

Memory for Everyday and Emotional Events

Edited by

Nancy L. Stein
University of Chicago

Peter A. Ornstein
University of North Carolina at Chapel Hill

Barbara Tversky
Stanford University

Charles Brainerd
University of Arizona

CHAPTER

14

LYING AND DECEPTION

Paul Ekman
University of California, San Francisco

LEA LAWRENCE ERLBAUM ASSOCIATES, PUBLISHERS
1997 Mahwah, New Jersey

Questions about truthfulness occur in many contexts—when parents ask their children if they are using recreational drugs, when an employer ask applicants about the reasons they left their last job, when international leaders consider each others' threats or promises, when voters evaluate candidates' promises, when physicians consider a patient's complaint, when at the start of a romantic encounter claims about the number of prior sexual partners are evaluated, and when juries evaluate witness testimony. In all of these instances many sources of information are used to evaluate whether someone is being truthful. My focus here has solely been on those judgments that are based on a person's demeanor.

Before I turn to this, I first explain my definition of lying and how I distinguish lies from secrets, self-deception, and other kinds of deceit. I then discuss some of the difficulties in using that definition, when people believe what is false to be true. Next I consider the different motives that underlie the decision to tell a lie. I then discuss two principal reasons why lies fail and close by reviewing some of our most recent research on how difficult it is to judge whether someone is lying or telling the truth.¹

¹Much of what I cover has been published in the second edition of *Telling Lies* (Ekman, 1992) or in articles listed in the reference section of this chapter. An exception is new distinctions between concealment lies and secrets I introduce in the first section of this chapter.

LYING AND SELF-DECEPTION

The intent of the liar is one of the two criteria for distinguishing lies from other kinds of deception. The liar *deliberately* chooses to mislead the target. Liars may actually tell the truth, but that is not their intent. Truthful people may provide false information—bad advice may come from stock brokers—but that is not their intent. The liar has choice; the liar could choose not to lie. Presumably, a pathological liar is compelled to lie and, by my definition, therefore is not a liar.

The second criterion for distinguishing lies from other deceptions is that the target is not notified about the liar's intention to mislead. A magician is not a liar by this criterion, but Uri Geller is a liar, because Geller claimed his tricks were not magic. An actor is not a liar but an impostor is. Sometimes notification of an intention to mislead is implicit in the *framing*, to use Goffman's (1974) term, of the situation. Let the buyer beware is one example of an explicit warning that products or services may not be what they are purported. (Of course, that warning does not appear in advertisements, nearly all of which are designed to convey the opposite message.) In real estate transactions, the potential buyer is implicitly notified that the seller's asking price is not the actual price the seller would accept. Various forms of politeness are other instances in which the nature of the situation notifies the target that the truth may not be spoken. The host would not properly scrutinize the dinner guest to determine if the guest's claim to have enjoyed the evening is true anymore than the aunt should worry whether the nephew is lying when he says that he appreciated being given a tie for Christmas. Deception is expected; even if the target might suspect that the truth is not being told it is improper to question it. Poker is still another situation in which the rules of the game sanction and notify the players that deception will occur, and therefore one can not consider bluffing to be a lie. In some situations only certain types of deception are allowable. The poker player cannot use marked cards, nor can the home seller conceal a known defect.

Courtship is probably an ambiguous situation regarding expectations of truthfulness. The saying "all's fair in love and war" would seem to warn lovers not to believe all they are told. Recent public opinion polls suggest that lies that diminish the number of previous sexual partners are common among college-aged adults. However, I expect that lovers want to believe in the truthfulness of their partners and popular songs testify to the betrayal felt when lies are discovered. Poets have brilliantly explained how romance may be considered a form of collusion to develop and maintain myths about each other.

I differ from Bok (1982), who only considered false statements to be lies. I (Ekman, 1985) argued that concealment is just as much a lie as falsification, as long as there is an expectation that concealment will not occur. My daughter knows that if she gets into trouble at school and the head teacher

14. LYING AND DECEPTION

gives her a "slip"—a formal warning that she may be suspended if the offense is repeated—she must tell me about it. If she does not inform me, she is lying. I do not need to ask her each evening, "Did you get into trouble at school?" She is obligated to reveal that information, and to conceal it is to deliberately mislead me without giving notification.

