

BOOK REVIEW

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Review of: *Bloodstain Pattern Evidence: Objective Approaches and Case Applications*

REFERENCE: Wonder A. Bloodstain pattern evidence: objective approaches and case applications. New York, NY: Elsevier-Academic Press, 2007.

Bloodstain pattern analysis (BPA) is a field that has developed mostly through forensic casework application. Over time, research has begun to reinforce this development with sound scientific principles. Unfortunately, this reinforcement is far from complete and there are still many misconceptions and improper techniques prevalent within the field. *Bloodstain Pattern Evidence: Objective Approaches and Case Applications*, addresses many of these misconceptions and promotes a standardized objective approach to interpretation. I believe this is a must read for anyone with a serious interest in BPA.

In *Blood Dynamics*, a previous publication by the same author, the impact of blood's non-Newtonian properties was assessed in relation to BPA. For example, viscosity is not only the dominant cohesive force within a blood droplet, but it can actually change depending on how fast it is moving and what it is moving against. The author then went on to suggest a systematic approach to BPA based on shape, alignment, arrangement, density, and distribution of bloodstains or patterns (SAADD).

In this book, *Bloodstain Pattern Evidence*, the author focuses on 25 casework applications. In each case, the SAADD approach is

applied as part of the initial investigation, or as part of a review following previous BPA. The author does a good job of highlighting the key learning points for each case and many of the pictures allow the reader to follow along with their own interpretation. Not only did the 25 cases represent a diverse selection of BPA case types, examples where incorrect analyses led to a wrongful conviction are also included. In addition to casework applications, the author also reviews the mathematics of BPA, discusses links with other forensic disciplines, and shares her training experience. Given the abundance of literature, I was hopeful that the author might discuss applicable research in droplet dynamics for fluids other than blood. With the focus on case applications however, this is an understandable absence.

This book does not read like a traditional BPA text. It is clear to the reader that the author is interested in more than simply summarizing the field of BPA to date. Instead the author takes a critical evaluation of the field, questions our current notions, highlights problem areas, and, most importantly, makes constructive suggestions for improvement. Regardless of whether the scientific community ultimately adopts the author's approach to BPA, it is hard to deny the value of individuals who are willing to shake things up a little. Especially in a field that, in my opinion, could use a good shake.

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