truthful victim may display offence-related fear that has yet to dissipate. Over time, however, these emotions may no longer be present unless, for example, the event continues to have psychological impact. The person of interest who is, in fact, innocent may display stress, anxiety or fear simply because s/he is being wrongly suspected of a crime, and this may be heightened if the interviewer uses an accusatory or challenging approach rather than an open-minded method.

The truthful person may also show increased mental effort (or cognitive load) when telling his/her story because s/he is eager to provide as much detail as possible. However, when asked open-ended questions about his/her experience, the truthful person will generally display relatively mild cognitive load because s/he has an actual memory to rely on when answering questions.

In contrast, the liar's emotional and cognitive consequences tend to be inconsistent with the content of the story and/or contextual demands (Cooper et al., 2009). As noted above, it is not uncommon for a suspect to claim that he has no anger/animosity towards a victim but nevertheless display signs of anger. In addition, the act of lying can trigger an emotion itself (Ekman, 2009). For many, lying produces some internal emotions, such as the fear of being caught or guilt over deceiving someone. However, not everyone experiences negative emotions when lying. Some people, psychopaths, for example, habitually lie and can actually experience a thrill at the thought that they are fooling the interviewer (Hare, 1998; Spidel et al., 2003). This is known as duping delight (Ekman, 2009). With all other variables being equal, lying also requires greater mental effort than truth telling. A police officer conducting a routine roadside stop should have cause for concern if, for example, the driver stumbles or takes time to answer a question that s/he should know automatically, such as his/her name or birthdate. Following a line of questioning, making up a plausible story and keeping one's story straight all requires more effort than simply telling the truth.

Knowing that truths and lies have emotional and cognitive responses is important but such represents only part of the process of evaluating truthfulness. How does someone know what someone else is feeling or thinking? While this is difficult to achieve with any certainty hence why the business of evaluating truthfulness is complex - the good news is that the

emotional and cognitive consequences associated with truth telling and lying tend to be displayed in behaviour (Cooper et al., 2009; Ekman, 2009; Vrij & Granhag, 2007; Yuille, 1989). This is referred to as "leakage." Leakage can be observed in a variety of behavioural channels, including the face, the body, in voice quality, verbal style and in verbal content (Ekman, 2009; Ekman, O'Sullivan, Friesen, & Scherer, 1991; Horowitz, 1991; Porter & Yuille, 1996; ten Brinke & Porter, in press; ten Brinke, Porter, & Baker, in press). Most of the time, when someone is telling the truth, his/her behaviours will be evidence that corroborates his/her claims and/or apparent emotional and cognitive load. In contrast, when someone is lying, his/her behaviours may betray him/her.

Leakage related to lying can be observed in two fashions: from a change in baseline and/or in light of inconsistencies across behavioural channels (Cooper et al., 2009; Ekman, 2009; Griesel & Yuille, 2007). Baseline refers to how someone typically behaves when telling the truth. With a good grasp of the interviewee's baseline behaviour, the interviewer may then spot deviations from this baseline when discussing topics of importance. For example, the interviewee may suddenly evidence a change in posture, voice pitch and/or speech mannerisms (e.g., pauses or filled pauses) when asked about his whereabouts concerning a crime in question. This is the easiest way to identify leakage. Spotting inconsistencies takes more practice and skill but is also more revealing. Inconsistencies in behavioral channels, by definition, mean that the person is communicating different messages. For example, a person may say yes but nod no, or may shrug their shoulders when "confidently" verbally denying any wrongdoing.

Once leakage has been identified, it is the interviewer's job to explore, via effective interviewing techniques, its cause(s) (Cooper et al., 2009; Yuille, 1989). Here lies another important point to understand about leakage. Emotional leakage by an interviewee only tells the

interviewer that an emotion has occurred; it does note tell the interviewer the cause of that emotion (Ekman, 2009, 2003). Similarly, seeing signs of cognitive load only tells the interviewer that the interviewee is exerting greater mental effort than is expected given the question or task (Cooper et al., 2009). It is therefore crucial that interviewers not label leakage as a sign of deception. That decision is simply premature. Instead, the interviewer should note the information as it is important; that is, it is a "hot spot" (i.e., a clue to importance) to be further investigated (Cooper et al., 2009). Otherwise, errors that could have been avoided will be made.

Wrongly judging a truth to be deception can have devastating consequences. The consequences of disbelieving the truth are exemplified by the phenomenon of false confessions (Drizin & Leo, 2004; Gudjonsson et al., 2008). However, this is not the only example. Did a coconspirator warn authorities of a pending hijacked airliner attack on the World Trade Center on September 11, 2011 and was the co-conspirator judged to be a lying? Wrongly believing the lie can also have dramatic consequences, particularly when the purpose of the interview is to determine some future activity. In 1938, British Prime Minister Chamberlain interviewed Hitler and erroneously believed that Hitler was telling the truth about his peaceful intentions in parts of Czechoslovakia. History proved this to be a significant lie.

To summarize, while there are many other factors that influence our ability to differentiate truths from lies (see Cooper et al., 2009; Ekman, 2009; Vrij, 2004; Vrij, Granhag, & Mann, 2010), evaluating truthfulness depends primarily on a good understanding of the nature and types of lies and of the psychology of truth telling and lying, and on skills in identifying, assessing and interpreting behavioural leakage. Evaluating truthfulness should not be viewed as a single event or decision (i.e., deciding if person is being truthful or not) but rather as a process in

which behaviour is identified, hypotheses are generated, more questions are asked to test these hypotheses, and conclusions are data driven and logical.

Sin Number 4: Making the Pinocchio Error

Sin numbers 4-6 are by-products of Sin number 3: misunderstanding lying and truth telling. Making the Pinocchio error occurs when someone believes that there is a universal sign for lying: a specific type of leakage that always means a person is lying (Ekman, 2009). This belief is propagated by a variety of factors, including erroneous theoretical perspectives (e.g., that looking up and to the left is associated with lying based on the theory of neuro-linguistic programming; see Mann et al., 2012), the mislabelling of signs of stress as signs of deception (e.g., as suggested by the developers of the voice stress analyser; see Damphousse, 2008), simplistic portrayals in the media, and/or by well-meaning senior interviewers who were taught to believe in this myth (Ekman, 2009; Ford, 2006). The bottom line is that there is no emotional, cognitive and/or physiological response in humans that equates to Pinocchio's nose growing. Research has consistently failed to find a single clue that means someone is lying across all people in all situations. In fact, it could be argued that there is greater variability than consistency when it comes to signs of deception across people (Cooper et al., 2009). In the same way that the presence of a particular clue does not guarantee a lie, the absence of a particular clue does not mean someone is truthful.

Sin Number 5: Making the Othello Error

The Othello error occurs when a displayed emotion is wrongfully interpreted as evidence of lying (Ekman, 2009). Othello was a character in Shakespeare's play, Othello and was led to

believe that his wife, Desdemona, had been unfaithful. This was not true. However, when he confronted her with the accusation of infidelity, she was frightened because she knew how jealous he was. In fact, Othello had already killed the man he suspected was her lover, so she knew how dangerous his anger was and how hopeless was her situation. Nevertheless, Othello misinterpreted his wife's fear as evidence of her guilt, as opposed to her legitimate fear of being disbelieved. Remember that, when an interviewer sees an emotion, all the interviewer knows is that the emotion occurred (Cooper et al., 2009; Ekman, 2003). If an interviewee feels physically threatened, s/he may "leak" fear that could easily be misinterpreted as a clue to lying. For example, when a gang member who is corroborating with police shows fear, is this detection apprehension or fear of retaliation from fellow gang members? The Othello error cautions interviewers against relying too heavily on reactions/answers to specific questions as a sign of deception or guilt. The effective interviewer will note this as a hot spot to be probed further during the interview (Cooper et al., 2009).

