Mysteries and Myths in Human Deception and Deception Detection: Insights from Truth-Default Theory

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〈Abstract〉

This essay reviews some oddities, inconsistencies, and paradoxes evident in the social scientific literature on human deception detection. Major findings from the literature are surveyed. Contrasts are drawn between folk wisdom, the logic of dominant social scientific theory, and the conclusions drawn from extensive empirical findings. It is argued that Truth-Default Theory helps to reveal some persistent myths and it solves some otherwise perplexing mysteries in the social science of human deception and deception detection.

Key Words: human deception, deception detection, mysteries, myths, Truth-Default Theory

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I. Mysteries and Myths in Human Deception and Deception Detection: Insights from Truth-Default Theory

There is an extensive, but insular, social scientific literature on human deception detection (unaided by technology such as the polygraph or brain scans). Deception research is multidisciplinary, heavily experimental, and efficiently summarized in more than a dozen meta-analyses. The literature on deception detection, while large, is generally unknown to people outside the deception researchers who study it. The topic seems intrinsically interesting to many people, yet people are often surprised that the topic has been the focus of sustained social scientific inquiry. Further, while the topic of deception detection itself is compelling, for the social scientifically inclined academic, deception detection research is also intriguing because of several mysteries and persistent myths. This essay describes a series of mismatches between folk wisdom, widely accepted social scientific lore, and hard data. It is proposed that the new Truth-Default Theory (Levine, 2014) may help reconcile some long-standing puzzles and contradictions.

1. Folk Lore

There is a surprising degree of consensus among everyday people in their beliefs that (a) they themselves can usually tell when they are being lied to, and (b) that specific behavioral “tells” or “cues” exist that signal deception in others. Specifically, although people are overly confident in
their own ability to detection lies (DePaulo, Charlton, Cooper, Lindsay, & Muhlenbruck, 1997), people also report that most of their own lies go undetected by others (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996). When it comes to how deception is detected, people hold beliefs such as a liar won’t look you eye (Bond & The Global Deception Research Team, 2006). There are three especially fascinating aspects to this belief that liars avert gaze. First, the ubiquity of this belief surprising. Forty respondents each from 58 countries (total \( N = 2,320 \)) were asked open-ended “How can you tell when people are lying?” Gaze aversion was mentioned by nearly two-thirds of the participants. Amazingly, gaze aversion was the most frequent response in 51 of the 58 countries. Even where it was not the top response, it was mentioned by no fewer than 20% of respondents. Second, despite its prevalence, the gaze aversion belief appears to be a complete myth. A meta-analysis of the effects of lying on eye behavior (gaze aversion, eye contact, eye shifts etc.) finds virtually no utility for eye behavior (other than pupil dilation) in distinguishing truth from lie (DePaulo et al., 2003). Third, if you ask people to recall a lie they detected and ask them how they did so, the answers seldom involve observation of real-time nonverbal behavior such as eye contact (Park, Levine, McCormack, Morrison, & Ferrara, 2002).

To sum up, people think they can detect when others lie to them but also believe that others can’t tell when they themselves lie. People everywhere also think that the keys to detecting lies involve observation of nonverbal behavior especially gaze aversion. Yet, nonverbal behaviors, including a lack of eye contact, are not useful. As you can see, contradictions abound.
2. Social Scientific Lore

The social scientific investigation of deception has been guided by a perspective I call cue theory. The basic idea is that honest communication and deceptive communication are psychologically different, and the internal psychological consequences of lying are signaled behaviorally. Lying may produce emotions like guilt or fear of detection. Lying may be more physiologically arousing, increasing heart rate, and skin conductance. Lying may involve greater cognitive effort with liars thinking harder than honest communicators. Liars may be more motivated to appear honest. These psychological states, in turn, are signaled behaviorally though specific behavioral cues. Emotions may show as brief facial expressions. Arousal may be observed as nervous behaviors such as fidgeting or stammering. Cognitive effort may increase response times, increase speech errors, and reduce the number of details in the communication. Observers then can detect deception, albeit indirectly and probabilistically, through the careful observation of specific nonverbal and linguistic behaviors. That is, cue theories specify a series of mediated relationships that start with honesty-deception and end with deception detection. Deception leads to one or more mediating internal psychological processes which produce observable behavioral cues which, if properly recognized, lead to deception detection. There is considerable scholarly debate about which psychological processes are involved (emotions vs arousal vs cognitive effort) and the boundary conditions (e.g., lie stakes), but the basic logic all follows the same causal string. The idea common to all versions of cue theory is that deception can be detected, at least under certain favorable conditions, by the observation of “cues” i.e., specific communicator
behaviors caused by the internal psychological consequences of lying (see Zuckerman, DePaulo, & Rosenthal, 1981 for further explication of cue theory logic).

