Discriminating between True and False Intentions

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Since 9/11, a renewed and fervent interest on crime prevention has emerged. A salient example comes from the ever-increasing measures being taken at airport security checks (e.g. the recent introduction of full-body scanners at a number of international airports; Milmo, 2010). Fundamental to crime prevention is an ability to ascertain the veracity of statements of intent. The psycho-legal study of true and false intentions aims to address this issue. It is, however, only in recent years that researchers have turned to this topic – the majority of past research on deception detection has focused on true and false statements about past events (Vrij, 2008). In brief, research on true and false intentions focuses on statements concerning future events. Specifically, a statement of true intent refers to a future action which a speaker intends to carry out, while a statement of false intent refers to a future action which a speaker does not intend to carry out. True and false statements of intent, just as with true and false statements of past actions, can vary in kind (e.g. outright lies, exaggerations, subtle lies; DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996). Statements of intent however
have an additional dimension which must also be considered, insofar as the intended actions have not yet been performed.

Granhag (2010), drawing on research from social psychology (Malle, Moses, & Baldwin, 2001), defines an intention as an actor’s mental state preceding a corresponding action. Intentions differ from related concepts like desires as they come with a commitment to perform the action in question and are often given some degree of thought and planning. In order to establish a focused research agenda, Granhag further delineated the definition of intention to refer only to single acts to be performed in the near future. Based on this stricter working definition, a statement of true intent refers to a single act one plans to perform in the near future. In contrast, a statement of false intent refers to a single act one claims, but does not in fact intend, to perform in the near future. A common use of a false intention in a legal context is a cover story. That is, a false statement about your future actions is given to mask the criminal actions you intend to carry out.

To date, some dozen studies have been implemented based on this stricter definition of intentions, most of which with a focus on cover stories (for a detailed review, see Granhag & Mac Giolla, 2014). Just as Granhag (2010) provided guidelines for the first round of studies on true and false intent, this chapter hopes to pave the way for a second round. Our aim is to highlight critical questions and new avenues of research and, where possible, offer advice on how these avenues can be approached. First, we provide a brief review of extant research. Following this, gaps in the research are highlighted, with a strong emphasis on different types of intentions and notable contextual variables.

WHERE WE ARE

The first studies on true and false intentions focused simply on (1) the ability to detect deceit when no specific methods are used (Vrij, Granhag, Mann, & Leal, 2011) and (2) how, in such situations, accuracy of veracity judgements compare to veracity judgements on past events (Vrij, Leal, Mann, & Granhag, 2011).

Vrij, Granhag, et al. (2011) conducted their study at an international airport using passengers as participants. Truth tellers were instructed to answer all interview questions about their upcoming trip truthfully. Liars were instructed to answer questions on their destination truthfully but were told to lie when answering questions on the purpose of their trip. Results showed a discrimination accuracy of approximately
70% (Vrij, Granhag, et al., 2011). This is markedly higher than what is typically found in deception studies, where accuracy rates are around 54% (Bond & DePaulo, 2006).

Vrij, Leal, et al. (2011) directly compared the deception detection accuracy for both statements of intent and statements on past behaviour. Participants were serving military and police officers. They were given a mission to collect and deliver a package. Intention-related interviews were conducted before they began their mission, and interviews about their past actions were conducted after they had completed the mission. Participants were interviewed a total of four times, twice on their intentions and twice on their past actions. In half of the interviews, they lied, and in the other half, they told the truth. Corroborating the findings of Vrij, Granhag, et al., results showed a discrimination accuracy of approximately 70% with regard to intentions. In contrast, and in line with previous research, a discrimination accuracy of approximately 55% was found for statements on past events.

Though these studies offer little in guidance with regard to theory, the differences in discrimination ability nonetheless highlight that statements about future and past events may differ in important ways. Since these pioneering studies, research on the topic has progressed steadily, and two broad approaches can be distinguished. First, researchers have extended deception detection techniques traditionally used by people speaking about past events to people speaking about future events. Second, researchers have sought to develop methods distinct for the study of true and false intent. These are based on theoretical approaches and assumptions not offered in the traditional setup on past events. It is primarily this latter approach that justifies a unique research field of true and false intentions.

**Extending Past Approaches to Intentions**

A number of deception detection techniques that have been applied to statements about past events have recently been extended to the study of true and false intentions, with mostly promising results.