Sin Number 6: Making the Idiosyncrasy Error

The idiosyncrasy error reflects the failure to consider individual differences when interpreting the behaviours of others (Ekman, 2009). There are a number of culturally-dictated behaviours and idiosyncratic behavioural habits that are commonly misinterpreted as indications of deception but, in reality, have little meaning as hot spots without some understanding of the baseline rate of these behaviours (Cooper et al., 2009). For example, some people never or rarely make eye contact; some people rub their noses a lot; some people frequently move their eyebrows; and so on. When a behaviour is culturally-sanctioned and/or habitual, its occurrence tells us little with regard to deception detection. For example, avoiding eye contact does not

represent a hot spot during an interview if the person usually avoids eye contact. In this case, a more telling hot spot would be intimidating eye contact as such is inconsistent with the person's culture and baseline behaviour.

The lesson here is that any leakage should be interpreted in relation to the person's baseline (Cooper et al., 2009; Ekman, 2009). The reasons behind individual behaviours are multifaceted and, among other factors, influenced by culture. For example, some cultures, such as certain Aboriginal or Asian cultures, tend to avoid eye contact, especially when talking with strangers or authority figures (McCarthy, Lee, Itakura, & Muir, 2006). However, experience suggests that some of these well-known culturally-dictated behaviours are changing just as the world is changing. It may be that world-wide instant communication, such as e-mail communication or the availability of films on the internet is breaking down these traditions. What we have always believed to be traditionally true may or may not be true any longer. This is another reason that no matter what you might assume about a person given his/her background (including culture), the best way to avoid errors is to compare the individuals' behaviour to his/her baseline (Cooper et al., 2009).

Sin Number 7: Not Being Self-Aware

One of the biggest impediments to effective interviewing is interviewer bias (Vrij, 2000, 2004). That interviewers are susceptible to bias should not be a surprise in that all interviewers have one thing in common: they are human. Like other humans, they are subject to likes and dislikes, prejudices and fears, and personality traits that can bias their approach to the investigation and/or to the manner in which they interview others. While an effective interviewer

will know his/her biases and attempt to minimize their impact, an ineffective interviewer unknowingly allows his/her biases to contaminate the investigation and/or interview.

There are three important points to remember when it comes to biases. First, biases affect the way we think about a particular subject, person or behaviour (Blanchette & Richards, 2010; Morrison, 2008; Schacter, 2001; Stanovich, 2009). That is, biases reflect erroneous thoughts/beliefs. For example, as explained under Sin number 1, the "Me" Theory of Personality, interviewers often use their own thoughts, behaviours, and assumptions as a way of assessing the actions of victims, witnesses, informants or suspects, or to judge the truthfulness of an interviewee's statement. Through improper training, an interviewer may also believe in a onesize-fits-all (or cookie-cutter) approach to interviewing. This type of approach "assumes" that all types of interviewees will respond identically to one interviewing style. This is too simplistic. Special populations, such as children, the developmentally delayed and the mentally ill, for example, require tailored approaches that take into account their unique characteristics (Gudjonsson & Joyce, 2011; Williamson, 2006; Yuille, 1988, 2007; Yuille et al., in press). For example, it is not uncommon for interviewers facing a suspect who is denying any wrongdoing to employ behavioural observations questions (i.e., questions based on the assumption that guilty and innocent individuals will respond differently; e.g., "What do you think should happen to someone who committed such a crime?"; e.g., Inbau, Reid, Buckley, & Jayne, 2001). While such questions may lead to important insights into the suspect, these insights are simply hot spots that need to be validated through further questioning, not conclusions with respect to guilt or deception. Remember that there is no Pinocchio response, and there are many reasons why someone may show hot spots to such questions. An innocent developmentally delayed suspect, for example, may have difficulty comprehending and, therefore, answering such questions,

which should not be confused as a sign of guilt. Thus, the skilled interviewer will always remember that effective interviewing requires a person-centered approach in which the interviewee's behaviours are interpreted from the interviewee's perspective rather than from the interviewers or in relation to other victims, witnesses, informants and/or suspects.

Second, biases are learned and, therefore, the product of our experiences (e.g., family, social, cultural, professional and/or training influences; Schacter, 2001; Stanovich, 2009). Within the investigative interviewing context, there are three major sources of biases (i.e., one internal and two external) that any interviewer should guard against. The first has to do with the interviewer's "gut instincts." With experience, interviewers understandably develop intuitions or instincts about people and their behaviours. If these intuitions are based on faulty assumptions regarding (e.g., certain erroneous clues to lying; see above), then they will lead to errors more often than not (Cooper et al., 2009). If the interviewer's gut instinct motivates him/her to follow up on one lead over others, then it only serves to blind him/her to other leads/possibilities and, therefore, increases the chance of errors. An effective interviewer will consider his/her gut instinct but not to the exclusion of other possibilities.

The second source of bias stems from the belief that the goal of a suspect interview is to seek a confession rather than the truth (Drizin & Leo 2004; Gudjonsson et al., 2008; Kassin et al., 2010a). This predisposes the interviewer to feel justified in using whatever means necessary to get a confession, and to pay little attention to the dangers of this approach, particularly as it relates to false confessions. The unbiased interviewer does not seek a confession but rather focuses on fact finding (Yuille, 1988; Yuille et al., in press). The goal is to find the truth, whatever it might be, and why the person believes it to be the truth. When facing a deceptive suspect, for example, the goal is to provide every opportunity for the suspect to provide a truthful

account and, if this fails, to examine the deceptive account in enough depth as to elicit information that can then be discredited as part of the investigation. The goal is to provide the trier of fact with enough information to make a judgment. The third major source of bias stems from the suspicious context within which investigative interviewers operate (Ekman, 2009; Kassin et al., 2010a). The more suspicious the interviewer, the more s/he expects to be told a lie and, conversely, the less s/he expects to be told the truth. S/he will have a lower rate of believing a lie but a higher rate of not believing the truth. This is another factor that contributes to false confessions (Drizin & Leo 2004; Gudjonsson et al., 2008; Kassin et al., 2010b). In contrast, the more trusting the interviewer, the more s/he expects to be told the truth and, conversely, the less s/he expects to be told a lie. The overly trusting interviewer will have a lower rate of not believing the truth but also a higher rate of believing a lie. This bias likely plays an impact in, for example, believing false claims of victimization. Obviously, the optimum combination is believing truth-tellers and disbelieving liars. The best way to achieve this is to keep an open mind and evaluate each case on its own merits.

Third, the stronger our bias, the more impact it will have on our actions (Blanchette & Richards, 2010; Schacter, 2001; Stanovich, 2009). The conviction with which we hold our biases will partly be influenced by our personality. Most notably, a bias may be strengthened by self-generated pressures to catch a suspect or identify the liar to, for example, prove to others how good we are. This is when the interviewer runs the risk of misinterpreting a hot spot as a sign of deception. The more our ego is involved in our work, the less effective we will be as our search for and analysis of hot spots will be a pursuit to prove our ego right (i.e., our pre-conceived notions). When ego is involved, we tend to avoid seeking any information that could damage the ego (i.e., evidence against the ego-driven beliefs/conclusions), leading to a self-fulfilling

prophecy. This is what occurs, for example, when one only tries to prove his/her gut instincts at the exclusion of other possibilities.

The strength of biases can also be affected by external pressures. For example, the extent to which our beliefs, assumptions and behaviours are supported within the context in which they operate is key in determining their strength. This is why it is often so difficult to stand up against what the larger group is doing or saying. Another external factor is the pressure placed upon the interviewer by their supervisor, team and/or the public (often via the media) to find a suspect and, consequently, identify the liar from the people of interest. As a result, the interviewer is predisposed to assume that at least one interviewee in the group is "guilty" of whatever is being investigated. This will bias the guilt - or confession - seeking interviewer to only look for "signs" of deceit at the exclusion of "signs" of truthfulness. This is problematic given that there are no clear signs of deceit. Consequently, this may result in a situation in which the truth teller is wrongly suspected of lying, such as when a highly cooperative interviewee withholds information or shades the information in a more favorable light - a situation not uncommonly encountered in investigative interviews. Finally and not unrelated to the above, it is important to note that emotions can also add saliency to our biases, stereotypes and prejudices (Blanchette & Richards, 2010). For example, the nature of the investigation (e.g., the sexual assault and murder of local children) can trigger emotions (e.g., anger, sadness, frustration) in even the most experienced of interviewers, and the characteristics of interviewees can add to these emotions (e.g., a person of interest with a dislikable demeanor). Interviewers will vary in how much and how long emotions affect them. For example, some interviewers are quick to anger but then mellow almost immediately, while other interviewers are slow to anger but then remain angry for long periods of time (Ekman, 2003). Successful interviewers are probably more self-aware of

these traits and, therefore, are more controlling of these emotions rather than letting their emotions dictate their behaviour during the interview.