While deception researchers disagree about which version of a cue theory is best, researchers generally agree on two well documented empirical facts: humans are quite poor lie detectors and cues are, at best, only weakly associated with deception. I’ll unpack both of sets of findings momentarily, but I hope it is obvious that these agreed-upon facts seem to contradict cue theory. The simple answer, I contend, is that various cue theories are excellent examples for what Ferguson and Heene (2012) call “undead theory”. Contradictory evidence is seen as disconfirming rival versions of cue theory, and the implications for researcher’s own perspectives are ignored or rationalized. Thus, the theory lives on in the face of empirical falsification.

The accepted conventional view is that research proves that humans are poor lie detectors; for an exception, see Levine (2015) who argues that this conclusion is now dated. The prime evidence for poor deception detection is an extensive and highly influential meta-analysis by Bond and DePaulo (2006). They found that correct truth-lie discrimination was normally distributed around a mean of 54% correct with a standard deviation of 6% and where 50% would be expected by chance. Further, the conclusion of slightly-better-than-chance accuracy was robust across various media, face-to-face interaction, more and less motivated liars, planned and spontaneous liars, and detectors who were both students and experts. The 4-point difference between 54% accuracy and the 50-50 chance rate is highly statistically significant and moderate in effect size ($d = .4$). Yet, 54% is understood as evidence of poor accuracy, not much
better than chance. In fact, it is not uncommon for literature reviews to slip from the factually accurate claim of significantly better than chance to the statistically inaccurate description of accuracy as no better than a coin flip.

Regarding cue utility, DePaulo et al. (2003) is the most influential meta-analysis by far. Most of the 158 cues investigated did not exhibit differences between honest and deceptive communication. Of the cues where significant differences were observed, effect sizes tended to be small and heterogeneous. These findings are usually interpreted as proving cues have little diagnostic value. More recent meta-analysis (Hauch, Blandon-Gitlin, Masip, & Sporer, 2014) suggests the same conclusions holds true for linguistic cues. Meta-analysis also shows a negative correlation between the average effect sizes for cue utility and the number of times a particular cue is studied (Bond, Levine, & Hartwig, 2014). What this means is that when cues are found, the effects fail to replicate. In short, the little evidence for significant cue effects appears to be mostly publication bias.

In summary, the lion’s share of social scientific research on deception detection is based on the idea that deception can be detected based on observation of specific nonverbal and/or linguistic behaviors of senders. After decades of empirical work, the accepted conclusions are that humans are poor lie detectors and the behavioral cues provide at best only weak signals of deception. The findings regarding weak cues align nicely with findings of poor accuracy and both sets of findings seemingly clash with the theoretical idea that deception can be detected based on the observation of behavioral cues.
3. Mystery #1

While the experimental study of deception has yet to become well known across the social sciences, much better known are experiments that involve deception but that are not ostensibly about deception. It is well known, for example, that experiments in social psychological often involve research confederates who are basically actors are playing the role of fellow research participants. Famous examples include Asch’s (1956) classic study of conformity and Milgram’s (1969) infamous obedience experiments. In Asch’s experiment, subjects judged the length of lines either alone or in groups. The group members seemed to be fellow subjects, but were actually working with the researchers. Group members often gave obviously wrong answers and the point of experiment was to see if the real subject would go along with the group’s wrong answer. In Milgram, an experimenter ordered research subjects to shock another subject (actually a confederate) with increasing strong shocks even though the victim protested vehemently and was obviously in extreme pain. The point of the Milgram experiment was to see if subjects would follow orders. In the case of Asch, subjects conformed about one-third of the time although there were large individual variations in conformity rates. In Milgram’s experiment there was much greater uniformity. About two-thirds of subjects were fully compliant and all subjects went along to some extent.