Research on the strategic use of evidence (SUE) technique has shown that when evidence exists against a suspect, it can be strategically deployed in an interview to elicit cues to deceit (e.g. Granhag, Strömwall, Willén, & Hartwig, 2012; Hartwig, Granhag, Strömwall, & Kronkvist, 2006). The approach is built on the differing counter-interrogation strategies between truth-telling and lying suspects. Truth tellers will typically be more forthcoming and willing to provide information, while liars will be more evasive and withholding (Clemens, Granhag, & Strömwall, 2013; Granhag, Mac Giolla, Strömwall, & Rangmar, 2012).
The aim of the SUE technique is to strategically disclose evidence throughout an interview, so as to increase statement-evidence inconsistencies for liars, but not for truth tellers. For instance, a late disclosure of evidence could cause liars, due to their withholding strategies, to produce more inconsistencies than truth tellers. The SUE technique has been successfully extended to statements of intent (Clemens, Granhag, & Strömwall, 2011). The evidence, identical for both truth tellers and liars, was derived from the planning phase preceding the intention and included fingerprints on a folder and Internet browsing history. Liars interviewed with an early disclosure of evidence produced fewer statement-evidence inconsistencies compared to liars interviewed by the SUE technique. Despite these promising results, some caution should be raised. Although there are now a large number of studies on the SUE technique (see Chapter 10, in this volume), there is only one study on intent; there are still few field studies; and, as of yet, there are no countermeasure studies.

Like the SUE technique, the concealed information test (CIT; also known as the guilty knowledge test; Lykken, 1959) has also been successfully extended to statements of intent (see Meijer, Smulders, & Merckelbach, 2010; Meijer, Verschueren, & Merckelbach, 2010; Meixner & Rosenfeld, 2011; Noordraven & Verschueren, 2013). During a CIT, participants are presented with crime-related questions (e.g. ‘What was the murder weapon?’) and a number of plausible answers to those questions (typically around five answers are provided, e.g. gun, knife, etc.). Guilty suspects are expected to show a heightened arousal (usually measured with skin conductors) to the correct answer, while innocent suspects are expected to show similar responses to all answers (Verschueren, Ben-Shakhar, & Meijer, 2011). The CIT is theoretically supported by research on the human orienting reflex, which demonstrates that personally relevant information produces orienting responses (Sokolov, 1963; Verschueren, Crombez, De Clercq, & Koster, 2004). Since personally relevant information can relate just as easily to information on future events as to information on past events, it is not surprising that the CIT can be applied to statements of intent. For example, Meijer, Verschueren, et al. (2010) compared participants who had committed a mock crime to participants who intended to commit a mock crime. Six crime-related questions (e.g. ‘What did you steal/what did you intend to steal?’) each with six potential answers were asked. Participants with a criminal intent and participants who had already committed the crime showed similar orienting responses to the crime-relevant answers.

Of all the methods reviewed in this chapter, the CIT has the longest research tradition (over five decades) and is the most established in an
applied setting. The most notable example of this is in Japan, where CITs are administered within police settings on a daily basis (Osugi, 2011). If we couple this strong tradition of research with the recent studies on CITs and intent, CITs perhaps represent the most ready-to-use approach to distinguish between true and false intent. With that said, CITs are not without criticism. For example, few field studies have been carried out on the topic; they are susceptible to countermeasures (but see recent work on countermeasure-resistant P300-based CITs; Rosenfeld et al., 2008; Meixner & Rosenfeld, 2010), are vulnerable to information leakage and can only be successfully applied in limited situations (Ben-Shakhar, 2012).

A related area of research has examined the visual attention orientation of individuals with malintent (i.e. malicious intent) (Wallace, 2013). Inspired by the CIT and the human orienting reflex, it was proposed that objects of personal relevance should capture people’s visual attention to a greater extent than non-relevant objects. Results from a series of studies provide promising support for this claim. The results consistently showed that individuals with malintent would attend to malintent-relevant objects to a greater extent than individuals without malintent.