Marriages differ regarding the obligation to report without being asked if an extramarital affair has begun. If there is an explicit agreement to that effect, then I consider the failure to volunteer such a report a lie. If there is no such agreement, then such a concealment would not qualify to be designated a lie. Commonly partners differ about their expectations, or at least about their memory of what their mutual obligations were regarding the reports of such liaisons.

Suppose a president had a minor stroke during the middle of his term of office, and the doctors concealed it. They would have committed a concealment lie, because the American public expects to be told about a change in a president's health that affects his ability to do his job. Concealment and falsification are two different techniques for accomplishing the same objective. There are many reasons why liars will always prefer concealment to falsification if the situation allows it: The liar does not need to remember the false story; if caught, she can always claim she was just about to reveal the truth, or that she did not because she was certain the target knew what was going on.

Concealment and falsification are not the only techniques of lying, although they are the most common. I (Ekman, 1985) distinguished three other techniques. *Telling the truth falsely* is when the liar speaks the truth in such a way as to seem to mean the opposite of what is said. Consider the situation in which a wife asks her husband whether he met any attractive women on his business trip and he replies, "I sure did, I slept with a different one every night, and sometimes another one during the lunch break." If that was indeed the case, then the philandering husband would be telling the truth, but in a manner which implies that he was faithful. Another technique is to tell a *half truth* as if it was a whole truth. The wife who is asked by her husband if she is attracted to the next door neighbor is telling a half truth if she replies "he's nice" if she indeed is having an affair with him. What she has said is true, but she is deliberately leaving out crucial information to mislead her husband. The *incorrect inference dodge* was identified by a newspaper columnist who recommended it as the solution to the problem of not wanting to be truthful to a friend who puts you on the spot. Suppose your friend has, for example, an exhibition of her paintings, and you think her work is terrible. The incorrect inference dodge would be to reply to her question about whether you like the paintings by saying, "Incredible, I can't believe it, how did you do that!"

Bok (1982) defined intentional concealment as *secrecy*. I think that confuses matters, for notification is the issue in distinguishing secrecy from conceal-

ment lies. I reserve the term secrecy for a situation in which notification is given about the intention not to reveal information. By calling something a secret we state our right not to reveal, to maintain privacy. Secrets may remain within one individual, or two or more people may maintain information they consider secret from others. To return to earlier examples, if my daughter has not told me about the trouble in school, it is not a secret, but a concealment lie. When I ask her if she has a boyfriend, she may properly tell me, "That is a secret." If she does indeed have a boyfriend, then she has concealed that from me, but because it is acknowledged it is termed a secret. Suppose I have not asked her about this, but she knows of my interest from past conversations. If she does have a boyfriend but does not tell me, she is engaging in concealment but it is not a secret, because she has not acknowledged her right to conceal the truth, and it is not a lie because she has not agreed that there is an obligation to inform.

Self-deception presumably occurs when the deceiver does not realize he is misleading himself, and does not know his own motive for deceiving himself. My discussion of the actions that led up to the Challenger space shuttle disaster in Ekman (1992) illustrates the subtle issues involved in distinguishing self-deception from rationalization, an attempt to excuse bad judgment, or repression:

The space shuttle launch on January 28, 1986 was seen by millions on television. This launch had been highly publicized because the crew included a schoolteacher, Christa McAuliffe. The television audience included many schoolchildren including Ms. McAuliffe's own class. She was to have given a lesson from outer space. But just seventy-three seconds after launch, the shuttle exploded killing all seven on board.

The night before the launch a group of engineers at Morton Thiokol, the firm that had built the booster rockets, officially recommends that the launch be delayed because the cold weather forecast for overnight might severely reduce the elasticity of the rubber O-ring seals. If that were to happen, leaking fuel might cause the booster rockets to explode. The engineers at Thiokol called the National Aeronautic and Space Administration (NASA), unanimously urging postponement of the launch scheduled for the following morning.