Although the Asch and Milgram experiments are understood as investigations of conformity and obedience respectively, they are also

1) Video tapes of both experiments are available on YouTube for readers not familiar with these famous experiments.
deception detection experiments. Both involved clear instances of deception, and both experiments included extensive debriefing that covered, among other things, the effectiveness of the deception. In this regard, both experiments report virtually identical results. All subjects were totally fooled. Despite hard visual evidence of objective truth in Asch and striking implausibility in Milgram (a torture chamber at Yale University, really?), no subject concluded that the confederates were simply lying. Accuracy was zero. So, I ask, why is accuracy 54% in deception detection experiments that are about deception detection but virtually 0.00% in experiments that involve deception, but aren’t intended to be about deception. It is a mystery.

4. Another Mystery

Unbeknownst to each of us at the time, Dunbar et al. (2013) and I (Levine et al., 2014) conducted very similar experiments using a cheating paradigm and expert interrogators. The research method involved bringing students into the lab to play a trivia game for a cash prize. Participants were given the opportunity to cheat when the researcher was called out of the room. Answers to the trivia questions were left in a folder within easy reach of the participant providing an opportunity to cheat. After the game is finished, subjects were questioned about whether or not they cheated. Of course, many of the subjects who did cheat lied about it (technically they are fraudulently obtaining federal research funds not to mention cheating in a university activity). In the particular experiments discussed here, the questioning was done by an elite federal interrogator blind to if the subjects had cheated or not, but who tried to ascertain the truth or
falsity of the subject’s communication through their questioning.

Dunbar et al. (2013) reported 59% accuracy, a value very much in line with prior findings. Our first experiment, in contrast, produced a perfect 100% accuracy. In a larger replication, we obtained 98% accuracy. How could seemingly similar experiments produce such different results?

There were two differences that likely mattered. First, Dunbar et al. (2013) used scripted questions. In our first experiment, deviations from the script were allowed. In our second experiment, there was no script at all. The expert interrogators were required (within the bounds of research ethics) to question subjects as they saw fit by designing their own questions. Second, Dunbar et al. discarded data from subjects who confessed. We did not. Why are these seemingly minor design changes such game changers and why did we think to make these changes?

5. One More

I have a stereotype about Koreans. I think that Koreans (at least the Koreans who make it into highly ranked universities) tend to be pretty good test takers. For my Korean readers, here is a true-false question for you:

True or false: Research finds that a substantial majority of people lie less frequently than average?

Think the answer is obvious? The answer is true. Get it right? If this surprises you, here is a follow-up question. When do averages (specifically the arithmetic mean) misrepresent the preponderance (mode and median)
of the data? One answer, of course, is when the data are heavily skewed. The problem is that too many researchers have been conditioned to look at the average without knowing how the scores are distributed.

If you read much deception research or popular press depictions of deception, you will see claims about the ubiquity of deception. I just finished reading a book titled *Everybody Lies* (Stephens-Davidowitz, 2017). A recent *National Geographic* article also touted the ubiquity of lying (Bhattacharjee, 2017). But, what research shows is that most people are mostly honest most of the time. For example, a nation-wide representative sample of American adults were asked how many times they had lied in the past 24 hours (Serota, Levine, & Boster, 2010). On average, respondents reported telling 1.7 lies per day. The mode was 0 reflecting 60% of the sample. Another 15% reported just one lie. Thus, 75% of the respondents were below average. In contrast, nearly half of all the reported lies were told by a mere 1% of the sample. Most lies are told by a few prolific liars.

### II. Myths of Cues and Demeanor

In folk wisdom, cue theories, and empirical studies alike there is a tacit presumption that specific cues are the relevant unit for observation in deception detection. My findings challenge this idea. My colleagues and I (Levine et al., 2011) reported and replicated substantial inter-correlation among cues. The cues we found do not travel alone but in clusters and it is these clusters of inter-related cues that create impressions of honesty or dishonesty. We call these clusters demeanor. We found that while
demeanor guilds deception judgments, a communicator’s demeanors is mostly independent of actual honesty. In summary, it can be misleading to look a specific cues because cues are non-independent data; cues co-vary with other cues. Further, these constellations of cues we call demeanor have powerful effects on people’s perceptions of honesty but are of little diagnostic value.

1. Myth: Lie Stakes Matter

I mentioned earlier that cue theories often specify boundary conditions and these boundary conditions (moderators) are used to save the theory from falsification. Theorists argue that supportive findings failed to obtain because the necessary pre-conditions were not met. The most prominent and widely accepted of these pre-conditions is lie stakes (e.g., see O’Sullivan, Frank, Hurley, & Tiwana, 2009). Lie stakes refer to the severity of consequences of lie detection for the liar. For example, if a detected lie might result in loss of employment, loss of an election, or imprisonment, then the stakes are high. If the worst case result is a little embarrassment, then the stakes are much lower.