The Sheffield lie test (Suchotzki, Verschuere, Crombez, & De Houwer, 2013) and the autobiographical implicit association test (aIAT) (Agosta, Castiello, Rigoni, Lionetti, & Sartori, 2011) provide further examples of deception detection techniques that have been successfully extended to intentions. The study by Agosta et al. is particularly noteworthy as it distinguishes not only true intentions from false intentions, but also distinguishes intentions from the related concept of hopes. Extending the typical aIAT, Agosta et al. paired known true and false autobiographical statements (e.g. I am sitting in front of a computer/I am not sitting in front of a computer) with unknown true and false statements of intent (e.g. I will sleep in Padua/I will sleep in Milan). Faster response times were shown for congruent pairings (e.g. true known statement/true statement of intent) than for incongruent pairings (e.g. true known statement/false statement of intent). As noted, however, the authors also distinguished between true intentions and hopes. Based on Audi’s (1973) classification, hopes were defined as desirable outcomes that were less probable than intentions (e.g. winning a lottery). Results showed that participants had faster response times for the congruent pairings of true intent and true known statements compared to the congruent pairings of hopes and true known statements.

Though the aIAT allowed for unique insights into the topic of true and false intent, its current applied value is called into question by
countermeasure studies. These studies showed that it is possible to fake the aIAT with minimal instruction and practice (Hu, Rosenfeld, & Bodenhausen, 2012; Verschuere, Prati, & De Houwer, 2009). Others, however, have claimed that simple algorithms can be developed to catch such fakers (Agosta, Ghirardi, Zogmaister, Castiello, & Sartori, 2011). Though the approach is not without its merits, more research is needed on this topic before it should be recommended for use in an applied setting.

Some techniques, however, have not fared so well when applied to intent situations. Pavlidis, Eberhardt, and Levine (2002) demonstrated how thermal imaging technology could be used to distinguish between guilty suspects (who had committed a mock crime) and innocent suspects (who had not committed a mock crime). Using thermal imaging, a classification accuracy of 83% was achieved (75% of liars were classified as guilty; 90% of truth tellers were classified as innocent). The authors explained the findings with regard to the liars' fright/flight response, which resulted in warming around the eyes to a higher degree compared to truth tellers. In addition, the authors suggested that the technique may be usable in security screening situations, that is, situations concerning true and false intent. Warmelink et al. (2011) tested this claim in a recent study taking place at an international airport. The design was the same as that used by Vrij, Granhag, et al. (2011). Participants—passengers at the airport—answered questions about their forthcoming trip either truthfully or deceptively. Although results were in line with the underlying theory—insofar as liars showed more warming around the eyes than truth tellers—classification rates at 64% were unremarkable. Furthermore, simple veracity judgements reached a classification rate of 69% and thus outperformed the thermal imaging technique. Notably, the classification rates based on thermal imaging in Warmelink et al.'s study were lower than those observed by Pavlidis and colleagues. Whether the differences between the two studies were due to differences in the design, or whether they were due to lies being about past rather than future events, remains undetermined. Regardless of which answer is correct, the results question the generalizability of thermal imaging as an efficient screening tool. Similar difficulties were found when examining the now debunked neurolinguistic programming approach. In brief, the authors found no support for the claim that liars gaze to the right more than truth tellers (Mann et al., 2012). In sum, deception detection techniques are likely to successfully extend to situations of intent when there is a sound underlying theory that is independent of whether statements concern past or future events.
Intention-Specific Approaches

To date, research on intentions has availed of at least three distinct psychological research areas to help develop novel intention-specific deception detection techniques: research on goals, planning and episodic future thought (EFT).

Goals

Goals influence how we interact with our environment. Research on goals has demonstrated that goal activation is distinct from the activation of non-motivational constructs ( Förster, Liberman, & Friedman, 2007). Intentions are closely related to the concept of goals: specifically, an intention activates a behavioural goal. Based on these findings, Ask, Granhag, Juhlin, and Vrij (2013) proposed that the distinct markers of goal-directed behaviour should only be evident for people with a true intention, as only a true intention should activate a behavioural goal. Specifically, Ask and colleagues examined whether the finding that objects are evaluated based on their utility for active goals would hold for true but not false intentions. Using an evaluative priming task, they demonstrated that truth tellers showed implicit positive evaluations of the goal-facilitative stimuli. Liars, in contrast, showed a neutral evaluation of the stimuli, in accordance with someone who would not have an active goal. A ROC analysis was used to gauge discrimination accuracy. It showed an area under the curve of 0.67 (significantly better than chance at 0.50). Although this discrimination accuracy is modest, the primary value of the study is in highlighting a viable direction for future research from the perspective of goal-directed behaviour.