Sin Number 8: Not Considering Multiple Explanations

It is a common trap for any interviewer, experienced or not, to "know" what must have occurred and then set out to prove it. Magically, after the premature judgment has been made, much of the information that is gathered during the interview seems to support that judgment, even if the judgment was wrong. Jumping to conclusions is a consequence of being biased and this sin of interviewing emerges because the interviewer fails to maintain an open mind (Cooper et al., 2009; Kassin et al., 2010a; Vrij, 2004; Yuille, 1988). Yuille (see Chapter X, this volume) has repeatedly testified on this issue in both Canadian and American Courts, and commonly informs the triers of fact something to the effect of the following: the biggest single impediment to effective interviewing is when the interviewer has a single hypothesis about the fact pattern that he or she is dealing with. In contrast to that, the most effective approach to investigative interviewing is the alternative hypothesis method, where the interviewer entertains several alternative explanations as the interview/investigation unfolds. This way, the investigator is not blinded by one hypothesis. When there is only one hypothesis, there is a tendency to exaggerate the evidence that is consistent with it and minimize the evidence that is inconsistent. Keeping an open mind through multiple hypotheses testing reduces that problem.

Erroneous results are often produced when the interviewer assumes that any information provided by the interviewee that does not fit with the interviewer's single hypothesis must be false and, therefore, a lie. When this sin is being committed, the interview questions are generally worded in a biased fashion and the answers are generally interpreted in a manner

favorable to the interviewer's biased hypothesis (Drizin & Leo 2004; Kassin et al., 2010b). Usually, this is not an intentionally malicious act. The "self-fulfilling prophecy" is the inevitable consequence of not keeping an open mind. Interviewers may also jump to the conclusion that an interviewee who lies about something or withholds information is guilty when the reason for this behaviour may be something else altogether. For example, a woman being interviewed about her murdered husband may lie about her whereabouts not because she had something do to with his death but because she was having an affair. The interviewer who is locked into only one hypothesis will likely erroneously interpret her efforts to conceal the affair as a sign of guilt in the murder. This is why interviewers are encouraged to consider behavioural leakage a hot spot rather than a sign of deception or guilt. Remember that a hot spot may occur for a variety of reasons, of which lying is only one possibility. It may turn out that the interviewee has lied, but the process by which that conclusion has been reached should include identifying the hot spot, entertaining alternate hypothesis for the hot spot, probing the different alternate hypothesis about the hot spot with a variety of questions, considering other evidence in the case, and then making a decision (Cooper et al., 2009). Considering multiple hypotheses for what we see and hear during an interview will go a long way to neutralizing interviewer biases and reducing errors in disbelieving the truth and believing the lie.

Sin Number 9: Not Planning Ahead

We have all heard the following edict: "A plan ... even a bad plan ... is better than no plan at all." Yet, it is not uncommon for an interviewer facing a heavy caseload to forgo planning an interview due to time management issues. Unfortunately, going into the interview without

much preparation often leaves the interviewer frustrated that the interview produced very little information of value.

Properly planning an interview should include seeking knowledge about the topic under investigation, knowledge about the interviewee, and preparing for the interview itself (Cooper et al., 2009; Yuille, 2007). Case-specific knowledge not only ensures that the interviewer will canvas all topics of investigative value (e.g., all alleged events of abuse) but it also facilitates the business of evaluating truthfulness. If, for example, the interviewer has reviewed the victim and witness statements, the interviewer will then be better prepared to identify details provided by a suspect that is inconsistent with this information. This information may also assist in make sense of the memory patterns evidenced during the interview (see Chapter X, present volume, by Hervé et al.; Hervé et al, 2007). Knowing about the particular case may also inform interview strategies. For example, if there is information to suggest that an offence was out of character (i.e., ego-dystonic in nature) and may have been committed due to external pressure (e.g., a substance abuser committing an offence to repay his dealer; a woman committing fraud for her domestically abusive husband), then tactics relying on guilt (or remorse) or providing a justifiable rational for the offence (e.g., you were coerced by your husband and simply had no options) might prove fruitful. In contrast, if the offence appeared to be internally and ego-driven (i.e., ego-syntonic in nature), then strategies that play on the offender's ego might be warranted. More generic knowledge about offence patterns is also useful. For example, knowing that seductive pedophiles engage in grooming behaviour, enables the interviewer to seek information regarding grooming (e.g., the victim reports that he was first approached at the local swimming pool and was offered help by the offender regarding learning how to dive), information which may lead to other potential victims. Similarly, knowing that, in some cases of reported domestic

partner abuse, the female is the actual perpetrator allows the interviewer to keep an open mind and identify false claims of victimizations by women and true claims of innocence by men.

Gathering knowledge about the interviewee also has numerous benefits (Bull, 2010; Christianson, 2007; Morrison, 2008; Williamson, 2006; Yuille, 2007). For example, the more we know about the person we are about to interview, the less likely we will engage in the "me" theory or other biases, contaminate memory, and misinterpret innocuous hot spots as signs of deception, and the better we will be at developing relevant alternative hypothesis, at cuing memory, and at tailoring our interviews (Cooper et al., 2009; Hervé et al, 2007). Indeed, while there are general principles that apply across all interviews, the bottom line is that each interviewee is unique and should be treated as such.

There are five general domains to canvas when seeking background information about an interviewee. First, it is important to understand the cognitive abilities of the interviewee (Gudjonsson & Joyce, 2011; Yuille et al., in press). Cognitive abilities may be age related (e.g., children vs. adolescents vs. adults vs. the elderly), or due to neurocognitive abnormalities (e.g., the developmental delayed; the brain injured). Cognitive abilities affect memory, understanding of concepts, and suggestibility, and dictate the complexity of questions that can be used (e.g., concrete vs. abstract language; word difficulty; sentence length). Someone with intellectual functioning deficits, for example, could have a limited understanding of the concepts covered during behavioural observation questions. Without knowing this, an interviewer could misinterpret this person's limited and simplistic response as a sign of guilt, particularly if the interviewee also shows stress (i.e., simple confusion at being interviewed rather than detection apprehension). Similarly, there are certain interviewing techniques, such as the Cognitive Interview and other memory enhancement techniques, that may be inappropriate for use in the

cognitively limited or impaired (Fisher & Geiselman, 1992; Geiselman, 1999). Failure to know this could lead one to misinterpret the limited usefulness of these tools in eliciting additional information as a sign of guilt.

Second, preparation should include gaining knowledge of the interviewee's personality. While a detailed review of personality theory and research is outside the scope of this chapter, it is important to remember that everyone has behavioural characteristics and traits that define his/her personality. These traits are likely to be most salient under times of stress (e.g., during an offence and criminal investigation) and these traits can affect memory, suggestibility, disclosure motivation, and/or interview dynamics (Blair et al., 1995; Drizin & Leo, 2004; Hervé et al, 2007; Kassin et al., 2010a). Some people, for example, are prone to being depressed vs. happy, manipulative vs. honest, trusting vs. suspicious, selfless vs. self-centered, and/or socially conscious vs. socially inappropriate/unaware. Designing the interview according to these traits will most likely result in a more productive interview. Consider, for example, the Unabomber who mailed packages containing explosives to a variety of victims. The victims were killed or wounded by the explosion that resulted from opening the packages. When the Unabomber was finally identified and arrested, he reportedly lived a Spartan-like existence in the state of Montana, alone in a shed without electricity or running water because of his personality. Not many of us would want to live that kind of life but apparently he did. Knowing this, the interviewer would probably prepare an interview plan differently than if the Unabomber were a more social person (i.e., reduce the amount of people involved; take time to identify topics of interest to develop rapport; etc.). As another example, consider interviewing the late Theodore Bundy, who was convicted and executed by the State of Florida for sexually sadistic murders committed in various US states. Bundy was reportedly a very self-centered, intelligent, and

charismatic individual. Knowing this, the interviewer would probably prepare an interview plan that would have anticipated Bundy's self-centeredness, and his attempts to manipulate the interviewer and control the interview. An interview with someone like Bundy could easily take a long time to conduct. The sage advice, "give him enough rope and he'll hang himself," would be very applicable in this situation.