In cue theories, cues result directly from internal psychological processes that stem from lying. The higher the stakes, the greater the resulting internal psychological differences, and the more likely that deception cues will present behaviorally. For example, the greater the lie stakes, the more a liar should fear detection and the more they fear detection the more likely a micro-expression of fear. Or, the greater the stakes, the more arousal and cognitive load, and the more arousal and load cues. In contrast, when the stakes are low or nonexistent, then there
should be little emotion, arousal, cognitive load etc. linked with deception and consequently cues would not be anticipated to distinguish truths from lies.

From within the perspective of cue theories, the importance of lie stakes makes good sense. Unfortunately, however, it creates the potential for circular arguments. If cues do not have utility in a particular study, it is because the stakes were too low. We know the stakes were low because cues lacked utility.

I call the lie stakes idea a myth despite its intuitive appeal because there is much evidence that stakes just don’t matter much in deception detection. Hartwig and Bond (2014) found that stakes did not moderate the diagnostic utility of cues. Bond and DePaulo (2006) found no difference in deception detection accuracy for motivated and unmotivated liars. The idea that stakes matter in deception has been soundly refuted. Theories that rest on lie stakes being an important consideration lack verisimilitude.

2. The Truth–Default Theory Perspective

Truth-Default Theory (TDT; Levine, 2014) provides a contrast with cue theories. An article-length summary was published in 2014 and book will published in the near future providing greater detail. One of the goals of TDT is to solve and resolve the mysteries and myths described here in a way that is empirically and theoretically satisfying.

The starting point for TDT is the idea of the truth-default. The truth-default is a passive cognitive state where people simply accept what others say. The idea of deception does not even come to mind unless
something triggers active consideration of honesty and deception. That is, most human communication occurs on mindless autopilot (the default state) when it comes to deception. We simply accept what is said. Trigger events can turn off the autopilot, but those are exception. Mindless acceptance devoid of conscious consideration of deception is the default or starting place.

According to TDT, the truth-default is highly adaptive. Humans evolved as and remain social beings. Our survival and wellbeing rest on getting along with and interacting with other humans. The passive belief reflected in the truth-default is essential for efficient human communication, coordination, and cooperation. If we second guessed everything other’s said, communication would break down. It would be impossible educate or socialize people because all information would be suspect. Cooperation would falter because of chronic worry over freeloaders and cheats. The resulting constant vigilance and wariness would be hugely inefficient and counterproductive.

The truth-default, however, involves a trade-off. Sometime we get fooled by deception. But, according to TDT, the social and communicative advantage we gain in return for the vulnerability greatly outweighs the costs of occasional deception. Further, although the truth-default is our normal state, it is not our only possible cognitive state. Suspicion can be triggered. There are situations where we have learned to be on guard and people we know better than to trust.

The idea of the truth-default makes sense of the first mystery. People believing that confederates are who they say they are simply exhibiting people’s natural truth-default state. The truth-default is in place so people take things at face value. The idea of deception either does not come to
mind or quickly fades. What is different in deception detection experiments is that researchers specifically ask subjects to make a conscious truth-lie assessment. Research subjects are shown some sample of communication and directly asked to evaluate honesty-deception. This requires research subjects to think about deception. The truth-default is no longer in operation. When faced with a forced choice truth-lie question, subjects sometimes pick lie. Because there is 50-50 chance of truth or lie in deception detection experiments, sometime subjects get the lies right. In contrast, in the Milgram experiments, the confederate is always a confederate. Deception happens 100% of the time (not the 50-50 truth lie ratio in deception detection experiments). Further, there is no explicit trigger for suspicion. The idea of deception simply does not occur to the subjects. The truth-default is in operation. People always believe. Accuracy is zero. The confederate is always believed despite never being honest.

This discussion raises the issue of truth-lie base-rates. This is one of the most important variables in TDT, and TDT is first deception theory to focus directly on the implications of base-rates. The base-rate is the ratio of deceptive (or honest) messages to total messages. In the typical deception detection experiment, the base-rate is 50-50. That is, people are equally likely (based on random assignment) to encounter a truth or lie. In the Milgram experiment, the base-rate is 100% deception. But, in everyday life, people are mostly honest most of the time.