There had already been three postponements in the launch date, violating NASA's promise that the space shuttle would have routine, predictable launch schedules. Lawrence Mulloy, NASA's rocket project manager, argued with the Thiokol engineers, saying there was not enough evidence that cold weather would harm the O-rings. Mulloy talked that night to Thiokol manager Bob Lund, who later testified before the Presidential commission appointed to investigate the Challenger disaster. Lund testified that Mulloy told him that night to put on his "management hat" instead of his "engineering hat." Apparently doing so Lund changed his opposition to the launch overruling his own engineers. Mulloy also contacted Joe Kilminster, one of the vice presidents at Thiokol, asking him to sign a launch go ahead. He did so at 11:45 p.m., faxing a launch recommendation to NASA. Allan McDonald, who was

director of Thiokol's rocket project refuses to sign the official approval for the launch. Two months later McDonald was to quit his job at Thiokol.

Later the Presidential commission discovered that four of NASA's key senior executives responsible for authorizing each launch never were told of the disagreement between Thiokol engineers and the NASA rocket management team on the night the decision to launch was made. Robert Sieck, shuttle manager at the Kennedy Space Center; Gene Thomas, the launch director for *Challenger* at Kennedy; Arnold Aldrich, manager of space transportation systems at the Johnson Space Center in Houston; and Shuttle director Moore all were to later testify that they were not informed that the Thiokol engineers opposed a decision to launch.

How could Mulloy have sent the shuttle up knowing that it might explode? One explanation is that under pressure he became the victim of self-deceit, actually becoming convinced that the engineers were exaggerating what was really a negligible risk. If Mulloy was truly the victim of self-deceit can we fairly hold him responsible for his wrong decision? Suppose someone else had lied to Mulloy and told him there was no risk. We certainly would not blame him for then making a wrong decision. Is it any different if he has deceived himself? I think probably not, if Mulloy truly has deceived himself. The issue is was it self-deception or bad judgment, well rationalized?

To find out let me contrast what we know about Mulloy with one of the clear cut examples of self-deceit discussed by experts who study self-deception (Lockard & Paulhus, 1988). A terminal cancer patient who believes he is going to recover even though there are many signs of a rapidly progressing, incurable malignant tumor, maintains a false belief. Mulloy also maintained a false belief, believing the shuttle could be safely launched. (The alternative that Mulloy knew for certain that it would blow up I think should be ruled out). The cancer patient believes he will be cured, despite the contrary strong evidence. The cancer patient knows he is getting weaker, the pain is increasing, but he insists these are only temporary setbacks. Mulloy also maintained his false belief despite the contrary evidence. He knew the engineers thought the cold weather would damage the O-ring seals, and if fuel leaked the rockets might explode, but he dismissed their claims as exaggerations.

What I have described so far does not tell us whether either the cancer patient or Mulloy is a deliberate liar or the victim of self-deceit. The crucial requirement for self-deceit is that the victim is unaware of his motive for maintaining his false belief. [It might seem that self-deceit is just another term for Freud's concept of repression. There are at least two differences. In repression the information concealed from the self arises from a deep-seated need within the structure of the personality, which is not typically the case in self-deception. And some maintain that confronting the self-deceiver with the truth can break the deceit, while in repression such a confrontation will not cause the truth to be acknowledged. See discussion of these issues in Lockard and Paulhus, 1988.] The cancer patient does not consciously know his deceit is motivated by his inability to confront his fear of his own imminent death. This element—not being conscious of the motivation for the self-deceit—is missing for Mulloy. When Mulloy told Lund to put on his management

hat, he showed that he was aware of what he needed to do to maintain the belief that the launch should proceed.

Richard Feynman, the Nobel laureate physicist who was appointed to the Presidential commission which investigated the *Challenger* disaster, wrote as follows about the management mentality that influenced Mulloy. "[W]hen the moon project was over, NASA . . . [had] to convince Congress that there exists a project that only NASA can do. In order to do so, it is necessary—at least it was *apparently* necessary in this case—to exaggerate: to exaggerate how economical the shuttle would be, to exaggerate how often it could fly, to exaggerate how safe it would be, to exaggerate the big scientific facts that would be discovered" (Feynman, 1988). *Newsweek* magazine said, "In a sense the agency seemed a victim of its own flackery, behaving as if space-flight were really as routine as a bus trip."