Knowing the personality style of interviewees has the added advantage of helping the interviewer be more effective with respect to evaluating truthfulness (Cooper et al., 2009). As mentioned previously, the ability to detect and correctly interpret hot spots depends on a good understanding of the person's baseline behaviour, and an understanding of what may lead to deviations from baseline. Baseline is, in part, determined by the person's personality. An interviewee who tends to be suspicious and distrustful of others will, for example, behave differently than an interviewee who tends to be extremely manipulative and self-centered (e.g., introverted, reserved and cautious vs. extroverted, gregarious and superficially cooperative). Similarly, a depressed and suspicious individual will interpret their life experiences differently than a very happy and trusting individual (e.g., negative and pessimistic vs. overly positive and optimistic). As per the memory sin of "bias," these interpretations may eventually become reality to these individuals (Schacter, 2001), a sin of memory that should not be confused with a sign of deception. Remember that interviewees often give away lies by unintentionally changing *their* behaviour from *their* baseline.

Third, the interviewer should assess if the interviewee has any mental health issues that may complicate the interview. While a review of mental health issues and how they impact the interview is beyond the scope of this chapter, there are some general principles that are worth mentioning. First, individuals with serious mental health problems, by and large, react poorly to

important with this group, and stress-free manner and environment is, therefore, especially important with this group, and stress-inducing tactics are counter-indicated. Second, as seen in problems of personality, mental health symptoms may cause an interviewee to have a unique (if not odd) interpretation of the world (Hervé et al., 2007). This may be most evident within, for example, the statement of a psychotic individual (e.g., someone who has lost touched with reality and who may have experienced visual and auditory hallucinations). Focusing on facts as opposed to interpretations can serve to reduce the contaminating influences of this effect and make such individuals more reliable witnesses than would otherwise be the case. That is, interviewers should not be distracted by a schizophrenic's belief that s/he was abducted by five "aliens" but rather focus on investigating how five individuals took him in a vehicle and assaulted him. Other points to consider when working with the mentally ill is their medication regime and compliance. Knowing the side effects of medications and medication schedules can help the interviewer schedule an interview when the interviewee will be at his/her best.

Fourth, the interviewer should learn about the physical state of the interviewee and prepare accordingly. If the interviewee is taking medication or has limited physical stamina, the interview should be scheduled to take this into account. Similarly, if the interviewee has some form of disability, the interview context should be adjusted accordingly (e.g., providing comfortable seating and appropriate breaks; ensuring easy access to the interview room and bathrooms). As well, the interviewer should seek information regarding the interviewee's cultural background (Cooper et al., 2009). While there is little research on the impact of culture on interviews, experience suggests that culture may influence what someone is willing to share (and to whom), their response to authority figures (including deception appropriateness), and their sensitivity to particular interpersonal behaviours and/or contexts. The bottom line is that

this information may be useful in developing rapport - which is discussed below, in understanding the person's baseline, in interpreting hot spots and in developing interview strategies (e.g., culturally appropriate forms of rationalization).

One of the simplest ways to learn about the interviewee and his/her baseline presentation is to contact the interviewers who have conducted interviews of the same person in the past. As the edict goes, "the best predictor of future behaviour is past behaviour." However, in other cases, determining the background of the interviewee can be a very complex process, requiring considerable time - even days, consulting with various behavioural experts, conducting background interviews of friends, associates, or co-workers of the interviewee, and researching other sources such as prior written reports about the interviewee, the interviewee's arrest and driving records, etc.

While other demands may limit how much background information about the case, topic and person may be collected, the interviewer should always take time to prepare for the interview itself (Yuille, 2007; Yuille et al., in press). As noted above, it is recommended that interviews be scheduled at a time when the interviewee is likely to be at his/her best (i.e., most alert and stable). Given memory transience, the shorter the time frame between the event of interest and the interview the better (i.e., with respect to memory). Indeed, Fisher and Geiselman (1992) recommend that, if an interviewee is reasonably calm, seems capable of following instructions, and can perform intensive memory retrieval operations, the interview should be conducted as soon as possible after the event in question. If, however, the interviewee is extremely anxious, has difficulty following even simple instructions, and appears incapable of doing intensive memory retrieval, it is better to postpone the interview to a later date. Planning where the interview is to take place is also important. While the actual interview location may be

determined by circumstances (e.g., the first responder taking a statement at the scene of the crime), the interviewer's primary concern should be a location where there will be the fewest distractions. Not only can distractions disrupt the memory flow, they often negatively impact rapport building, the next sin reviewed.

Sin Number 10: Not Establishing Rapport

Rapport refers to the connection, harmony, confidence or trust between the interviewer and interviewee (Yuille et al., in press). There is probably no other activity that can potentially influence the success of an interview to the same degree as establishing rapport. Positive rapport encourages people to talk and to talk honestly, including about topics they would otherwise not have talked about (Morrison, 2008). Taking time to establish rapport further permits the interviewer the opportunity to establish a baseline and, therefore, contributes to evaluating truthfulness (Cooper et al., 2009). Conversely, the failure to establish or maintain rapport can potentially jeopardize an interview. For example, an otherwise cooperative victim or witness may be put off and leave out crucial pieces of information, an informant may fail to report crimerelated information, and a suspect may never feel comfortable enough to unload his burden onto the shoulders of the interviewer. If the interviewee reacts to the inability of the interviewer to establish rapport, his/her feelings may leak out and could potentially be misinterpreted as a sign of guilt. Moreover, if the interviewee is chronically stressed by the inability of the interviewer to establish rapport, the associated stress-related leakage could serve to mask more subtle hot spots elicited by offence-related questions. The importance of establishing rapport cannot be overstated.

Rapport can be established at the beginning of the interview by inquiring as to the interviewee's welfare and background, and by attending to his/her basic needs. Often, common events or experiences will be discovered during the preparation step or early in rapport building that both the interviewer and interviewee share. Discussing children or jobs or places lived are examples. Rapport should be maintained throughout the interview and can be strengthened at any point during the interview by again inquiring about the interviewee's welfare or comfort. Furthermore, complimenting the interviewee as to their performance or ability to communicate often enhances positive rapport. This includes thanking suspects for their disclosure(s). Rapport can be further supported at the end of the interview when the interviewer provides the interviewee with contact information and informs him/her of the next step in the investigation. Infrequently, establishing rapport may be the only activity that takes place in the first few interviews. This may be because the interviewee is highly suspicious of the interviewer's intentions, because the interviewee is too traumatized to comfortably talk about what happened, or due to some other factors. For example, experience suggests that, while establishing rapport with prisoners of war takes a long time, the effort occasionally pays unexpected positive results.

The problem that many improperly trained interviewers have with establishing and maintaining rapport is that it requires time and patience. Interviewers are frequently pressured to conduct interviews quickly and efficiently in order to move on to other pending interviews or to conduct other phases of an investigation. This is unfortunate because it often forces the interviewer to rush into the essence of the interview (i.e., asking questions about the event in question) without first establishing positive rapport with the interviewee. At other times, interviewers fail to recognize the value of rapport building and only superficially attend to it.

Again, they rush through this part of the interview to get to what they believe is the crucial part

of the interview: talking about the event in question (e.g., the offence). This effect is further intensified when one is simply focused on seeking a confession.

Another feature of rapport is that it cannot be faked. If the interviewer has any biases or prejudices towards the interviewee, these are likely to leak out in his/her behaviour. Just as the interviewer is reading the interviewee, the interviewee is reading the interviewer. Accordingly, these biases are likely to disrupt (if not prevent) rapport building and unnecessarily complicate the interview. Another roadblock to rapport building is the interviewer's ego. The bottom line is that no one is liked by everyone and, consequently, an effective interviewer will know when to remove him/herself from the interview in favor of another interviewer who may have the right characteristics to build rapport with a particular interviewee.

