

WONDERS OF THE INVISIBLE WORLD: PROSECUTORIAL SYNDROME AND PROFILE EVIDENCE IN THE SALEM WITCHCRAFT TRIALS

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*"It were better that Ten suspected Witches should escape, than that
one Innocent Person should be Condemned."*

Increase Mather¹

INTRODUCTION

In early 1692, the residents of Salem Village and its neighboring towns in Massachusetts were devil-fearing, witchcraft-worried Puritans. Along with the cold New England spring winds that swept through their village came accusations by neighbor against neighbor of terrifying acts of witchcraft. Believing witchcraft was afoot in their villages, ensnaring their residents, the communities resorted to the legal system,² since witchcraft was considered not only a sin, but a crime.³ To deal with this criminal outbreak, Governor Phips and his council established the Court of Oyer and Terminer.⁴

* Associate Professor, University of Akron School of Law. The title of this Article, *Wonders of the Invisible World*, refers to the title of the Reverend Cotton Mather's 1693 defense of the Salem witchcraft trials *The Wonders of the Invisible World*, reprinted in GEORGE L. BURR, NARRATIVES OF THE WITCHCRAFT CASES, 209 (1914). Cotton Mather's role in the trials is discussed *infra* Part II. I am grateful to the numerous colleagues at Akron who discussed issues and read early drafts and to the law librarians and secretarial staff for their assistance. Many thanks to colleagues in other schools who read and commented on early drafts, including Maureen O'Connor, David Faigman, Paul Finkelman, Barry McCarthy, and Mindy Mechanic. Finally, many thanks to the excellent editors at the *Vermont Law Review* for their great work and cooperation on completing this project. This Article was supported in part by a grant from the University of Akron School of Law.

1. INCREASE MATHER, CASES OF CONSCIENCE CONCERNING EVIL SPIRITS PERSONATING MEN 283 (1693) (hereinafter CASES OF CONSCIENCE).

2. See DAVID THOMAS KONIG, LAW AND SOCIETY IN PURITAN MASSACHUSETTS ESSEX COUNTY, 1629-1692, at 70 (1979) ("Making the legal system their matrix for coping with their highly 'problematic social reality,' the people of Essex [County] insisted upon a legalistic prosecution of the witches in order to assert the unequivocal rule of legal authority against all types of extralegal force." (quoting CLIFFORD GEERTZ, *Ideology as a Cultural System*, in INTERPRETATION OF CULTURES (1977))).

3. See SANFORD J. FOX, SCIENCE AND JUSTICE: THE MASSACHUSETTS WITCHCRAFT TRIALS 35-43 (1966) (discussing the legal procedural issues concerning the prosecution of witchcraft). See also BRADLEY CHAPIN, CRIMINAL JUSTICE IN COLONIAL AMERICA, 1606-1660 117 (1983) (explaining that "[n]o common law felony was more deeply rooted in the Bible than witchcraft, the injunctions in Exodus and Leviticus being the imperative command: 'Thou shall not suffer a witch to live'").

4. Konig, *supra* note 2, at 170. A court of "oyer and terminer" is a court that "hears and determines" cases and was generally enacted to hear felony and treason cases. BLACK'S LAW DICTIONARY 1132 (7th ed. 1999).

The legal process culminated in a series of witchcraft trials and executions over a four-month period.⁵ By most estimates, 156 people were accused of witchcraft, although not all of those were tried.⁶ Following the trials, nineteen individuals in Massachusetts were hanged for witchcraft,⁷ and one man was pressed to death for refusing to plead to the indictment.⁸ During the prosecutions and executions, few voiced objections to the proceedings; many expressed certainty at the inherent virtue of the prosecutions and appropriateness of the methodologies employed.⁹

By the time the executions ended, fifty-five people had confessed to being witches and dozens more either awaited trials or reprieves so that their yet-unborn children would not be executed with them.¹⁰ One of those who confessed to witchcraft was four-year old Dorcas Good. She went insane after spending eight months in jail, during which time her infant sister perished and her mother was executed.¹¹

Much of the evidence used to convict the Salem defendants was premised on testimony about observations of behaviors that the experts had ordained to be causally related to witchcraft. There were two types of causal

5. The first execution, Bridget Bishop, occurred on June 10, 1692; the last, Giles Corey, occurred on September 19, 1692. See PAUL BOYER & STEPHEN NISSENBAUM, *THE SALEM WITCHCRAFT PAPERS, VERBATIM TRANSCRIPTS OF LEGAL DOCUMENTS OF THE SALEM WITCHCRAFT OUTBREAK* 24, 26 (1977) (hereinafter *WITCHCRAFT PAPERS*).