Mulloy was just one of many in NASA who maintained those exaggerations. He must have feared Congressional reaction if the shuttle had to be delayed a fourth time. Bad publicity which contradicted NASA's exaggerated claims about the shuttle might affect future appropriations. The damaging publicity from another postponed launch date might have seemed a certainty. The risk due to the weather was only a possibility, not a certainty. Even the engineers who opposed the launch were not absolutely certain there would be an explosion. Some of them reported afterwards thinking only seconds before the explosion that it might not happen.

We should condemn Mulloy for his bad judgment, his decision to give management's concerns more weight than the engineers' worries. Hank Shuey, a rocket-safety expert who reviewed the evidence at NASA's request said, "It's not a design defect. There was an error in judgment." We should not explain or excuse wrong judgments by the cover of self deception. We should also condemn Mulloy for not informing his superiors, who had the ultimate authority for the launch decision, about what he was doing and why he was doing it. Feynman offers a convincing explanation of why Mulloy took the responsibility on himself. "[T]he guys who are trying to get Congress to okay their projects don't want to hear such talk [about problems, risks, etc.]. It's better if they don't hear, so they can be more 'honest'—they don't want to be in the position of lying to Congress! So pretty soon the attitudes begin to change: information from the bottom which is disagreeable—'We're having a problem with the seals; we should fix it before we fly again'—is suppressed by big cheeses and middle managers who say, 'If you tell me about the seals problems, we'll have to ground the shuttle and fix it.' Or, 'No, no, keep on flying, because otherwise, it'll look bad', or 'Don't tell me; I don't want to hear about it. Maybe they don't say explicitly 'Don't tell me', but they discourage communication which amounts to the same thing" (Feynman, 1988).

Mulloy's decision not to inform his superiors about the sharp disagreement about the shuttle launch could be considered a lie of omission, [a concealment lie]. . . .

If Feynman is correct, if the NASA higher-ups had discouraged communication, essentially saying "don't tell me," then this might constitute notification. Mulloy and presumably others at NASA knew that bad news or difficult

decisions were not to be passed to the top. If that was so then Mulloy should not be considered a liar for not informing his superiors, for they had authorized the deceit, and knew they would not be told. In my judgment the superiors who were not told share some of the responsibility for the disaster with Mulloy who did not tell them. The superiors have the ultimate responsibility not only for a launch decision but for creating the atmosphere in which Mulloy operated. They contributed to the circumstances which led to his bad judgment, and for his decision not to bring them in on the decision.

Feynman notes the similarities between the situation at NASA and how mid level officials in the Iran-Contra affair, such as Poindexter, felt about telling President Reagan what they were doing. Creating an atmosphere in which subordinates believe that those with ultimate authority should not be told of matters for which they would be blamed, providing plausible deniability to a President, destroys governance. Former President Harry Truman rightly said "the buck stops here." The President or Chief Executive Officer must monitor, evaluate, decide and be responsible for decisions. To suggest otherwise may be advantageous in the short run, but it endangers any hierarchal organization, encouraging loose cannons and an environment of sanctioned deceit. (pp. 308-315)

A *broken promise* is not a lie. A week before President Clinton took office, a reporter charged that he had broken his campaign promise about Haitian immigration because he was now adopting the position of former President Bush—a policy he had criticized during the election campaign. With a trace of anger Clinton defended himself, saying that the American people would think he was foolish if he did not change his policies when circumstances change. From my framework Clinton was lying only if he had known at the time he criticized Bush that he intended to follow the same policy himself. Consider the charge that when President Bush raised taxes near the end of his term of office he should be considered a liar. Certainly he had earlier in his campaign promised not to raise taxes, but he could only be branded a liar if it could be proven he knew when he made that promise that he intended to break it.

The *failure to remember* is not a lie, although liars will often try to excuse their lies, once discovered, by claiming a memory failure. It is not uncommon to forget actions that one regrets, but if the forgetting truly has occurred, we should not consider that a lie, for there was no choice involved. Often it will not be possible to determine whether a memory failure has occurred or whether its invocation is itself a lie.