Planning

Planning is a typical concomitant of a true intention (Malle et al., 2001). Liars, however, as their stated intentions are false, may be less likely to have planned for these or at least less likely to have planned to the same extent as a typical truth teller. This discrepancy between truth tellers' and liars' planning can be addressed in at least two ways. First, planning can be used as a theme for an unanticipated question. The unanticipated question approach is designed to ask questions that an interviewee is unlikely to have prepared an answer for. It should be devised so that a truth teller can recall the answer from memory but a liar must come up with an answer on the spot (Vrij et al., 2009). In an intention scenario, questions on the topic of one's intentions can be seen as anticipated (e.g. 'What do you intend to do on your trip?'), while questions on
the planning of the intentions can be seen as unanticipated (e.g. 'How did you plan for your trip?'). Research examining this showed that truth tellers and liars provided similar answers for the anticipated questions on intentions. For the unanticipated questions, however, truth tellers provided longer and more detailed answers compared to liars (Sooniste, Granhag, Knieps, & Vrij, 2013). In a travel experiment, truth tellers and liars were interviewed about their alleged forthcoming trip (Warmelink, Vrij, Mann, Jundi, & Granhag, 2012). Anticipated questions about the purpose of the trip (e.g. 'What is the main purpose of your trip?') were followed by unanticipated questions about transport (e.g. 'How are you going to travel to your destination?'), planning ('What part of the trip was easiest to plan?') and the core event ('Keep in mind an image of the most important thing you are going to do on this trip. Please describe this mental image in detail'). Compared to truth tellers, liars gave significantly more detail to the anticipated questions and significantly less detail to the unanticipated questions. The authors therefore cautioned that if one wishes to avail of the 'less detail indicates deceit' decision rule, it may be better to focus on answers to unanticipated questions.

Unanticipated questions, based on the planning phase of the stated intentions, have also been extended to cells of suspects with some success. With cells of suspects, the primary cue to deceit is within-group consistency. Studies have shown that, when interviewing groups of suspects, questions on planning produced larger differences between truth tellers and liars for measures of within-group consistency compared to questions on intentions (MacGiola & Granhag, 2014; Sooniste, Granhag, Strömwall, & Vrij, in press).

A second approach to the likely discrepancy between truth tellers' and liars' degree of planning is to directly focus on quality of plans. As truth tellers are typically more likely and more motivated to plan their intentions than liars, it follows that they should produce better plans. Based on this assumption, MacGiola, Granhag, and Liu-Jönsson (2013) examined whether markers of good planning behaviour (e.g. effective time allocation, implementation intention-related utterings and likelihood to speak of potential problems) would be more pronounced in statements of true intent compared to statements of false intent. As expected, truth tellers' statements were shown to consist of such markers to a greater extent than liars' statements.

**Episodic Future Thought**

A final area of research, distinguishing the study of true and false intentions from other forms of lies, concerns the concept of Episodic Future Thought (EFT) and mental images. EFT refers to our ability to pre-experience future events through mental simulation, with a strong
focus on visual imagery (Szpunar, 2010). Just as planning is a typical concomitant of intentions, EFTs are a typical – often automatic – concomitant of planning. Therefore, since truth tellers are more likely to engage in detailed planning compared to liars, it follows that truth tellers should have EFTs related to their intentions to a greater extent than liars.

In their studies investigating this claim, Knieps and colleagues (Granhag & Knieps, 2011; Knieps, Granhag, & Vrij, 2013a, 2013b) had truth tellers plan a shopping trip in a nearby shopping mall, while liars used a shopping trip as a cover story to mask their criminal intention. Self-report measures showed that truth tellers were much more likely to have EFTs, and to have clearer EFTs, than liars. In essence, Knieps (2013) provides strong and consistent empirical support that – during an investigative interview – more truth tellers than liars report to have experienced a mental image during the planning phase. Differently put, if suspects do not report that they had a mental image activated during the planning phase, they are most likely lying about their stated intentions.

The series of studies reported by Knieps (2013) is, however, less clear when it comes to comparing the content of the descriptions of the mental images offered by liars and truth tellers. However, a similar study where more specific questions were used during the interview to probe the suspects’ mental image provides more promising results (Warmelink, Vrij, Mann, & Granhag, 2013). Participants either lied or told the truth about a forthcoming trip. If participants indicated that they had a mental image of their trip, a number of specific (e.g. ‘In your mental picture, where are you?’) and general questions (e.g. ‘Please tell me what you can see, hear, taste and feel.’) were asked. Results showed that truth tellers described their mental images with more spatial and temporal details compared to liars.