6. See BERNARD ROSENTHAL, *THE SALEM STORY: READING THE WITCH TRIALS OF 1692* 205 (1993). See also RICHARD GODBEER, *THE DEVIL'S DOMINION: MAGIC AND RELIGION IN EARLY NEW ENGLAND* 238-42 (1992); PAUL BOYER & STEPHEN NISSENBAUM, *SALEM-VILLAGE WITCHCRAFT, A DOCUMENTARY RECORD OF LOCAL CONFLICT IN NEW ENGLAND* 375-78 (1993) (listing all accused witches) (hereinafter *DOCUMENTARY RECORD*).

7. *DOCUMENTARY RECORD*, *supra* note 6, at x.

8. See SALLY SMITH BOOTH, *THE WITCHES OF EARLY AMERICA* 157 (1975) (stating that Giles Corey stood mute and refused to enter a plea to the charge). The refusal to "cooperate" with the legal system was "an act akin to insurrection" and thus automatically subjected the individual to a *peine fort et dure* (a harsh and severe penalty). *Id.* In this case, Giles Corey was pressed to death with heavy weights over a two-day period. Some surmise that by subjecting himself to this horrible death without being convicted, Corey saved his estate from confiscation by the Crown. *Id.* See also EDWIN POWERS, *CRIME AND PUNISHMENT IN EARLY MASSACHUSETTS 1620-1692: A DOCUMENTARY HISTORY* 497 (1996) (explaining that Corey "made it possible for his heirs to inherit his property" by denying his guilt). But see PETER CHARLES HOFFER, *THE SALEM WITCHCRAFT TRIALS, A LEGAL HISTORY* 123 (1997) (noting that Corey had already disposed of much of his estate by this time and that the English law only confiscated chattel).

9. Cotton Mather, *Return of Several Ministers*, reprinted in *DOCUMENTARY RECORD*, *supra* note 6 (hereinafter *Several Ministers*) discussed *infra* Part III. Toward the end of the trials, both Robert Calef and Thomas Brattle began to criticize them more openly. See *infra* Part V (addressing Calef and Brattle's reactions to the Salem witchcraft trials).

10. Early New Englanders apparently did not execute pregnant women; instead, they waited until the child was born to execute the mother. See BOOTH, *supra* note 8, at 198.

11. HOFFER, *supra* note 8, at 66.

relationships: the relationship between behaviors of the alleged victims¹² and the witchcraft (what this Article terms “syndromes”); and the relationship between behaviors and features of the accused witches and the witchcraft (what this Article terms “profiles”). Of these two types of evidence, reliance on syndromes was more pronounced.¹³

This Article defines prosecutorial syndrome evidence as a proffered conclusion about the existence of criminal activity that is based upon observable behaviors or symptoms of an alleged victim. Syndrome evidence requires a belief in the meaningful relationship between the criminal activity (the cause) and the observable behaviors or symptoms in the victims (the effect). The syndrome behavior or symptoms exhibited in Salem would be based upon the witchcraft committed by the accused (the cause) and inexplicable fits and behaviors, contortions, illnesses, and even death of the afflicted (the effect).

Of primary significance for syndrome evidence at Salem was the belief that witchcraft could effect strange and bizarre physical symptoms, illness and even death in people and animals.¹⁴ This belief was premised on the idea that certain real disorders or illnesses were not caused by ordinary means but by diabolical intervention. Strange and inexplicable behaviors that came and went without leaving permanent damage were also believed to be the result of witchcraft. In short, Salem villagers believed that people (and animals) could exhibit behaviors caused by witchcraft. This causal relationship was established by experts, who possessed great familiarity from observations of these behaviors in prior cases.¹⁵ This testimony is collected here under the heading of “witchcraft syndrome evidence,” although it could be further fractured into a variety of syndromes, such as “bewitched pig syndrome,” “bewitched child syndrome,” and “bewitched cattle syndrome.”¹⁶

Prosecutorial profile evidence is defined as a proffered conclusion about the existence of criminal activity that is based upon observable behaviors or physical features of an alleged perpetrator. Profile evidence does not seem to possess the clear causal relationship that syndrome evidence does when associated with criminal activity. However, relevant profile evidence rests on an assumption that the accused’s behavior is affiliated with the criminal behavior in a meaningful fashion. Thus, profile behaviors or features were *indicative* of witchcraft, if not actually *caused* by it.