Sin Number 11: Not Actively Observing and Listening

Crucial information can be missed when one is distracted. Indeed, lies often succeed because the recipient of the lie was not paying attention (Cooper et al., 2009; Ekman, 2009). Unfortunately, there are many personal and professional demands that make distraction a reality within the interview context. An interviewer who is having problems at home or facing other personal problems will likely be distracted. Failure to attend to basic needs, such as food and sleep, can reduce our attentional capabilities. Acute and chronic pain further reduces our concentration, and some medications have known effects on attention and concentration. An interviewer facing a seemingly unmanageable case load or external pressures to find the suspect or identify the liar will likely be distracted. During the interview, the interviewer may be distracted by thinking about what question to ask next. This scenario is especially likely in novice interviewers and/or when the interviewer failed to prepare for the interview. The

interviewer who is busy writing notes is, by definition, distracted. As well, the biased interviewer will also be distracted. His/her prejudices will likely surface into consciousness and, therefore, take away from limited attentional resources. The confession-seeking interviewer will be focused on navigating the interview to elicit a confession rather than focused on the here and now. The bottom line is that, the more one has on one's mind, the more likely one is to be distracted; and the more one is distracted, the less attention one has for the task at hand. Remember that attention is limited. This situation also sets the context by which corners are cut and poor interviewing techniques thrive (e.g., biases and not establishing rapport). For these reasons, distraction is the nemesis of the effective interviewer.

While distractions within the investigative context cannot be fully removed, their impact can be minimized by active listening and observing (Cooper et al., 2009; Yuille et al., in press; Ekman, 2009), the key word being "active." By active, we mean the degree of concentration (or effort) the interviewer puts into paying attention to what is said and done by the interviewee. Actively observing refers to watching for the interviewee's baseline behaviours in the face and body when developing rapport, and to being attentive to deviations or hot spots when more sensitive topics are discussed. Actively listening refers to paying attention to the interviewee's baseline use of language early in the interview (e.g., voice characteristics, verbal style and verbal content), and to actively identify verbal hot spots during the more sensitive part of the interview. Often, it is what is left unsaid that is most revealing.

Actively observing and actively listening are difficult to do at the same time. Even for the very experienced and properly trained interviewer, many audio and visual behaviours of the interviewee will be missed. This is one of the many advantages of recording interviews: the interviewer can later view the recording at a time when s/he is less distracted. Recording also

allows for a more accurate account of what transpired in the interview, including what the interviewee reported. Indeed, note taking, particularly when conducted retrospectively following the interview, typically results in key information being left out, most notably information that is inconsistent with the interviewer's primary hypothesis (Lamb, Orbach, Sternberg, Hershkowitz, & Horowitz, 2000). Should recording not be possible, the interviewer is encouraged to actively listen and observe what is being said and done, and to document this information when the interviewee pauses between questions. Paraphrasing these findings back to the interviewee (when appropriate) to allow for corrections can reduce the chance that information inconsistent with the interviewer's primary hypothesis was inadvertently left out of the paraphrased summary.

Sin Number 12: Phrasing the Question Wrongly

One of the most frequent sins of interviewing is the improper phrasing of questions (Kassin et al., 2010a; Morrison, 2008). This may be due, at least in part, to the fact that questions asked in the investigative interviewing context differ drastically from questions asked in the social context. The former requires a fact-finding mindset that avoids contaminating the interviewee's memory and/or distorting his/her self-report. These factors are not present in the social context which consequently promotes bad habits (e.g., phrasing questions to get a desirable answer or a story rather than just facts).

Within the investigative interviewing context, poorly phrased questions can have several unwanted consequences. Questions that are poorly worded can influence or contaminate how the interviewee answers the question, which itself may contaminate the interviewee's memory, or simply confuse the interviewee (Gudjonsson et al., 2008; Hervé et al., 2007; Schacter, 2001). At

best, this reduces rapport and, at worst, it may serve as grounds to dismiss the case. An improperly worded question can also contain information that reveals what the interviewer already knows or, in some cases, does not know. Giving away your position is never a good plan. It matters not whether the questions are used in an interview (i.e., generally a non-confrontational solicitation of information from a cooperative interviewee) or an interrogation (i.e., generally a search for truthful or incriminating information from a reluctant or hostile interviewee) - the effects of a poorly worded question are the same. In order to recognize how often improperly worded questions are used in an interview, the interviewer should record the interview and then review the tape at a later date, critically listening for those questions that were confusing, leading, or otherwise supplied information to the interviewee, as well as the impact of such questions on the interviewee's self-report.

One example of a commonly asked but poorly worded question is a closed-ended question. A close-ended question can only be answered with "yes, no or I don't know." For example, "Did you have anything to do with the murder of Joe?" is a close-ended question. The problem with this question is that it typically fails to elicit a multiple word response. Remember that lies of concealment are easier to get away with than lies of falsification. That is, it is easier to lie with only one simple word than with having to create a multiple-word response that contains false or misleading information. Accordingly, a better question would be an open-ended question; that is, a question that requires a multiple word response, such as "What do you remember about the past 24 hours?" Avoiding (or at least minimizing) close-ended questions accomplishes one interview goal: challenging the interviewee to supply information without much prompting by the interviewer.

Another common mistake occurs when the answer to the question is suggested in the wording of the question (Bruck et al., 1998; Kassin et al., 2010a). "Do you live at 125 Main Street?" is an example of a close-ended leading (or suggestive) question. A better question would be, "What is your home address?" Open-ended suggestive questions are less obvious but as problematic. For example, asking a witness, "What was the colour of the car?", presumes that s/he knows that information. The problem is that a cooperative interviewee might answer this to be helpful despite not having a clear recollection of the car's colour. In such cases, the colour s/he provides may become part of his/her memory and, therefore, contaminate his/her recollection. It is, consequently, important to avoid suggesting qualities of objects, places or people in a question. A better question would be, "What do you remember about the car?" Suggestions can also occur via nonverbal communication by, for example, the emphasis placed on a particular question via the emotional tone in which the question was posed.

Another example of a poorly worded question is a compound question (Yuille, 2007; Yuille et al., in press). At times, compound questions occur when the actual question is preceded by a lengthy, often confusing preamble. The wording often reveals the questioner's opinions or knowledge and it may also influence the answer. Extreme examples of the use of compound questions can be seen during televised American Senate investigations in which the Senators make lengthy political speeches that ultimately lead to a question. At other times, compound questions take the form of multiple questions being asked at once (e.g., How satisfied are you with your job? Do you like the pay, your coworkers ... are you happy with your duties?). This may serve to confuse the interviewee, particularly those with limited cognitive abilities, or allow the sophisticated manipulator to choose which question to answer. It also may confuse the interviewer who may be unsure which question is being answered. A better prompt would be,

"Tell me about your job." This gives the interviewee the chance to spontaneously discuss his/her views about his/her job, and permits the interviewer to actively listen and observe for hot spots which may dictate which follow up topics to query (e.g., "Tell me more about your coworkers.").

Another example of a poorly worded question is a multiple choice question (Yuille, 2007; Yuille et al., in press). An example would be, "Did you go somewhere on your vacation or did you stay at home or what?" A better prompt would be, "You said you went on vacation. Please tell me everything you remember about that." As with leading questions, multiple choice questions makes it easier to lie when the questions contain the answer (see Chapter X, present volume, by Colwell, Hiscock-Anisman, & Fede). All the liar has to do is select one of the choices. Recall taking tests in school. Which type of question challenged you the most: a question that required composing two or three paragraphs or a multiple-choice question that required picking an answer from four or five choices? Accordingly, multiple choice questions should be used sparingly (if at all). If used, it is good practice to come back to that question later in the interview and provide the choices in a different order. This is especially important when working with suggestible or cognitively impaired individuals as such individuals may simply pick a choice because of its order, not its content.

