

## BOOK REVIEW

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### Review of: Levy H "And The Blood Cried out. A Prosecutor's Spell-binding Account of the Power of DNA"

**REFERENCE:** Review of Levy H, And the blood cried out. A prosecutor's spellbinding account of the power of DNA, Basic Books, Harper Collins Publishers New York NY, 1996, 223 pages.

Rarely, does a technically accurate work provide a concise (223 page) yet intriguing narrative. Harlan Levy's straightforward account of the introduction of DNA technology into the criminal justice system makes for easy and informative reading. The hard-bound, well-edited, carefully-referenced edition should be a required textbook for students of the law and forensic sciences, but it may well be consumed by those who find pleasure in detective stories. The book has ten chapters that provide details of some very famous and infamous legal cases that arose during the first "DNA decade". These narratives were selected because defendants were found guilty or innocent on the bases of (or despite) VNTR and/or PCR matching of DNA contained in blood or semen evidence to DNA of the blood of suspects.

There are a Table of Contents and an Index that allow the reader to access or review specific case materials and details. A section called Notes and Sources provide more technical information as well as bibliographical data. Each chapter's relevant contents are supported by information culled from court records, standard texts, legal editorials, scientific articles, and accounts in newspapers and periodicals. The factual material appears correct regardless of whether it is historical, legal, sociologic or scientific. Technical and legal methods are described so that they can be understood by lay persons and they are wonderfully accurate with the exception that statistical and population frequency concepts are largely omitted. I have focused this review upon issues rather than the case histories.

In Chapter 1, "Getting to Homicide", business-as-usual detective work is described as a backdrop to prepare the reader for the dramatic introduction of DNA evidence into investigations of rape and blood murder. The admissibility of DNA provided the courts with a new kind of physical evidence that can identify the source individual with a power greater than any other except fingerprints. The author has omitted description of other genetic marker systems that might have been compared to DNA.

Chapter 2 ("Breakthrough") is somewhat autobiographical. Apparently, Mr. Levy is intellectually restless and recognized that

his career in the law was not fully satisfied by the legal process. He is concerned with truth: "Truth is sometimes an underrated commodity in the criminal justice system." Surprisingly, although he recognizes that DNA raises fundamental "... questions about our commitment to justice", Mr. Levy hesitates to suggest solutions in this early chapter. Instead, he describes how DNA is used in identity studies, beginning with a technical review and following with the historical review of the Narborough murders in which Alec Jeffrey's DNA probe system was first applied.

"The Trouble with DNA" (Chapter 3) traces the Castro case in which so-called experts in DNA analysis and aggressive attorneys challenged DNA evidence and jeopardized its admissibility in future cases. (In my view, expertise requires experience in the application of DNA to forensics and is not simply a matter of academic standing or technical understanding of methods. (Who would want a pure anatomist for a surgeon?) To be sure, some real technical and scientific issues were debated in the Castro case, but science aside, the motivations for the debate, including egotism, desire to maintain the *status quo*, and profit, clouded the issues.

The furor that followed resulted in the first report of a National Academy of Sciences committee (and erroneous newspaper account) which compounded both the scientific problems and those of the public's perception of DNA evidence. (In Chapter 10, the author indicates that the more rational second, 1996 NAS report better represented the value and limitations of DNA evidence.) Eventually, a better perspective was established; DNA evidence is extraordinarily powerful but it is more or less subject to the usual problems associated with physical evidence: mislabeling, contamination, switching, loss, degradation, misconduct and misinterpretation.

Chapters 4 and 5, "Inside the Central Park Jogger Trial" and "The Triumph of DNA" are simply reports of complicated but fascinating cases in which the problems of eyewitnesses' inability to identify or to misidentify can be overcome by DNA evidence.

Chapter 6, "Vitriol" opens with the seismic power of DNA to rock the legal system and to make objective even the sociology of crime. There is allusion to the problems of knowing allele frequencies in various ethnic races and groups, but the scientific issues are not dissected completely. This is not the fault of the author because there is still much to be learned by scientists. The very concept of race has been challenged. Specific racial groups (e.g., Hispanic) can mean various ethnic admixtures. Geography and population isolation have not been fully explored with respect

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to DNA loci. These problems cannot be resolved by debate in court, in editorials, or in committee.

"Manhunt" (Chapter 7) presents the value of convicted felon DNA data banks in finding and identifying serial rapists. A discussion of the ethical issues and limitations might have been worthwhile, but is omitted.

"Sudden Insight" (Chapter 8) describes the greater analytical sensitivity of PCR over RFLP (VNTR) analyses, using the World Trade Center bombing and Untweger serial rapes/murders cases as examples. A third case of mistaken eyewitness identity demonstrates PCR as a sensitive, exonerating technique. The shortcomings of PCR are not given and there is no consideration of possible future technologic advances.

The "trial of the century" is detailed at length in Chapter 9, "O.J. Simpson: What the Blood Really Showed". Defense strategies are outlined, but the author points out the far-fetched nature of the combined theories of police/lab misconduct and ineptitude. The author dissects out the DNA evidence which was not, and could not have been, explained by defense theories and concludes that there was "... evidence that strongly indicated Simpson's guilt." Specific reasons are listed for how the case was lost despite the evidence, but the author is notably silent about general underlying problems of the criminal justice system: racial bias, monetary motives and partiality of witnesses.

The final Chapter 10, "The Power of DNA", presents how DNA evidence has changed the legal process. DNA has caused rape

defense attorneys to give up the 'denial of intercourse' in favor of the 'consensual sex' defense. Also, the use of civil law is a strategy for prosecutors to achieve a measure of justice because the standard for conviction ('preponderant evidence') is lower than criminal law's 'reasonable doubt'. Even when DNA evidence by itself is insufficient to produce conviction, it may serve to indicate that a case should be tried. (An unusual case involving twins is presented.) The author points to ways that can improve legal objectivity, evidence selection, laboratory performance and data banking.

The text falls short in failing to suggest improvements that would assure proper collection, storage, and reporting of DNA evidence or how to control the quality of databases. Quality of analysis is less a problem than assuring absence of misconduct and human sloppiness. Early DNA use has pointed out an unfairness caused by inequality of resources available to prosecution and defense.

Fundamental changes are needed. Witnesses presenting DNA evidence should be impartial (as they are in civil paternity cases). Evidence should be encoded to assure laboratory objectivity. Perhaps forensic specimens should be collected by a party unrelated to prosecution or defense. Will these or other changes be made?

Despite this reviewer's wish for more, Harlan Levy's accounts are both enlightening and thought provoking. He has illuminated not only the power of DNA as evidence, but its implicit power that calls for greater justice.