BELIEVING WHAT IS FALSE TO BE TRUE

If someone provides a false account of what truly occurred, it does not necessarily mean the person intended to mislead, and, as I explained earlier, if there is not a deliberate intent to mislead, a false statement should not

be considered a lie. Why should it matter what we call a false statement? It is not simply a matter of semantics or definition. If the person is not lying, if the person does not believe he is engaged in deception at the moment he is doing it, then I expect his demeanor will be that of a truthful person. There should be no behavioral clues that the account is untrue if the person giving the account does not believe he is lying at the moment he gives the account. Although I have no direct evidence for this prediction, it is consistent with my (Ekman, 1985) general theory of when demeanor will betray a lie, and other evidence (Ekman, Friesen, & O'Sullivan, 1988; Ekman, O'Sullivan, Friesen, & Scherer, 1991) does support that account. There are a number of ways in which people may provide false information that they believe to be true.

People do misinterpret events, especially the meaning of other people's actions and the motives that lead people to act in one way or another. The fact that someone interprets matters in a way that reflects well on her, a way that allows her to engage in actions she finds desirable, does not mean that she is necessarily lying rather than misinterpreting. I would not necessarily consider such an occurrence an instance of self-deception. Not every misunderstanding or misinterpretation is self-deception.

Consider an alleged rapist who claims that his victim wanted to have sex with him. Even though rapists who do know they had totally unwilling victims could often make this claim, lying to avoid punishment, the claim itself does not tell us that it is false. Even if it is improbable, it conceivably might be true. Suppose it was a date rape, and the victim was shy or very fearful, protested only once, and not very strongly, and then did not resist. A rapist could misinterpret the initial protest and construe the subsequent lack of protest and passivity as consent. Would that rapist be a victim of self-deceit? Not, I believe, unless it was certain that he had no awareness that his misinterpretation of his victim's behavior was motivated by a wish to gratify his own needs. Did a rape occur? I believe the answer must be yes, although the rapist may not think it did, and may be telling his truth when he claims his victim implicitly consented. And one of the reasons why someone who makes such a claim might appear believable in their demeanor is that they believe their claim, and do not believe they are lying. (See Cross & Saxe, 1992, for a discussion of this problem in the context of their critique of the use of polygraph testing in child sexual abuse cases.)

Of course, that is not the only reason why someone may appear totally believable. I initially (Ekman, 1985) used the term *natural liar* to designate those people whose lies are seamless, whose demeanor is totally believable when they know they are lying. I have since (Ekman, 1992) changed the term to *natural performer*, because my studies suggest that they are not psychopaths, nor necessarily antisocial. Natural performers have the capacity to become the role they are playing, to near instantly believe for at time

whatever they are saying, and because they believe they are saying the truth, their demeanor is totally credible.

Misinterpreting is not the only route by which someone may believe their false account is true. A person may initially know he is lying, but over time he may come to believe in his lie. If that happens, once he has come to believe his lie is a faithful account of what transpired, he may appear truthful. Consider a child molester who, when first accused, claimed that he was only cuddling the child, doing nothing that was really wrong, nothing the child did not want and enjoy. Even though he initially knew he was lying in his account, over time, with many repetitions of his lie, a molester could, I believe, come to believe his false story is true. It is conceivable that he could maintain in consciousness both the memory of the true event, that he forcibly abused the child, and the constructed belief that he only cuddled a willing child. In addition, the true memory might over time become much less accessible than the constructed belief, or perhaps not accessible at all.

Consider a child who deliberately lies, alleging that a teacher molested her, knowing that never occurred. Suppose the lying child was motivated by a wish to punish the teacher for having humiliated the child in class for not having done well on a test. If the child felt entitled to her revenge, she might reason that this was the kind of teacher who might have molested her, probably wanted to molest her, probably had molested other children, and so on. I believe we cannot rule out the possibility that, over time, with many repetitions and elaborations, the child could come to believe she had been molested.

These examples are troublesome because we do not know often they may occur; nor do we know if children are more vulnerable than adults to believing what is false is true, or whether there are specific personality characteristics associated with this phenomena. We have no certain way as yet to determine whether a memory is true, partially, or totally constructed. We do have ways, which I describe later to distinguish a false account, but only when the person giving that account knows he or she is giving a false account.

MOTIVES FOR LYING

My interviews with children (Ekman, 1989) and my data on adults from questionnaires suggests nine different motives for lying:

1. To avoid being punished. This is the most frequently mentioned motive by either children or adults. The punishment may be for a misdeed or for an accidental mistake.
2. To obtain a reward not otherwise readily obtainable. This is the second most commonly mentioned motive, by both children and adults.