Another consideration with respect to phrasing questions has to do with words that solicit, words that command, and words that connote detail. Words that solicit are best used early in an interview, as they politely request that the interviewee answer questions. These include such words as "please," "can you," "would you," etc. For example, the interviewer might say, "Please tell me what happened on the way to the forum." Words that command are best used later in an interview. Words that command are less polite and, in effect, order the interviewee to provide information. For example, words that command are words such as "Tell me" or

"describe," as when prompting the interviewee, "Tell me everything that happened when you arrived home yesterday." Words that connote detail can be used throughout the interview, as they simply request the interviewee to be detailed and exact in his/her account. For example, you may prompt a witness with, "tell me specifically..." or "describe in detail..."

Overall, effective interviewing is characterized by the use of open-ended and non-leading questions. When querying a topic (e.g., an offence), broad open-ended questions are asked to prompt a spontaneous and detailed account. More specific open-ended w-h questions can then be asked as needed (e.g., what, when, where), followed by more specific questions if warranted. The more questions asked, however, the greater the chance for contamination and misinformation.

Sin Number 13: Timing the Question Wrongly

There are a number of ways that an interviewer can disrupt the tempo of an interview, cause the interviewee to forget to report vital information, or put the interviewee on the defensive by the timing of his/her questions. One of the most common examples of this sin is when the interviewer interrupts the interviewee (Fisher & Geiselman, 1992; Williamson, 2006; Yuille, 1988, 2007). Interrupting any interviewee, deceptive or cooperative, is problematic more often than not. In many cases, an interviewer, after having established rapport, introduces the topic under investigation with a great opening statement, such as "Please describe everything that you can recall about the robbery yesterday." The mistake occurs when the interviewer quickly interrupts the interviewee with a second question. For example, the interviewer may stop the narrative and ask about specific characteristics of the perpetrator. With the cooperative interviewee, the interruption can disrupt the reconstructive process of memory and, therefore,

result in less information being provided or key details being left out. The interruption can also be confusing and distracting to the interviewee, which may reduce rapport and/or implicitly communicate to the interviewee that the interviewer has an agenda that is not necessarily to get the interviewee's detailed account of what s/he knows. By definition, an interruption indicates that the interviewer was thinking of another line of questioning rather than actively paying attention to what was being said.

With the deceptive interviewee, the interruption can actually make it harder to identify the lie (Cooper et al., 2009). As Napoleon stated, "Never interrupt your enemy when he is making a mistake." While it is not a good idea to view the interviewee as an enemy (as this has obvious biasing effects and is counterproductive to rapport building), interviewers should refrain from interrupting an interviewee who may be "hanging himself" with a series of subtle deceptions, outright lies, or other distortions of the truth. In addition to reducing the potential for hot spots, interruptions may telegraph the interviewer's suspicions, thereby allowing the deceptive individual to adjust his strategy and/or provide him/her more time to prepare a story. A far better strategy is to remain silent while the interviewee answers the question. This should be followed by a pause, as this may motivate the interviewee to resume talking and, therefore, add even more information. Silence between questions also allows the interviewer to think about the wording of the next question, or think about a strategy change, or make notes. Thereafter, another open-ended question should be asked, and the process repeated. Encouraging the interviewee to do most of the talking is desirable and often helps in the task to differentiate the truth teller from the liar.

Another common error is committed when a specific aspect of the interviewee's narrative becomes the central issue of a disproportionate number of questions. Repeatedly asking about

that specific aspect teaches the interviewee that the aspect in question is very important. Suppose, for example, that the interviewee witnessed a robbery committed by two suspects and the witness describes the suspects as two males. If the interviewer believes that the second suspect was in fact a female, the interviewer may then repeatedly ask the interviewee about the description of the second suspect, thereby telegraphing his/her suspicions. The interviewer may eventually even ask, "Are you sure you saw two males?" This may very likely cause the interviewee to question his/her memory, if not taint it. As noted above, telegraphing your beliefs to interviewees early in the interview only serves to help them better prepare for more difficult aspects of the interview to come. A better approach is to allow the deceptive interviewee to continue his/her deception uninterrupted. Later in the interview (i.e., when the interviewer has elicited and tested enough hot spots and, therefore, gather evidenced against the lie(s)), the interviewer can ask questions to clarify inconsistencies or to challenge the interviewee's account (Yuille et al., in press). Indeed, while clarification questions are important, they are best left to the end of the interview and asked in a non-leading and non-suggestive manner (see PEACE model introduced in Chapter X, present volume, by Walsh & Bull). When challenging an interviewee's account (e.g., if credibility of the account is in question), one tactic is to point out contradictions in his/her statement or between his/her statement and other evidence or sources of information.

Poorly timed questions are also commonly seen when the subject matter being discussed is multifaceted or otherwise complicated (e.g., multiple offences; multiple perpetrators; multiple parts to one offence). In such cases, the improperly trained or overwhelmed interviewer may ask a series of questions that jump from one topic to another, rather than exhausting the memory for one topic before moving on to the next. Suppose, for example, that the interviewee is questioned

about his/her activities on a certain day and reports four separate activities. Asking a few questions about the first activity, a few questions about the fourth and then asking a few more questions about the first activity can cause confusion in both the interviewer and interviewee. This may result in the interviewer forgetting to follow-up on key information and/or may cause the interviewee to forget to mention some important detail. These problems can be avoided by preparing for the interview and/or identifying and labeling the different parts, and then exhausting the memory for each.

Sometimes a good question may be asked at the wrong time. Interviewers who ask the "why" question too early in the interview can cause the interviewee to become defensive and, consequently, to edit the remainder of his/her statement in order to justify their actions. Imagine, for example, interviewing a victim about a sexual assault she suffered as she was leaving work late at night and walking to her car parked in a secluded parking lot. If she is asked why she parked her car where she did, suggesting that this contributed to her vulnerability, she may become defensive about that decision and edit her answers to justify her decision to park her car where she did. Now imagine if the victim was asked at the beginning of the interview why she didn't try to fiercely fight off the rapist. The same holds true for offenders. Some offenders simply do not know why they do what they do (B. Pitt-Payne, personal communication, Fall, 2011), and asking them the "why" question may serve to highlight their lack of insight and, therefore, threaten rapport.

The best way to learn about the timing of questions and their impact is to record interviews. The interviewer who audio or video records his/her interviews can review them at a later date and critically listen for those questions that were timed in such a way as to cause confusion, cause the interviewee to forget to report critical information, or cause the interviewee

to become defensive. At times, this exercise may lead the interviewer to learn how poorly timed questions ended up confusing him/herself to the extent that crucial pieces of information or hot spots were not properly followed up.

Sin Number 14: Misunderstanding Coercion

History is filled with descriptions of torture tactics, from "the rack" to "the rubber hose." Defining some of these tactics as "torture" is often self-evident. But there are other, less brutal tactics that are designed to manipulate the interrogated person psychologically. Tactics such as exposure to loud sounds, prolonged isolation in extreme ambient environments, and degrading techniques are but a few. These are considered abusive in nature and are increasingly being shunned by the public, various professional groups and the Courts (Drizin & Leo 2004; Kassin et al., 2010b; Kassin et al., 2010a). There are, however, other less abusive techniques that also aim to manipulate the interviewee who is being interrogated. These are viewed as coercive in that they are likely to render a confession that is not the product of the interviewee's free will regardless of whether free will was actually actively overcome (Gudjonsson et al., 2008). Coercive tactics include manipulation and deception (e.g., falsely claiming that evidence exists when it does not) and the failure to consider important individual difference factors (e.g., the limited cognitive abilities of the interviewee). Coercive tactics have been implicated in false confessions and the legal acceptability of these tactics depends on local policies (e.g., Canadian laws do not allow for the use of false evidence during interrogations that some other jurisdictions permit).

There are two major concerns with the use of coercive techniques. First, the probability is strong that memory, both in terms of content and accuracy, will be adversely affected in direct

proportion to the amount/severity of the coercive techniques that are employed (Hervé et al., 2007). The second concern relates to the possibility that the individual being interviewed or interrogated may not have engaged in the suspected activity or may not possess the knowledge being sought (Drizin & Leo 2004; Kassin et al., 2010a). This is not a statement of fact but a constant reminder that the purpose of the interview is to develop as much accurate information as possible from the interviewee without presupposing that the interviewee must know anything about what actually happened. By adopting this attitude, the interviewer is much more likely to consider alternate investigative hypotheses, ask more open-ended questions, allow the interviewee more narrative latitude, avoid coercive and unethical tactics, and consider lesser explanations for false or misleading information. In fact, this attitude forces the interviewer to work diligently at developing the information necessary to make accurate judgments about the interviewee. In contrast, the use of torture and other coercive or unethical tactics, by definition, presupposes that the individual has the information and that it is just a matter of breaking his or her will to withhold it.