WHERE WE ARE GOING

To reiterate, the first round of research has availed of a rather strict working definition of intentions. In the following section, we will highlight variants of intentions and contextual factors that may influence suspect’s reports. These variables offer new directions for research and new theoretical perspectives, which hopefully can result in novel deception detection techniques and a more complete research agenda.

Threats and Bluffs

As noted, the extant research on true and false intentions has focused on statements that denote lawful activities; when false, such statements are cover stories used to mask a genuine (e.g. criminal) intention.
Although this is an important area of research, with a value in a myriad of situations, an equally important area has been relatively ignored by psycho-legal research, namely, threats. Threats are statements of intent denoting criminal activities. They are a major concern for any security agency, with modern terrorism providing a particularly high-profile example. In such situations, an ability to assess whether a threat is authentic, or whether it is unfounded, is of utmost importance. Additionally, in many countries, simple verbal threats are punishable by law. When evaluating such threats, the intent of the speaker is paramount in determining subsequent legal actions (Crane, 2006). This highlights how distinguishing between a threat and a bluff is important at both the investigative phase and in the courtroom.

Importantly, true and false threats differ in a number of ways from true and false statements concerning lawful activities, thereby warranting specific research on the topic. First, as noted, cover stories denoting lawful activities typically mask other (e.g. criminal) intentions. With a false threat, however, there is no true intention being masked. For this reason, true and false threats offer a more straightforward categorization of true and false intent: the suspect is simply lying or telling the truth. Second, the content of a stated threat will differ considerably compared to statements concerning lawful activities: threats will likely consist of more negative and emotive language compared to statements of intent concerning lawful activities. Future research can shed light on whether these differences will change how interviewers should approach these sorts of situations.

Taking this direction one step further, it may also be constructive to examine people’s statements about others’ intentions. Operations with informants provide examples of situations where such research can be applied. In such human intelligence gathering situations, the accurate assessment of an informant’s statement is critical (Meissner, Evans, Brandon, Russano, & Kleinman, 2010).

Abstractness and Planning

As noted, following the guidelines of Granhag (2010), the majority of studies have focused on specific rather than abstract intentions. That is, they have focused on future actions where the what, where, when and how are largely decided upon. It is, however, not difficult to think of situations where some or even all of these have been left undecided. Consider, for instance, a prisoner’s parole hearing. One of the goals of a parole committee is to assess the prisoner’s chances of recidivating. A great advantage in such a situation would be to accurately assess the veracity of the prisoner’s stated intentions. In such a situation, the
intentions, of both truth tellers and liars, may be considerably more abstract compared to the form of intentions hitherto studied. For instance, a prisoner may well intend to commit a future crime without having specifics decided upon. Others may intend to live lawfully, again, without accompanying specific plans.

Variation in specificity is a particular aspect associated with statements of intent (rather than statements about past events). Of course, with regard to past events, both questions and answers can refer to less or more specific aspects of an event. The event, however, has nonetheless occurred. Therefore, truth-telling suspects should be capable of speaking about the event in both abstract and specific terms. With regard to intentions, suspects will not always be capable of this. Degree and type of planning will affect how a suspect can speak about their intention. As an example, consider two friends who are taking a trip together. The trip was predominantly organized by one of the two. The planner should be able to speak of specifics in a way the other cannot. The planner could mention a specific café or art exhibit they intend to visit, while the other might speak more generally of seeing the sights. In other words, degree of planning should moderate people’s capacity to speak about an event. Past research has shown that liars speak more abstractly about their claimed intentions than truth tellers (Vrij, Mann, Jundi, Hope, & Leal, 2012). Future research could examine if such findings hold when truth tellers’ planning is limited.

The Post-planning Pre-action Interval

Thus far, intention studies have focused on acts to be carried out in the near future. In other words, the time between planning and action is brief. Social psychological research indicates that truth tellers and liars may markedly differ in situations with a longer and varying post-planning pre-action interval.