3. To protect another person from being punished.
4. To protect oneself from the threat of physical harm. This is different from being punished, for the threat of harm is not for a misdeed. An example would be a child who is home alone telling a stranger at the door that his father is asleep now, to come back later.
5. To win the admiration of others.
6. To get out of an awkward social situation. Examples are claiming to have a babysitter problem to get out of dull party, or ending a telephone conversation by saying there is someone at the door.
7. To avoid embarrassment. The child who claims the wet seat resulted from water spilling, not wetting her pants, is an example if the child did not fear punishment, but only embarrassment.
8. To maintain privacy, without giving notification of the intention to maintain some information as private.
9. To exercise power over others, by controlling the information the target has.

I am not certain that every lie would necessarily fit under one of these nine motives, but these are the motives that emerged from the interview data I collected. There are a variety of trivial deceits, the lies of politeness and tact that are not easily subsumed by these nine motives. By my definition these are not lies, because the rules of politeness imply notification. A more difficult case is a lie required to maintain a surprise birthday party. Perhaps it should fit under the privacy motive.

WHY LIES FAIL

Many lies succeed. It is incumbent on those interested in detecting lies to account for when lies will fail and when they will succeed. Such an account will not only tell us when behavioral clues may betray a lie, and what we should therefore attend to, but will also provide guidelines for deciding which types of experimental deceptive scenarios can provide information relevant to which real-life settings.

Certainly, it is not the arena that determines the success or failure of a lie. It is not that all spousal lies succeed and all political lies fail. Within every arena of life (and when one begins to consider the matter, there are few arenas in which deception does not occur), some lies fail and others succeed.

Lies fail for a variety of reasons that will not concern us here. For example, liars are often betrayed by someone in whom the liar had confided. Liars may also be betrayed by many other kinds of evidence that expose

14. LYING AND DECEPTION

the liar's claims as false. My focus is not on these types of betrayal, but on instances in which the liar's own behavior betrays the lie. I omit from such considerations instances in which the liar confesses (although much of my discussion is relevant to predicting when a liar will confess) or instances in which the liar might be judged to have acted in a way so that he or she would be caught. Instead, I am interested in those cases in which some aspect of the liar's behavior, despite his or her best intentions, betrays the liar's false pretense.

To put it briefly, before expanding on this, there are two reasons why lies fail; one has to do with thinking and the other with feeling. Lies fail either because the liar failed to adequately prepare, or because of the interference of emotions.

I would predict that in general (disregarding the type of lie, who is the liar, and who the target, and recognizing that disregarding these issues to make a general assertion is a very risky stance to take), most lies fail because the liar has not adequately prepared the false line he or she intends to maintain. One obvious, if not very interesting, example is when the liar forgets what he has said on one occasion and thoroughly contradicts himself on another occasion. Here, the source of clues to deceit is in the verbal content. One must be cautious about this, however, because truthful people will contradict themselves. However, I believe it would be possible, although I have not tried to do so, to specify the type of contradictions that are reliable signs of lying.

Another consequence of the failure to adequately prepare is being caught off guard when asked questions the liar had not anticipated and for which the liar has no ready reply. In such a jam the liar must think of a credible answer on the spot. When doing so most people will evidence various behaviors that signify they are thinking about what they are saying as they are talking. Pauses, gaze aversion, speech disfluencies, and speech mannerisms may all increase over what is usual for that person. In addition, the use of the hands to illustrate speech (what Ekman & Friesen, 1969a, termed *illustrators*) may decrease and voice intonation may flatten. Bear in mind that these are not signs of lying per se. There is no behavioral sign of lying itself, I maintain. However, when these signs of thinking about a reply occur in contexts in which answers should be known without thought, they can betray the liar.

Lies are also betrayed by signs of emotions. The simplest case is one in which the liar attempts to convincingly fabricate an emotion that is not felt. Few people are very good at this, although most of the time people get away with it, because rarely does the target of such a lie care whether the emotion displayed is feigned or real. There are what I call "reliable" behavioral signs of emotion; reliable in the sense that few people can display them at all or correctly. Narrowing the red margins of the lips in anger is an example of

such a reliable sign of anger, typically absent when anger is feigned, because most people can not voluntarily make that movement. There are ways around this for the inventive liar, such as utilizing a Stanislavski-like technique to create the actual emotion, so that its involuntary signs will then appear unbidden.