12. The term “victims” refers to those individuals believed to be tormented and afflicted by the accused witch. One scholar notes the sympathy that some of the judges had for the “poor ‘afflicted’ girls.” POWERS, *supra* note 8, at 477.

13. See *infra* Part IV.

14. The prevailing belief system of Puritan Massachusetts is discussed *infra* Part II.

15. These expert opinions are discussed *infra* Part II.

16. For examples of these various syndromes, see *infra* Parts III, IV.

Of primary significance for profile evidence was the belief that witches acted in abnormal ways and displayed identifying features. There was testimony about inexplicable acts committed by the defendants—such as remarkable feats of strength—that supported convictions for witchcraft.¹⁷ Witchcraft experts also permitted the use of certain behavioral tests, such as the “touching test”¹⁸ and the “recitation of the Lord’s prayer test.”¹⁹ The judges also decreed significant the display of curious physical features, commonly referred to as “witches’ marks.”²⁰ The experts indicated that these behaviors and physical phenomena, along with physical symptoms, were consistent with witchcraft. This type of evidence is collected here under the heading of “witchcraft profile testimony.”

Modern cases are replete with syndromes and profiles, primarily in the prosecution of criminal cases. For example, many contraband investigations have relied upon the so-called “drug courier profile” for probable cause or reasonable suspicion to stop and search a vehicle or person.²¹ Even more pernicious has been the use of racial profiling to justify stopping and searching suspects.²² While profile evidence at trial is generally frowned upon

17. See the testimony admitted in the trial of George Burroughs, *infra* Part IV.

18. The “touching test” rested on the premise that if the witch’s touch stopped the victim’s torment, the witch was the cause of the torment. This test is explained in more detail *infra* Part II.

19. The “recitation of the Lord’s prayer test” required the accused witch to recite without error the Lord’s prayer. The failure to properly recite was evidence that she was a witch. See *infra* Part II for further discussion of this test.

20. “Witches’ marks,” also known as “witches’ teats,” were unusual skin growths found on accused witches, which were believed to be the spot where the witch suckled her “familiar.” “Familiars” were small animals, birds, or even strange creatures whose presence indicated that the devil had possessed the witch. See ELIZABETH REIS, DAMNED WOMEN, SINNERS AND WITCHES IN PURITAN NEW ENGLAND 113 (1997).

21. “A drug courier profile is a somewhat informal compilation of characteristics believed to be typical of persons unlawfully carrying narcotics, commonly used by agents as a basis for reasonable suspicion to stop and question a suspect.” *United States v. Cordoba*, 104 F.3d 225, 229 (9th Cir. 1997) (citing *United States v. Lui*, 941 F.2d 844, 847 (9th Cir. 1991)). See also *United States v. Flowal*, 234 F.3d 932, 935 (6th Cir. 2000) (upholding the use of the drug courier profile as an investigative tool). For a more complete handling of the description and limitations of this profile, see WAYNE R. LEFAVE, SEARCH AND SEIZURE § 9.4(e) (3d ed. 1996).

