Book Review

Detecting Deception:
Current Challenges and Cognitive Approaches

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Detecting Deception: Current Challenges and Cognitive Approaches
Pär Anders Granhag, Aldert Vrij & Bruno Verschuere (eds) (2015)
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Introduction

Detecting Deception is part of the Wiley Series *Psychology of Crime, Policing and Law.* The purpose of this series is to inform practitioners involved in the many aspects of the judicial process about the latest research findings which may have implications for real-world policy and practice in crime investigation, detection, policing, and Law. *Detecting Deception* is effectively an update on two previous books in the series, *Detecting Lies and Deceit: The Psychology of Lying and the Implications for Professional Practice* (2000) and *Detecting Lies and Deceit: Pitfalls and Opportunities* (2008) by Aldert Vrij, Professor of Applied Social Psychology at the University of Portsmouth. However, this latest publication is an edited book, with fourteen chapters written by leading psychology researchers in the field, providing readers with the most comprehensive review of the state of deception detection research, theory, and practice at the present time.

The content is conveniently subdivided into three sections which look at: deception detection practices currently in use (5 chapters); current and emerging practices and the challenges they face (3 chapters); and new and encouraging developments in the field (6 chapters). Each chapter focuses on a specific lie detection approach, beginning with useful overviews of the tools, followed by comprehensive assessments of their strengths, weaknesses, and limitations of the research, and ends with a comprehensive reference list.

While there is very little actual linguistics in this book, if one subscribes to Chomsky's claim that linguistics is a "branch of cognitive psychology" (1972), then there is much to interest the linguist in terms of current psychology theory as to why language

might be produced in the way it is, and what meaning may be derived from it. The approaches to deception analysis discussed lie entirely within psychological frameworks of behaviour, almost all of which are non-verbal. Of particular interest to linguists will be the chapters dealing with language production in certain contexts such as interview-interrogation and cross-cultural communication scenarios, where the psychology behind the language variation observed by linguists are discussed in detail. It should be noted that we are reviewing this book as linguists (specifically forensic linguists) and, as such, there are some chapters, especially those dealing with physiological and cognitive responses to deception stimuli, that we are less able to comment on.

Section 1 – Established Approaches

Section 1 describes existing practices relating to deception detection, beginning with a chapter on 'Verbal Lie Detection Tools'. Vrij provides a general overview of the background and methodological approaches to three speech-based lie-detection tools: Statement Validity Analysis (SVA), Reality Monitoring (RM), and Scientific Content Analysis (SCAN), with a detailed look at the individual criteria used by each tool and the research surrounding them. All three tools focus on the structure and informational content of witness evidence. SCAN would be of most interest to linguists as it is the only approach which looks at details of language change as a deception indicator. Vrij also does an excellent job of comparing and contrasting the tools and how well (or not) they meet the five Daubert criteria, used by the United States Supreme Court for admitting expert evidence in US Federal courts.

Chapter 2, 'New Findings in Non-Verbal Lie Detection' (Bond, Levine and Hartwig), looks at physical behavioural cues associated with lying. It contains interesting background on the main theories which explain variations in physical behaviour which deceivers are said to exhibit when managing their deception. Most of this will be familiar to researchers interested in physical behavioural cues associated with deception, and their conclusion comes as no surprise – no individual cue or collection of cues consistently identifies deception. In fact, one new finding is that the more a cue is studied, the weaker becomes its discriminatory value.

Chapter 3, 'The Polygraph: current practice and new approaches' (Meijer and Verschuere) addresses the practice of measuring physiological responses to identify deception. The article questions its validity and highlights the gulf between polygraph practice and academic validation.

Chapter 4, 'Forensic Application of Event–Related Brain Potentials' (Iacono) and Chapter 5,'Deception Detection Using Neuro-imaging' (Ganis) focus on the controversial analysis of brain signals as a deception detection tool. The former relates to the "Guilty Knowledge" (GKT) Test associated with the polygraph and covered in Chapter 3 (as "Concealed Information Tes" or CIT), while the latter deals with brain imaging. As with Meijer and Verschuere, Iacono argues GKT has potential, while Ganis concludes that neuro-imaging is "not even remotely suitable for field applications" (p. 117).