More typically, lies about emotions do not simply involve fabricating an emotion, but concealing an emotion that is actually being experienced. Often, concealment goes hand in hand with fabrication, in which the liar uses a feigned emotion to mask signs of the emotion to be concealed. Such concealment attempts may be betrayed in either of two ways. Some sign of the concealed emotion may escape efforts to inhibit or mask the felt emotion, providing what Ekman and Friesen (1969b) termed *leakage*. What they called a *deception cue*, which does not leak the concealed emotion but betrays the likelihood that a lie is being perpetrated, occurs when only a fragment leaks that is not decipherable. A deception cue also occurs when the very effort of having to conceal produces alterations in behavior that do not fit the liars' line.

Even when the lie is not about emotions, the liar's feelings about lying can betray the lie. Chief among these feelings about lying are the fear of being caught, guilt about lying, and what I have called *duping delight*—the pleasure and excitement of putting one over. Not all lies will call forth these emotions. Whether they do will depend on characteristics of the liar, the target of the lie, and the content of the lie. Elsewhere (Ekman, 1985) I have described in some detail a lying checklist that facilitates making a prediction about the likelihood that any of these emotions about lying will occur.

To give just a few examples, the fear of being caught is highest when the stakes for being caught, the reward that is lost, and especially the punishment for being caught lying is very high. The fear of being caught will also be greater if the liar has not practiced the lie and has not had the experience of having succeeded before in this very lie with this target. If the target is known to be both suspicious and of extraordinary acumen, the fear of being caught will be greater. Guilt about lying will be highest when the liar shares values with and respects the target, when the target is not collusively aiding the lie and does not benefit from the lie, and when the lie is in no way authorized by any social group or institution. Duping delight is enhanced when others who are allies of the liar observe the liar's actions.

Although the arousal of any strong emotion—fear, guilt, or delight—produces changes in behavior that may be detectable, and thereby betray the lie if they do not fit the liar's line, each of these emotions produces some unique behavioral signs. Elsewhere I have explained in detail how these emotions, and the very process of managing emotions, are manifest in face, body, voice, and paralinguistic behavior (Ekman, 1985). Perhaps here it would be useful to mention that there is no one channel that is the best or

most sensitive source for clues to deceit. Every aspect of behavior can provide such clues. There are hints of individual differences as well, in terms of what behavioral source may be most profitable to scrutinize.

An astute lie catcher will assess the likelihood of any of these emotions, so as to better know what behaviors to be especially alert to. Also, such an exercise will alert the lie catcher as to when the truthful person may appear to be lying. One must not make *Othello's error* of presuming that a sign of fear is a sign of lying. The truthful person may, under some circumstances, be afraid of being disbelieved, or guilty, or manifesting delight. The crucial issue is to examine the circumstances, and evaluate whether or not a truthful or lying person would be experiencing these emotions.

Why Is It So Hard to Discern Truthfulness From Demeanor?

Our behavioral measurements of facial expressions and voice can distinguish when someone is lying, in a high stakes lie about emotion felt at the moment, for 85% of the subjects (Ekman et al., 1991). Most observers, however, who are shown the videotapes and asked to judge who is lying do little better than chance, and that is so even for members of the criminal justice community, such as FBI, local police, or judges, as well as for members of the mental health community (Ekman & O'Sullivan, 1991).

I believe there are two reasons why most people are such poor judges of lying. The first reason I have no data to support, but nevertheless I believe that few people obtain corrective feedback about the accuracy of their judgments about who is lying and who is truthful. In workshops in which I try to improve the ability to detect deceit I provide numerous examples of lying, providing such feedback. The second reason why most people do so poorly in judging deceit is that they rely too much on what people say and ignore the discrepancies between the expressive behaviors and what is said. I have three kinds of evidence that are consistent with this explanation.