Sin Number 15: Not Corroborating Information

The final sin of interviewing reviewed in this chapter occurs when the interviewer fails to corroborate the information gained in the interview (Drizin & Leo 2004). As noted above, the "truth" is whatever the interviewee believes to be true and there are a host of reasons why this "truth" may be historically wrong. It is, therefore, always important to find out why the interviewee believes the information to be true. It then becomes the responsibility of the interviewer to conduct a follow-up investigation to determine whether or not the information can be corroborated. Only then will the interviewer know for sure that what was said by the

interviewee was, in fact, true or not. Corroborating statements would go a long way to reducing incidences of wrongful convictions due to false confessions and/or false claims of victimization (Kassin et al., 2010a; Marin, 2012).

Conclusion

This chapter covers 15 sins of interviewing that have been identified through practical experience and the collaboration between law enforcement professionals and academics/researchers. This chapter also provided practical suggestions for overcoming these sins. The first three sins are arguably the cardinal sins of interviewing in that they account for the development and/or maintenance of the remaining 12 sins. Avoiding these cardinal sins would, therefore, go a long way towards promoting effective interviewing skills. It seems only reasonable to assume that, if some of the major mistakes associated with the practice and research of interviewing could be identified and, therefore, avoided, the result would be more effective interviews and more complete and accurate information

Many of these sins reflect insufficient or improper training, and point to the need for scientifically-based training in investigative interviewing that is both practical and delivered in a way that maximizes learning and generalizing of skills to the real world. Arguably, the most effective training is developed through collaborative efforts between law enforcement professionals and academics, and delivered by subject matter experts who are also qualified instructors that can effectively communicate, demonstrate, and convey the training content. For now, the reader is reminded that the probability of conducting a successful interview that results in accurate information is enhanced when the following steps are followed:

1. Be <u>A</u>ware of the personality characteristics, traits, and background of the interviewer and the interviewee;

- 2. Determine the <u>Baseline</u> behaviour of the interviewee;
- 3. Watch for Changes in the interviewee's behaviour during the interview;
- 4. Actively listen and watch for <u>D</u>iscrepancies between the interviewee's behaviour and the verbal content of the statements;
- 5. Be willing to Engage and challenge the interviewee when deception possibly occurs; and,
- 6. Conduct a <u>F</u>ollow-up investigation to corroborate the interviewee's statements.

References

- Akehurst, L., Kohnken, G., Vrij, A., & Bull, R. (1996). Lay persons' and police officers' beliefs regarding deceptive behavior. *Applied Cognitive Psychology*, *10*, 461–471.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders*, (4th Ed., Text Revision), Washington, DC: Author.
- Blair, R.J.R., Sellars, C., Strickland, I., Clark, F., Williams, A. O., Smith, M., et al. (1995).

 Emotion attributions in the psychopath. *Personality and Individual Differences*, 19, 431-437.
- Blanchette, I. & Richards, A. (2010). The influence of affect on higher level cognition: A review of research on interpretation, judgement, decision making and reasoning. *Cognition and Emotion*, 24(4), 561-595.
- Brewer, N. & Wells, G.L. (2011). Eyewitness identification. *Current Directions in Psychological Science*, 20(1), 24-27.
- Bruck, M., Ceci, S.J., & Hembrooke, H. (1998). Reliability and credibility of young children's reports: From research to policy and practice. *American Psychologist*, *53*, 136-151.
- Bull, R. (2010). The investigative interviewing of children and other vulnerable witnesses:

 Psychological research and working/professional practice. *Legal and Criminological Psychology*, 15(1), 5-23.
- Christianson, S.-A. (1992). Emotional stress and eyewitness memory: A critical review. *Psychological Bulletin, 112*, 284-309.
- Christianson, S.-A. (2007). *Offenders' memories of violent crimes*. Chichester, England: John Wiley and Sons.
- Colwell, K., Hiscock, C.K., & Memon, A. (2002). Interviewing techniques and the assessment of statement credibility. *Applied Cognitive Psychology*, *16*, 287-300.

Conway, M. A. (1997). Introduction: What are memories? In M.A. Conway (Ed.), *Recovered memories and false memories*, (pp.1-22). Oxford: Oxford University press.

- Cooper, B.S., Cuttler, C., Dell, P., & Yuille, J.C. (2006). Dissociation and amnesia: A study with male offenders. *International Journal of Forensic Psychology*, *1*(3), 69-83.
- Cooper, B.S., Hervé H., & Yuille, J.C. (2009). Evaluating truthfulness: Detecting truths and lies in forensic contexts. In R. Bull, T. Valentine & T. Williamson (Eds.), *Handbook of Psychology of Investigative Interviewing*, (pp. 301-328). Chichester, England: Wiley-Blackwell.
- Damphousse, K. (2008). Voice stress analysis: Only 15 percent of lies about drug use detected in field test. *National Institute of Justice Journal*, 259. Retrieved from http://www.nij.gov/journals/259/voice-stress-analysis.htm
- Daylen, J., van Tongeren Harvey, W., & O'Toole, D. (2006). *Trauma, trials, and transformation: Guiding sexual assault victims through the legal system and beyond.*Toronto, Ontario: Irwin Law Inc.
- DePaulo, B.M., Kashey, D.A., Kirkendol, S.E., Wyer, M. M., & Epstein, J. A. (1996). Lying in everyday life. *Journal of Personality and Social Psychology*, 70, 979–995.
- Drizin, S.A. & Leo, R.A. (2004). The problem of false confessions in the post-DNA world.

 North Carolina Law Review, 82, 891–1007.
- Ekman, P. (2009). *Telling lies: Clues to deceit in the marketplace, politics, and marriage*. New York: W. W. Norton & Co.
- Ekman, P. (2003). *Emotions revealed: Recognizing faces and feeling to improve communication and emotional life*. New York: Henry Holt and Company.
- Ekman, P. & O'Sullivan, M. (1991). Who can catch a liar? American Psychologist, 46, 913-920.

Ekman, P, O'Sullivan, M., Friesen, W.V., & Scherer, K.R. (1991). Face, voice, and body in detecting deceit. *Journal of Nonverbal Behavior*, 15, 125–135.

- Erdelyi, M.H., & Kleinbard, J. (1978). Has Ebbinghaus decayed with time? The growth of recall (hypernesia) over days. *Journal of Experimental Psychology: Human Learning and Memory*, 4, 275-289.
- Fisher, R.P. & Geiselman, R.E. (1992). *Memory-enhancing techniques for investigative interviewing: The cognitive interview*. Springfield, II: Charles C Thomas.
- Frank, M.G. & Ekman, P. (1997). The ability to detect deceit generalizes across different types of high-stake lies. *Journal of Personality and Social Psychology*, 72(6), 1429-1439.
- Ford, E.B. (2006). Lie detection: Historical, neuropsychiatric and legal dimensions. *Internal Journal of Law and Psychiatry*, 29, 159–177.
- Geiselman, R.E. (1999). Commentary on recent research with the cognitive interview. *Psychology, Crime & Law, 5*(1-2), 197-202.
- Griesel, D. & Yuille, J.C. (2007). Credibility assessment in eyewitness memory. In M.P. Toglia, J.D. Read, D.F. Ross & R.C.L. Lindsay (Eds.), *Handbook of eyewitness psychology. Volume I, Memory for events* (pp. 339–370). Mahwah, NJ: Lawrence Erlbaum.
- Gudjonsson, G.H. & Joyce, T. (2011). Interviewing adults with intellectual disabilities.

 Advances in Mental Health and Intellectual Disabilities, 5(2), 16-21.
- Gudjonsson, G.H., Sigurdsson, J.F., Sigfusdottir, I.D., & Asgeirsdottir, B.B. (2008). False confessions and individual differences: The importance of victimization among youth. *Personality and Individual Differences*, 45(8), 801-805.
- Hare, R.D. (1998). Without conscience: The disturbing world of the Psychopaths Among Us. New York, NY: Guilford Press.