22. See generally Anthony Thompson, *Stopping the Usual Suspects: Race and the Fourth Amendment*, 74 N.Y.U. L. REV. 956 (1999) (discussing racially motivated searches and seizures); Tracey Maclin, *Race and the Fourth Amendment*, 51 VAND. L. REV. 333 (1998) (addressing, *inter alia*, race and pretextual traffic stops). Since the September 11, 2001, terrorist attack in the United States, a renewed discussion has begun on the issue of “terrorist profiling,” based primarily on ethnicity or religious affiliation. See, e.g., David Cole, *A Matter of Rights*, NATION, Oct. 8, 2001, at 6 (stating that before September 11, 2001, more than eighty percent of the American public disapproved of ethnic or racial profiling and noting that such a consensus is “rapidly eroding, as FBI agents detain dozens of suspects solely because of their Arab or Muslim identity and associations”). Laurie Levenson, *Lessons From the Past*, NAT’L L. J., Sept. 24, 2001, at A25 (discussing law enforcement targeting members of particular ethnic groups and noting that such targeting is not considered racial profiling “when reliable information identifies a particular group as the likely perpetrators of terrorist acts of war”).

because it inculcates the innocent along with the guilty,²³ profiles are widely relied upon in criminal investigations and probable cause determinations. Prosecutorial syndrome evidence, on the other hand, is widely admissible in the prosecution of criminal trials. Such syndromes include Child Sexual Abuse Syndromes, Rape Trauma Syndrome, and more commonly, Post Traumatic Stress Disorder.²⁴

The primary aims of this Article are to deconstruct the evidence from the Salem witchcraft trials and to determine whether those prosecutions relied upon syndrome and profile evidence, and whether such evidence played a substantial role in the convictions. The secondary aim is to determine whether modern cases employ evidentiary methods sufficiently similar to the Salem cases such that we should reconsider prosecutorial syndrome and profile evidence.²⁵

This Article concludes that prosecutorial syndrome evidence and, to a lesser degree, prosecutorial profile evidence, were relied upon in the Salem cases and were important to the convictions. Moreover, in modern cases, which rely on syndromes for purposes of conviction and profiles for purposes of reasonable suspicion and probable cause, the essential cognitive error in the Salem trials is still present in the use of syndrome and profile evidence: the belief that criminal behavior can be determined with sufficient certainty by considering constellations of behaviors in either victims or defendants. This Article argues that experience-based conclusions about the relationship

23. See, e.g., *United States v. Beltran-Rios*, 878 F.2d 1208, 1210 (9th Cir. 1989) (explaining that "[d]rug courier profiles are inherently prejudicial because of the potential they have for including innocent citizens as profiled drug couriers"). But see *United States v. Smith*, 149 F.3d 634, 637 (7th Cir. 1998) (approving the admission of drug courier profile evidence as relevant to the issue of intent to deliver contraband); Mark Kadish, *The Drug Courier Profile: In Planes, Trains, and Automobiles; And Now In the Jury Box*, 46 AM. U. L. REV. 747 (1997) (discussing the trend in some circumstances toward admissibility of such evidence at trial).

24. For a fuller discussion of the utility, accuracy and limitations of these types of syndrome evidence see *infra*, Part VI, as well as 1 JANE CAMPBELL MORIARTY, *PSYCHOLOGICAL AND SCIENTIFIC EVIDENCE IN CRIMINAL TRIALS* (1996 & Supp. 2001) (Chapter 8 [Child Sexual Abuse Syndromes] and Chapter 9 [Rape Trauma Profile]).

25. Other scholars have noted the connection between modern trials and the events in Salem. See, e.g., STEPHEN J. CECI & MAGGIE BRUCK, *JEOPARDY IN THE COURTROOM: A SCIENTIFIC ANALYSIS OF CHILDREN'S TESTIMONY* 9-9, 302-304 (1995) (comparing the Salem trials with modern trials involving child witnesses); DAVID L. FAIGMAN, *LEGAL ALCHEMY* 33-37 (1999) (discussing the Salem Trials and noting that "[m]odern courts have not been entirely guiltless in conducting their own witch-hunts," particularly in the area of repressed memory and sexual abuse cases); MOIRA JOHNSTON, *SPECTRAL EVIDENCE* (1997) (discussing the repressed memory case against Gary Ramona in California and prefacing the book with a precis of the Salem case); Peter Charles Hoffer, *Invisible Worlds and Criminal Trials: The Cases of John Proctor and O.J. Simpson*, 41 AM. J. LEGAL HIST. 287 (1997) (discussing the current fear of racially-perpetrated crime as the invisible animus behind modern trials); Martha M. Young, Comment, *The Salem Witch Trials 300 Years Later: How Far Has the American Legal System Come? How Much Further Does it Need to Go?*, 64 TUL. L. REV. 235 (1985) (discussing the trials, the progress of the legal system since Salem, and the areas in which progress is needed).

between observed behaviors and crime, when not subjected to a more searching or science-based scrutiny, are both incomplete and laced with the potential for error.

