

## BOOK REVIEW

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### Review of: *Handbook of Polygraph Testing*

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**REFERENCE:** Kleiner M, editor. Handbook of polygraph testing. Academic Press: London. 2002, 354 pp.

“For as long as human beings have deceived one another, people have tried to develop ways to detect lies and uncover the truth.” This statement, by the National Research Council of the National Academy of Sciences, appeared in a recent (2002) report describing their survey and analysis of the published research on the polygraph and lie detection. The fact that such a prestigious body undertook an evaluation (Notwithstanding the quite large sum of money provided for the review!) shows, as the preceding quotation suggests, the importance of the field of “lie detection” to all human interactions, social, legal, political and other domains. Deceit and its detection, are a part of life. (Not just human life, of course.) But, is it really possible to detect human deception with the use of a polygraph instrument, a so-called, “lie detector?” The NAS report was not very encouraging in this regard, though it did restrict almost all of its conclusions to polygraph usage for “security screening” purposes. It did not focus on forensic applications, where polygraph testing commonly plays a role in helping to resolve criminal investigations. In fact, it may well be that such testing is more widely used in the U.S. for that purpose than almost all other forensic techniques. What do we know about such testing and how might we evaluate its effectiveness? This book is the most recent of the handful in polygraphy—a field in which there has been relatively little scholarly (writing and research) attention.

The dearth of useful literature in the field makes this book, if for no other reason, a significant contribution. But, fortunately, there are other reasons to welcome it. Most of the chapters were written by persons who are well known in the field, who have considerable professional experience, and who have a good grasp of the issues that need to be addressed. Considered holistically the chapters bring together in one volume a good overview of points of interest and points of debate that feature in the continuing controversy about the nature and effectiveness of polygraphy.

The book starts with a chapter in which the most widely used procedure in the U.S. is discussed. This is the so-called “Control (Comparison) Question Test (CQT).” In this chapter of about 50 pages, one can find an overview of some of the critical issues involved in the administration and evaluation of the CQT. Unfortunately, one can also find an awful lot of misleading commentary

in this chapter. This is probably the case because of the authors’ zealotry in trying to show that “their” version of the CQT is superior to others. In doing this they make a number of uninformed, inaccurate and unsubstantiated observations about alternative versions. Many of their statements are so obviously self-serving as to be irritating to informed observers and, perhaps, to others as well. They give the appearance of a much less than objective view of the field. In their words, for example, their version of the CQT is: “. . . the first polygraph technique developed by psychologists who explicitly incorporated basic knowledge and principles from psychological science and psychophysiology in the pre-test interview, question structure, recording methods, and evaluation methods.” This sort of self-promotion abounds in the field but one would expect a bit less of it in a book of this nature. So, as a word of advice to the naive reader, consider some of the material here as part fact based on scientific findings, part speculation and part self-aggrandizement. With those caveats in mind, the general content of the chapter is informative of the range of issues that must be considered in comprehending the controversy about the CQT.

A careful reading of the first chapter, followed by the material in Chapter 4, the almost obligatory critique of the CQT, which, by the way, contains no argument that has not been advanced a number of times before, and that included in Chapter 5, a somewhat unique and informative perspective on the underlying theoretical basis for the CQT and polygraphy, will give the reader a good overview of the most critical concerns that confront those who advocate the use of the CQT. And, because that procedure—in its many variations—is most certainly the one that dominates in the testing used for criminal investigative and other forensic purposes, the reader will get a good grasp of the issues and the response to them, both pro and con. In reading the material, it should become clear why research in the field is so difficult to do and, when done, so subject to multiple interpretations. It will also be clear why many of the issues remain unresolved even though the past 30 years or so have witnessed more and better research in the field than all of the preceding seven decades.

Because of the controversy concerning the CQT, a number of critics of that procedure advocate abandoning it in favor of a different approach, the Guilty Knowledge Test (GKT) or the Concealed Information Test (CIT). (Neither term is a very apt descrip-

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tor for the “test” but I’ll use CIT here to be consistent with what appears in this book.) The one country in which the CIT is commonplace and the CQT is not is Japan. The second chapter of this book, having been written by a well-known and experienced Japanese polygraphist, describes the use of that procedure. What is of real interest here is that the application is described as it is used in the field, not in a laboratory setting. The reader should give close attention to several important characteristics in that usage. First, the polygraph examiner actually visits the crime scene and “experiences what the offender had done and seen” and, when possible, visits with the victim. These help the examiner to formulate appropriate test items. Second, the test results are admitted into court proceedings, though not without some restrictions. Finally, polygraphists there must have an academic background in psychology, often at the Masters degree level. They are support staff to the police and, in general, serve in a role very similar to that traditionally given to other forensic scientists. That is, they accumulate background information about a case, carry out their testing and file a report for the benefit of the investigative and prosecutorial personnel. Unlike law enforcement polygraphists in the U.S., they do not typically combine polygraph testing with “interrogation.” Suspect questioning to gain an admission or confession is done by others. The reader will have to decide if the process applied in Japan could be readily adapted to U.S. circumstances, as many of the critics of the CQT advocate. It is worth mentioning though, that the CIT is used in the U.S., though in a much more limited way than in Japan. In the U.S., primarily because police investigations are often lax, the media typically expose crime details, and the view of the role of polygraphy is different than in Japan, circumstances work against widespread reliance on the CIT. It is also of interest to point out that when critics say that the “polygraph doesn’t work” they usually don’t mean that literally; they find great value in the CIT, not in the CQT. It is not the “polygraph” but the procedure that is applied when using it that they object to.

Although this book is titled as a “handbook on polygraph testing” and one might assume it is, like many other books on the topic,

more of a how-to manual than a useful, reasoned discussion of issues and conceptual concerns, it is, in fact, more of the latter than the former. That is one of the book’s strong points and it makes this book stand out from some of the few others that have become available in recent years. Among its weaknesses, as often occurs in edited volumes, the chapters are not especially well integrated. They are not of equal strength in either scope or depth and some of them tend to be unbalanced in their presentation of important material; that is, in some chapters important concerns are either ignored or given short shrift in favor of less significant issues. But, overall, there is enough coverage of most of the basic issues in the field that one can get a good grasp of what is known about them.

Aside from chapters on topics already mentioned in this review, there are also chapters on: the pre-test interview; the use of polygraphy in personnel screening—by far the most frequent application in the federal sector of the U.S.; the periodic testing of sex offenders, a rapidly growing but little understood application; the problem of countermeasures, attempts to defeat polygraph testing; developments in “new” instrumentation to detect deception, more specifically, the use of “brain waves;” computerized “scoring” of polygraphic data; and legal developments as they relate to polygraphy, especially the CQT. The chapter that stands out from these is the one dealing with the pre-test interview. All polygraph examinations include such an interview and, even though polygraphists insist that this is an extremely important component of an examination, there has been very little attention devoted to it. Little has been written about it, there is almost no empirical research on it, and because it may vary from one circumstance to the other it is one of the principal reasons that it is so difficult to standardize polygraph testing, a key argument in the critics’ position. The chapter on this topic sets out a basis for investigating the interview and, though there is plenty of room to disagree with the author on some points, what is expressed here is a welcome addition to the book and a promising contribution to the literature on polygraphy. If it spurs research in the direction the author intends, the shortcomings in this book will be of little consequence in the long run.