Hervé, H., Cooper, B.S., & Yuille, J.C. (2007). Memory formation in offenders: Perspectives from a biopsychosocial theory of eyewitness memory. In S.A. Christianson (Ed.), *Offenders' memories of violent crimes*, (pp. 37-74). Chichester, England: John Wiley and Sons.

- Horowitz, S.W. (1991). Empirical support for statement validity assessment. *Behavioral Assessment*, 13, 293–313.
- Inbau, F.E., Reid, J.E., Buckley, J.P., & Jayne, B.C. (2001). *Criminal interrogation and confessions* (4th ed.). Gaithersberg, MD: Aspen.
- Kassin, S.M., Appleby, S.C., & Perillo, J.T. (2010b). Interviewing suspects: Practice, science, and future directions. *Legal and Criminological Psychology*, *15*, 39–55.
- Kassin, S.M., Drizin, S.A., Grisso, T., Gudjonsson, G.H., Leo, R.A., & Redlich A.D. (2010a).

 Police-induced confessions: Risk factors and recommendations. *Law and Human Behaviour*, 34, 3–38.
- Lamb, M.E., Orbach, Y, Sternberg, K.J., Hershkowitz, I., & Horowitz, D. (2000). Accuracy of investigators' verbatim notes of their forensic interviews with alleged child abuse victims. *Law and Human Behavior*, 24(6), 699-708.
- Lamb, M.E., Sternberg, K.J., Esplin, P.W., Hershkowitz, I., Orbach, Y., & Hovav, M. (1997).
 Criterion-Based Content Analysis: A field validation study. *Child Abuse & Neglect*, 21(3), 255-264.
- Loftus, E.F. (1979). Eyewitness testimony. Cambridge, MA: Harvard University Press.
- Mann, S., Vrij, A., Nasholm, E., Warmelink, L., Leal, S. & Forrester, D. (2012). The Direction of Deception: Neuro-Linguistic Programming as a Lie Detection Tool. *Journal of Police and Criminal Psychology*. ISSN 1936-6469 10.1007/s11896-011-9097-8

Marin, R.J. (February, 2012) *Admissibility of statements: Recent developments*. Paper presented at the RCMP conference, Surrey, BC.

- McCarthy, A., Lee, K., Itakura, S., & Muir, D.W. (2006). Cultural display rules drive eye gaze during thinking. *Journal of Cross-Cultural Psychology*, *37*, 717–722.
- Morrison, J. (2008). The first interview (3rd ed.). New York, NY: The Guilford Press.
- Pollock, P.H. (1999). When the killer suffers: Post-traumatic stress reactions following homicide.

 Legal and Criminological Psychology, 4, 185-202.
- Porter, S., Birt, A. R., Yuille, J.C., & Hervé, H.F. (2001). Memory for murder: A psychological perspective on dissociative amnesia in forensic contexts. *International Journal of Law and Psychiatry*, 24, 23-42.
- Porter, S. & ten Brinke, L. (2010). The truth about lies: What works in detecting high-stakes deception? *Legal and Criminological Psychology*, 15, 57-75.
- Porter, S., Woodworth, M., & Birt, A.R. (2000). Truth, lies and videotape: An investigation of the ability of federal parole officers to detect deception. *Law and Human Behavior*, 24, 643–658.
- Porter, S. & Yuille, J.C. (1996). The language of deceit: An investigation of the verbal clues to deception in the interrogation context. *Law and Human Behavior*, 20, 442–458.
- Ruby, C.L., & Brigham, J.C. (1997). The usefulness of the Criteria-Based Content Analysis technique in distinguishing between truthful and fabricated allegations: A critical review. *Psychology, Public Policy, and Law, 3*(4), 705-737.
- Schacter, D.L. (1996). Searching for memory. New York: Basic Books.
- Schacter, D.L. (2001). *The seven sins of memory: How the mind forgets and remembers*. New York: Houghton Mifflin Company.

Spidel, A., Hervé, H.F., Greaves, C., Cooper, B.S., & Hare, R.D. (2003). Psychopathy and deceptive motivations in young offenders. In M. Vanderhallen, G. Vervaeke, P.J. Van Koppen & J. Goethals (Eds.), *Much ado about crime: Chapters on psychology and law* (pp. 287-299). Politeia.

- Stanovich, K. E. (2009). What intelligence tests miss: The psychology of rational thought. New Haven, CT: Yale University Press.
- Steller, M. (1989). Recent developments in statement analysis. In J.C. Yuille (Ed.), *Credibility assessment* (pp. 135-154). Dordrecht: Kluwer Academic.
- Steller, M. & Koehnken, G. (1989). Criteria-based statement analysis: Credibility assessment of children's testimonies in sexual abuse cases. In D.C. Raskin (Ed.), *Psychological methods in criminal investigation and evidence* (pp. 217-245). New York: Springer.
- ten Brinke, L., Porter, S., & Baker, A. (in press). Darwin the detective: Observable facial muscle contractions reveal emotional high-stakes lies. *Evolution and Human Behavior*.
- ten Brinke, L. & Porter, S. (in press). Cry me a river: Identifying the behavioural consequences of extremely high-stakes interpersonal deception. *Law and Human Behavior*.
- Tollestrup, P.A., Turtle, J.W., & Yuille, J.C. (1994). Actual victims and witnesses to robbery and fraud: An archival analysis. In D. Ross, D. Read & S. Ceci (Eds.), *Adult eyewitness testimony: Current trends and developments*, (pp. 144-162). New York: Press syndicate of the University of Cambridge.
- Undeutsch, U. (1989). The development of statement reality analysis. In J.C. Yuille (Ed.), *Credibility assessment*, (pp. 101–120). Dordrecht: Kluwer Academic.
- Vrij, A. (2000). Detecting lies and deceit: The psychology of lying and the implications for professional practice. Chichester: Wiley.

Vrij, A. (2004). Why professionals fail to catch liars and how they can improve. *Legal and Criminological Psychology*, *9*, 159–181.

- Vrij, A. (2005). Criteria-based content analysis: A qualitative review of the first 37 studies.

 *Psychology, Public Policy, & the Law, 11(1), 3-41.
- Vrij, A. & Granhag, P.A. (2007). Interviewing to detect deception. In S.A. Christianson (Ed.), *Offenders' memories of violent crimes*, (pp. 279–304). Chichester: John Wiley & Sons.
- Vrij, A., Granhag, P.A., & Mann, S. (2010). Good liars. *The Journal of Psychiatry and Law, 38*, 77-98.
- Williamson, T. (2006). *Investigative interviewing: Rights, research, and regulation*. Portland, Or: Willan Publishing.
- Yuille, J. C. (1988). The systematic assessment of children's testimony. *Canadian Psychology*, 29(3), 247–262.
- Yuille, J. C. (1989). Credibility assessment. Dordrecht: Kluwer Academic.
- Yuille, J. C. (1990). *Use of the criteria based content analysis*. Unpublished manuscript. University of British Columbia. Vancouver, BC.
- Yuille, J. C. (2007). Adult interview guidelines. Unpublished manuscript.
- Yuille, J.C., Cooper, B.S., & Hervé H.F. (in press). The step-wise guidelines for child interviews: The new generation. In M. Casonato & Pfafflin (Eds.), *Handbook of Pedosexuality and Forensic Science*.
- Yuille, J. C., & Daylen, J. (1998). The impact of traumatic events on eyewitness memory. In C.
 Thompson, D. Herman, D. Read, D. Bruce, D. Payne, & M. Toglia (Eds.), *Eyewitness memory: Theoretical and applied perspectives*, (pp. 155-178). Mahwah, New Jersey:
 Lawrence Erlbaum Associates.

Author Note

The authors are grateful to Susan Kim, Barry Cooper, Dorothee Griesel and Marguerite

Ternes for their helpful comments on earlier drafts of this chapter.

Please address all correspondence concerning this manuscript to either John Yarbrough at johnyarbro@npgcable.com or Hugues Hervé, Ph.D. at hherve@theforensicalliance.com.