Note that the truth-default is highly advantageous when deception is improbable but is dysfunctional when deception is likely. If most people are honest most of the time and people blindly presume honesty most of the time, then the probability of an honest communication being believed is high and the probability of being deceived is low. In deception
detection experiments, however, people encounter rates of deception much higher normal. Performance suffers. In situation like the Milgram experiments were deception is constant and consideration of deception is not primed, accuracy falls to zero.

According to TDT, trigger events can kick people out of their truth-default states, and when this happens, people consciously try to ascertain honesty or deception. Trigger events can take a variety of forms. People may become suspicious if they know another person is in a situation where they have a motive to lie. Deception cues and demeanor can trigger suspicion. So can statements known in advance to be false. Information from third parties can put people on guard for deception. Regardless of the trigger event, the idea is something must happen to make people wonder if someone else might be trying to deceive them. Otherwise, people just accept what others say.

Once active consideration of deception is prompted, TDT departs from cue theory regarding how deception is accurately detected. In cue theory, the path to accurate deception detection rests on the ability of a person to correctly recognize and interpret the right cues. For example, people need to pay attention to the number of details but not gaze aversion. TDT, in contrast, specifies that cues and demeanor influence belief or disbelief but not accurate belief or disbelief. More specifically, in TDT demeanor is more important than individual cues because the focus on specific cues fails to take into account the interdependent ways cues are given off and are perceived. In TDT, demeanor impacts who is believed but not who should be believed. That is, demeanor affects perception of honesty-deception but has little diagnostic utility. Cues and demeanor, according to TDT, are misleading and reliance on cues and demeanor
pushes accuracy down toward chance levels (Levine, 2014; Levine et al., 2011).

TDT suggests better ways to accurately detect deception. While spotting cues and paying attention to demeanor cause poor accuracy, accuracy can be improved with (a) contextualized communication content, (b) evidence, (c) attention to motive, and/or (d) actively encouraging honest admissions. Communication content involves what is said, not how it is said. For example, the number of details is a cue. Considered the follow statement as an example. “I am going to eat roasted blue ants for lunch today. I will cook them in the oven at 400 degrees Fahrenheit for 10 minutes on a non-stick pan and then serve them with a gochujang sauce.” We could count the number of details, decided that the statement was quite detailed so it is probably honest. But, if we focus on content, we might decide that ants usually are not blue and people usually don’t eat ants, roasted with gochujang or otherwise. In this case, content leads to a different conclusion than the available cues. Further, you could seek evidence. You could find out my nationality and research if Americans typically eat bugs for lunch. You could talk to my friends and ask, “Is Professor Levine a bug eater?” You might consider if I have a motive for making a false statement about eating ants for lunch. If you meet me sometime in person, you can ask, “Were you kidding about eating blue ants for lunch?” According to TDT, these are the ways that are the most diagnostic lie detection methods. This is how people really detect deception. Listen to what is said. Use available evidence. Consider plausibility and motive. If possible, try to persuade the person to be honest.

In 2002, Park et al. (2002) did a very simple yet innovative study. At the beginning of the essay, I referenced Bond’s finding that when asked
how you can know when someone was lying, the most frequent response was, by far, that liars avert their gaze. Park asked the question a bit differently. She asked subjects to first recall a recent time where they detect a lie. Then she asked them how they detected the lie. From these responses, she created a list of discovery methods and also measured the amount of time from the initial lie to until the discovery. The discovery method involved in typical deception detection experiments might be described as real-time behavioral observation which would include reliance on cues and demeanor. In Park et al.’s results, only about 2% of the reported instances of lie detection were of this sort. Instead, most lies were detected after the fact (not at the time of telling). All the frequently reported discovery methods involved either the use of evidence (comparing what was said to some previously known or later uncovered information that contradicted what was said) or subsequent honest admissions by the liar. Park and her colleagues concluded that lie detection experiments differ in important ways from everyday lie detection and that the lie detection methods people actually use have little to do with cues.

Thirteen years later, Levine (2015) summarized experimental evidence for improved lie detection. By then, approximately 2 dozen published studies had obtained human deception detection accuracy rates above 70%. All of them involved either communication content and/or persuasion based approaches in line with TDT and Park et al.’s (2002) findings.