We have consistently (Ekman & O'Sullivan, 1991; Frank, Ekman, & Friesen, 1993) found that those observers who are accurate in identifying facial expressions when they are shown in a fraction of a second are more accurate in judging lying. The second type of evidence is that patients with left-hemisphere damage, rendering them more impervious to the content of speech, are more accurate than normal subjects in detecting lying (Etcoff, Ekman, Frank, Torreano, & Magee, 1992). The third type of evidence comes from a set of studies in which separate groups of observers were shown the face only, the body only, the voice (speech frequencies filtered out), and typescripts of what was said during the lying and truthful interviews. We then correlated our behavioral measurements with the judgments made by the observers who had seen either the full audio-video or the separated

channels. The overall finding was that when the subjects were lying, the observers judgments correlated only with the text measures. Duchenne's smile, leakage smiles, illustrators and pitch—all of which differentiated the deception from the honest interview—were not correlated with the judgments of the deception interview made by the observers who were exposed to the full audio-video record.

It is not that the other nonverbal and vocal behaviors are not detectable, for when we examined the judgments made by observers who only saw the face, we found that Duchenne's smiles were correlated with judgments. Similarly, when we examined the judgments made by observers who saw only the body, illustrators correlated with judgments of those who saw only the body and changes in pitch were correlated with the judgments made by observers who heard only the speech.

In contrast to the nonverbal measures that were not correlated with the judgments of the audio-video presentation of the deception interview, nearly every measure of the verbal text and many of the vocal measures were correlated with observers' judgments of the audiovisual version of the deception interview. The only text measure not correlated with observers' judgments—the number of "I"'s—and the only vocal measure not correlated with observers' judgments—pitch—were the only text and vocal measures that differentiated the honest from deception interviews.

To sum up these findings, the face, body, voice, and text clues that are most relevant to spotting deceit were ignored. Those behaviors that were least useful for differentiating when someone was lying were most relied on when the observers responded to the audio-visual presentation of the deception interview. (These findings are reported in detail in Ekman et al., 1991.) This apparent failure of the observers to make use of the behaviors most relevant to detecting deceit fits with my (Ekman, 1985) notion that, in social life, people unwittingly collude in maintaining rather than uncovering deception.

ACKNOWLEDGMENT

The preparation of this chapter was supported by a Research Scientist Award from the National Institute of Mental Health (MH06092).

REFERENCES

- Bok, S. (1982). *Secrets*. New York: Pantheon.
- Cross, T. P., & Saxe, L. (1992). A critique of the validity of polygraph testing in child sexual abuse cases. *Journal of Child Sexual Abuse, 1*, 19-33.
- Ekman, P. (1985). *Telling lies: Clues to deceit in the marketplace, marriage, and politics*. New York: Norton.

- Ekman, P. (1989). *Why kids lie*. New York: Scribner's.
- Ekman, P. (1992). *Telling lies: Clues to deceit in the marketplace, marriage, and politics* (2nd ed.). New York: Norton.
- Ekman, P., & Friesen, W. V. (1969a). The repertoire of nonverbal behavior: Categories, origins, usage, and coding. *Semiotica*, 1, 49-98.
- Ekman, P., & Friesen, W. V. (1969b). Nonverbal leakage and clues to deception. *Psychiatry*, 32, 88-105.
- Ekman, P., Friesen, W. V., & O'Sullivan, M. (1988). Smiles when lying. *Journal of Personality and Social Psychology*, 54, 414-420.
- 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 deception. *Journal of Nonverbal Behavior*, 15, 125-135.
- Etcoff, N. L., Ekman, P., Frank, M., Torreano, L., & Magee, J. (1992, August). *Detecting deception: Do aphasics have an advantage?* Paper presented at meeting of International Society for Research on Emotion, Pittsburgh, PA.
- Feynman, R. (1988). *What do you care what other people think? Further adventures of a curious character*. New York: Norton.
- Frank, M. G., Ekman, P., & Friesen, W. V. (1993). Behavioral markers and recognizability of the smile of enjoyment. *Journal of Personality and Social Psychology*, 64, 83-93.
- Goffman, E. (1974). *Frame analysis*. New York: Harper & Row.
- Lockard, J. S., & Paulhus, D. L. (Eds.). (1988). *Self-deception: An adaptive mechanism?* Englewood Cliffs, NJ: Prentice-Hall.