First, the intention superiority effect holds that intention-related constructs (e.g. tasks to be performed) are more salient in our minds than constructs of a non-motivational kind (e.g. tasks simply to be remembered, but not performed) (Goschke & Kuhl, 1993). In other words, intention-related information shows a heightened activation and accessibility (e.g. Penningroth, 2005). In addition, research demonstrates that future tasks that would benefit from forethought (broadly synonymous with the definition of intentions given earlier) commonly cause task-related spontaneous thoughts (Masicampo & Baumeister, 2011; Morsella, Ben-Zeev, Lanska, & Bargh, 2010). As an example, consider how we are often kept awake at night by tomorrow’s duties. Since only truth tellers have a genuine intention, it seems reasonable that
during the pre-action interval, truth tellers should show more intention-related chronic thought and have more intention-related spontaneous intrusions than liars. Preliminary support for this claim was found in a recent study. Participants were either told that they were to partake in an argument creation task (true intention) or that they were to lie about their intentions to partake in the task (false intention). Those with a true intention reported to have both more, and more distracting, task-related thoughts than those with a false intention (Mac Giolla, Granhag, & Ask, 2014, Experiment 1).

Second, construal level theory holds that people think more abstractly about distant-future events compared to near-future events (Trope & Liberman, 2003). Therefore, when an intention is to be carried out is likely to affect how suspects think, and in turn speak, about the event. The influence of temporal distance, however, is likely to differ between truth tellers and liars. Research on suspect counter-interrogation strategies shows that a common strategy for liars is to stick to a cover story (Clemens et al., 2013). As this is akin to learning a script, liars’ thoughts about the event are likely to be quite rigid, reducing the typical effects of temporal distance. Truth tellers, in contrast, should adhere to the tenets of construal level theory and think about the future event in a more dynamic way. As the event draws nearer, they will be more likely to think about the event in concrete terms. In sum, truth tellers should think more often and more dynamically about the events associated with the stated intention. This may lead to notable differences in statement content when compared to liars. Such effects may be particularly telling over repeated interviews with large intervals between interviews.

Embedded Lies

Embedded lies are lies that are nested in otherwise true statements. For instance, instead of an outright fabrication, liars can recall an event they have experienced and simply alter some crucial details (e.g. the date or time of the event). Such lies are particularly difficult for people to uncover (Vrij, 2008). Furthermore, when given the opportunity, liars will often opt for these types of lies (Leins, Fisher, & Ross, 2013).

Just as with past events, embedded lies can occur with statements of intent: cover stories can denote acts that are largely intended with only slight alterations to mislead receivers. Worse still, the misleading element of a statement may not be what is said, but rather what is left out. Consider, for example, a terrorist who moves to a country under the guise of an international student. The cover story in such a situation is studying. However, it is likely that such individuals will often
live the roles entailed in their cover stories – this, for example, is what is recommended in the so-called Manchester Manual, the al-Qaeda handbook that advises on terrorist behaviours. In other words, they will attend classes, write assignments and so on. For this reason, to a direct question such as ‘What do you intend to do in this country?’, a direct answer like ‘study’ is true, since the individual does intend to study. Yet, it is nonetheless misleading as a vital piece of information is omitted.

Psychological work on goals may provide avenues to help disentangle such half-truths. Most goal theories advance a hierarchical structure for the organization of goals, where base sub-goals aid in the eventual attainment of higher-order goals (Austin & Vancouver, 1996). The higher-order goals can be as abstract as ‘being a good person’, and the lowest sub-goals typically refer to concrete motor actions (Austin & Vancouver, 1996). Between these extremes, sub-goals can be held at any point along the spectrum. This perspective can help us frame statements of intent. In situations with embedded lies, those with a false intent may share many of the sub-goals of those with a true intent. At some stage on the spectrum, however, the goals of the liars must differ from the goals of the truth tellers. If we return to the example of the international student, truth tellers and liars may share similar lower-level goals, such as attending classes, passing exams, etc. On some occasions, they may even share some higher-level sub-goals such as graduating. The further one goes in the hierarchy, however, the less likely it becomes that a typical student will share the same goals as a student-would-be-terrorist. For instance, if asked questions such as ‘What do you plan to do when you graduate?’, liars’ statements may be less likely to be imbedded and hence will be closer to outright lies. This approach can help interviewers better frame their questions during an interview. In situations when embedded lies may be expected, interviewers may be advised to include questions on higher-order end states. Furthermore, this approach could be combined with the unanticipated question approach or, more specifically, could aid in the development of unanticipated questions that are unlikely to be addressed by liars’ cover stories.