The availability of discovery methods explains the mystery of why Dunbar et al.’s (2013) findings differed from those of Levine. Seeking honest admissions was possible in Levine’s but not Dunbar’s experiments. The experts in Levine et al.’s experiments tried to gain honest admissions with considerable success (85% of cheating liars confessed under
questioning). When the experts were successful in gaining honest admissions in Dunbar’s study, the data were excluded for the purpose of calculating accuracy.

The finding that most people lie less frequently than average is also TDT-inspired. TDT specifies that lie prevalence is not normally distributed and highly skewed. In fact, the Serota et al. (2010) studies first drawing attention to the skewed distribution were grounded in TDT. If lying was prevalent, the truth-default would be dysfunctional.

In conclusion, TDT provides an alternative to cue theory accounts of deception detection. In TDT, lies are detected though attention to communication content and persuasion, not the careful observation for specific behavioral cues. TDT also raises issues such as truth-lie base-rates and the distribution of lie prevalence that have no place in cue theory. These considerations help make sense of several mysteries and dispel several myths about human deception.

3. Korean Findings

Although TDT was formulated in the USA by an American social scientist, the logic of TDT is meant to hold pan-culturally. The basic ideas may be universal. Humans from all cultures are social beings who communicate and cooperate. Of course, we know well that people from different cultures and people who vary in a variety of demographic factors can differ in psychological and social ways to numerous to list. Nevertheless, there are also commonalities shared by humans everywhere. So, an interesting and theoretically important question is just how general and robust are TDT’s predications and explanations? To date, several TDT
have been replicated in Korea, although not all the replications have been published. This essay closes with a description of TDT findings in Korea.

The first TDT experiment conducted in Korea was experiment 4 in Levine et al.’s (2011) series of studies on demeanor. The idea of demeanor was discussed previously, but a bit more background explanation is needed here. I had previously created a large collection of truthful and deceptive interviews for use in deception detection experiments (see, http://timothy-levine.squarespace.com/deception-interviews/) and had completed several experiments using these interviews. As I was entering the data, I noticed a pattern. Some of the interviewees were uniformly seen in the same way. Some senders were almost always believed. Other senders tended to be doubted. Some senders almost everyone got right. For others, accuracy was poor. This led me to hypothesize that there are certain senders that are judged consistently regarding their honesty for deceitfulness and regardless of who is judging them. To test this out, I selected 20 interviews (half honest, half liars, half highly believable, half dubious) that tended to produce consistent impressions and set out to show them to different samples of viewers (i.e., college students, professors, professional interrogators). My prediction was that people who had honest demeanors would be perceived honest across judges. As part of the test, the interviews where shown to Korean students in Korea. The Korean findings aligned neatly with the findings the various samples of Americans. People who come off as honest come off as honest everywhere.

A second TDT finding that has been replicated in Korea is the relationship between truth-lie base-rate and accuracy (Park & Levine, 2017). The finding in American is a positive linear relationship between
the proportion of communication that is honest and the percent correct truth-lie classification. So, for example, subjects might be asked to watch and judge each of ten interviews. The proportion of honest and deceptive interviews are experimentally varied. The interviews might be all honest or all deceptive or 30% honest or 90% honest. The judgments are scored for the percent correct i.e., accuracy. The predictions are that (a) as the proportion of interviews that are honest is increased, accuracy increases and (b) the increase is linear. These predictions hold nicely in Korea.

There are two more replications that are currently unpublished. Park et al.’s (2002) about how people really detect lies and Serota et al.’s (2010) findings regarding most people lie less often than average have been replicated in Korea too. Hopefully those findings will be published soon.

Ⅲ. Conclusion

Deception is a fascinating topic for research both because the topic is itself fascinating and because attention to research findings reveal a number of mysteries and myths. For decades, research has been guided by the idea of deception cues. Both folk wisdom and social scientific theory hold that deception can be detected by observing specific behaviors. The social scientific search for deception cues; however, has failed to yield findings that consistently replicate and research shows that judgments based on cues produces low accuracy only slightly better than chance.

Truth-Default Theory (TDT) offers an alternative to cue theory. Amongst other things, TDT seeks to shift attention to the proportion of communication that is deceptive in the communicative environment. When
lies are infrequent, passive belief is adaptive. When lies are detected, it is often after the fact. Cues and demeanor are misleading, and more accurate lie detection is possible by attention to communication, the use of evidence, and persuading dishonest people to honesty. Especially promising, several TDT predications have been supported using data collected in Korea.
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