Section II – Current Challenges

Despite being the shortest section, Section II holds some of the most interesting chapters for linguists. Overall, this section favours posing questions rather than answering them, but that can be of great benefit to those interested in researching deception. It contains

three chapters focusing on current challenges facing deception detection, valuable to anyone wanting an overview of the field. Although not the explicit aim of the section, it highlights areas that might benefit from linguistic research while giving a moderated view of the existing research. For example Taylor *et al.* call for researchers to "derive a better understanding of cultural differences in cues to deceit" (p. 194), an area we believe linguists could certainly contribute to.

Chapter 7 focuses on 'Discriminating between True and False Intentions' (Giolla, Granhag and Vrij), an area that is of obvious interest to threat assessment work, which has itself been turning more to forensic linguistic research. The chapter differentiates between implicit and explicit beliefs about what constitutes deception and demonstrates through numerous studies that lay people and supposed experts are not particularly accurate in their beliefs. Unsurprisingly, the authors find that criminals are more accurate than many other groups at determining deception.

Chapter 8 looks at 'Cross-Cultural Deception Detection' (Taylor *et al.*) and hence would be of interest to anyone interested in deception in multi-cultural groups or anyone interested in intercultural communication.

Section III – Improving Lie Detection: New Approaches

Section three looks towards the future of lie detection. Through six different chapters, it introduces techniques and methodologies that are new and which the editors believe are constructive approaches for detecting deception. As such, these methodologies are frequently still evolving. Vrij's chapter on 'A Cognitive Approach to Lie Detection' discusses the role of cognitive loading to increase the production of lie cues during interviews. The linguist reader would be interested in how psychologists identify plausibility and measure amount of detail and response length, but this is not described in the article.

Chapters 11 and 12, which focus on using brain stimulation methods (Ganis) and reaction times (Vershuere *et al.*) respectively to identify deception, are highly technical and aimed at quite a specific audience of practitioners or psychologists. We were, however, particularly impressed with Ganis's inclusion of a short discussion on ethics.

This section has several chapters that focus more on the physiological responses (particularly chapters 11 and 14), so might be of less interest to linguists. Nonetheless, it might be beneficial to linguists interested in deception detection to see the current trends and identify how they could contribute to make the field even stronger,

Chapter 13 (Clemens and Clemens) would be of particular interest here. As the approaches in this section are still evolving, the limitations could have been discussed further. There was also next to no mention of the role of different cultures and the potential impact that might have, which is a shame as it was discussed brilliantly in Chapter 8, and is clearly relevant for some of the approaches here.

Conclusion

Overall this book has many elements that are relevant for those with an interest in forensic linguistics. It provides a nice introduction to the current state of the art within deception detection, and is suitable for a wide range of audiences, as it does not require any overly specialist knowledge to understand its content. Readers unfamiliar with the reporting of statistical results might find these areas daunting but these are accompanied by clear explanations as to how the findings are interpreted. The book is aimed at legal,

law enforcement, and investigative deception detection practitioners with the intention of influencing best practice in the field. It leans towards a strong cognitive approach to deception analysis, largely ignoring the anxiety-based approaches which work on the premise that emotions theoretically associated with deception leak out into verbal and nonverbal behaviour. One criticism is that several of the chapters, and the book overall, would have benefited from a discussion of the definition of deception and lies. The chapters tended to take these terms given, and there was little discussion of how understanding of the terms might differ across socio- or cultural-groups. In our opinion, this resulted in the occasional problematic assumption.

To conclude we would recommend this book to anyone who has an interest in deception, as well as academics or professionals with an interest in intercultural communication, interviewing, or the intersection of psychology and linguistics. This book would be of interest to students, researchers and lecturers in the area off linguistics – particularly, but not exclusively, those with an interest in deception detection – and to people interested in interviews or text production where deception (or the perception of potential deception) is likely.

References

Chomsky, N. (1972). *Language and Mind.* New York: Harcourt, Brace, Jovanovich.