Other work on goals could provide further insights. For instance, it may be possible to extend the work of Ask and colleagues (2013) who demonstrated how true but not false intentions display effects of goal-directed behaviour. They demonstrated that those with a true intention should positively evaluate goal-facilitative stimuli. Another marker of goal-directed behaviour is the automatic positive evaluation of end states ( Förster et al., 2007). If the end states refer to the end states of higher-order goals, it may be possible to distinguish truth tellers
from liars even with embedded lies. Alternatively, availing of such research may provide ways to analyse the content of answers directed towards end states (e.g. truth tellers may spontaneously speak more positively of end states than liars).

The Intention–Behaviour Gap

Decades of research investigating predictors of people’s behaviour converge on one important finding: intentions do not guarantee action (Sheeran, 2002). Importantly, in the topic of true and false intentions, the intention–behaviour gap is only of relevance for those with a true intention – since those with a false intention will never attempt to bridge it. To date, research has minimized the gap for those with a true intention by having an achievable task coupled with a high level of motivation and commitment. In real-life settings, however, large variations of these variables can be expected and an intention–behaviour gap will be likely in many situations. Of interest is whether this can be exploited in an interview context. For example, in situations when a gap is more likely (e.g. when intention commitment is low; Sheeran, 2002), truth tellers may speak of doubts or hindrances with regard to their ability to achieve their stated intention. In contrast, liars may be more likely to ignore the gap, taking for granted that intentions will lead to action. Of course, past research shows that truth tellers will often take this for granted as well. Future research should address whether situations exist where liars will be more likely to do so than truth tellers. A first step from a research perspective is to vary the form of intention that truth tellers plan for and their relationship to it. This could include varying intention difficulty and the actor’s ability, motivation and commitment.

A NOTE OF CAUTION: THE ELUSIVE NATURE OF INTENT

As time in office is coming to an end, politicians are regularly faced with their unkept promises. Disappointed voters feel that they were deceived during the elections. A common line of defence is, ‘Really, our true intention was to [x], but then [y], and our priorities had to change’. The elusive nature of intentions can be seen in many other walks of life, and the legal arena is no exception. For example, accusations of tax fraud (and other white-collar crimes) are often met by the suspect admitting to the actions per se but leaving to the prosecutor the job of proving that the actions were premeditated (i.e. that he acted
with criminal intent). On a related note, a recurrent dilemma in counterterrorism work is to know when to interrupt a surveilled illegal operation that is about to unfold (e.g. Bjørgo, 2013). In short, delaying the arrest until there is sufficient evidence to prove criminal intent must be balanced against the risk (and possible consequences) of suddenly losing track of the players involved. Furthermore, a person might, at a certain point in time (e.g. after having watched an upsetting debate on TV), express a serious threat against a person but later (e.g. the next day) decide not to follow through. The expressed intention was never acted upon, but might have been genuine when stated. In addition, an unfounded threat (false intent) might be used to obtain a very harmful effect, for example, a sense of fear in the individual who was threatened (true intent).

The legal field offers many opportunities and motives to study ‘intent’. Irrespective of whether the issue is to assess past intentions (‘Did he act with criminal intent in mind?’) or to assess future intentions (‘Is he telling the truth about his intentions?’), the different tasks seem to converge with regard to the complexity of the nature of intent.

CONCLUSIONS

Developing methods to distinguish between true and false intentions is not an easy task. The primary defence for conducting this type of research is the sheer amount of veracity judgements that are made about intentions on a daily basis. Border control, security personne and intelligence agencies provide salient examples. Nonetheless, research on the topic remains scarce.

In this chapter, we have reviewed a number of new approaches for discriminating between true and false intent. No matter how acute different operators’ needs might be, one must remember that all these approaches are still underdeveloped. Hence, it makes little sense to provide any strong practical recommendations, and the different approaches should at best be seen as promising avenues for future research.

Researchers are perhaps unlikely to ever provide clear-cut diagnostic tools. However, considering the amount of judgements that are regularly made, even slight improvements of practitioners’ classification rates could have tremendous positive effects. To date, as highlighted by the review of the extant literature, a number of advances have already been made. This first round of research has focused on (1) extending deception detection techniques traditionally used on
statements concerning past actions to statements of intent and (2) developing novel approaches based on the unique psychological features of intentions. Our contention is that it is too early to choose one approach over the other; instead, both strands of research should be further developed. The next round of research should address a host of variants of intentions and contextual factors omitted in the first round. Whether these variables will result in novel and usable interview techniques remains an open question, but past research in related areas provides us with some degree of optimism.

REFERENCES