As developed more fully in Part VI, *infra*, courts have shown a great willingness to accept prosecutorial profile and syndrome evidence, the validity of which is premised primarily on the experience of law enforcement officers and treating therapists. Courts have not been forceful in requiring proof of the underlying belief structures that animate profile and syndrome evidence, namely that crime is meaningfully related to defendant behavior and victim behavior.²⁶ Part VI submits that current appreciation for scientific method, along with the Supreme Court's mandate that trial courts engage in rigorous "gatekeeping" of expert evidence²⁷ and amended Federal Rule of Evidence 702, collectively support greater proof of reliability and validity of prosecutorial syndrome and profile evidence prior to its admissibility at trial.

Although the comparison between the witchcraft trials of 1692 and modern trials may be considered inflammatory, it is important to remember that the experts relied upon in Salem were employing precepts that had been in use for approximately a century.²⁸ Moreover, although witchcraft may not have been the cause, there were numerous examples of people and animals in Salem becoming sick and dying. Thus, some of the harm was very real, even if the cause misperceived. Finally, it is the respective methodology under comparison, not the actual evidence. The law does not always recognize its own errors while they are occurring, but often discovers them only in the refracted light of history.²⁹

I. IN THE BEGINNING: WHAT CAUSED THE SALEM WITCHCRAFT TRIALS?

The story of the Salem witchcraft trials is a familiar part of American history and lore; the image of a circle of girls exhibiting inexplicable and extreme physical behaviors, claiming to be tormented by "spectres" of witches

26. This Article does not address either the defendants' use of syndrome or profile evidence, or the use of such evidence in non-criminal proceedings. Potentially unreliable testimony in criminal prosecution poses the unique danger of unreliable convictions and is worth considering separately.

27. This "gatekeeping" requirement emanates from the Supreme Court trilogy on expert evidence: *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993); *General Electric Co. v. Joiner*, 522 U.S. 136 (1997); *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999). The importance of the trilogy to this subject is discussed *infra*, Part VI.

28. See *infra* Part II (addressing expert opinions used in the Salem witchcraft trials).

29. On October 31, 2001, the acting governor of Massachusetts signed a bill exonerating five women who were hanged as witches in the Salem witchcraft trials: Bridget Bishop, Susannah Martin, Alice Porter, Wilmot Redd, and Margaret Scott. 2001 Mass. Legis. Serv. 122 (West) ("1692 Witchcraft Trial—Names Cleared").

and accusing their neighbors of the torment.³⁰ Spectres were thought to be the Devil in a human shape. As commonly believed, persons who appeared as spectres had entered into compacts with Satan, "thus granting the devil permission to appear in their shapes and torment others."³¹ Many Puritans believed and testified that spectres were on the loose in Salem and its environs, hideously afflicting its residents.

Like much of New England during the mid to late seventeenth-century, Salem village was in a fair amount of turmoil. There were ongoing battles with the French and their Native American allies.³² Disease was rampant, religions were in conflict, neighbors were engaged in disputes, and death was a constant presence, afflicting not only the aged but the young and apparently robust as well.³³ The dread of Satan was a real part of everyday life for the Puritans, for they feared the strength of diabolical influence³⁴ and accepted the principle of predestination. "[S]alvation and damnation were foreordained by God, not chosen by individuals . . . and only God knew who would end up in heaven or hell."³⁵ Some opine that women of the period were more likely to believe they were damned and "more likely to think of themselves as utterly depraved, as 'rebellious wretches against God,' bonded to Satan and bound for hell."³⁶ The Puritans shared a belief in the Devil's influence and the existence of witchcraft.³⁷

30. While much of our archetypal memory may be derivative of Arthur Miller's *The Crucible*, the play is not historically accurate in a number of ways, as Miller mentions in a prefatory note to the play. ARTHUR MILLER, *THE CRUCIBLE* 2 (1952).

31. REIS, *supra* note 20, at 73. Thus, witches who had made covenants with Satan would appear in their spectral form to innocent people, urging the innocents to "sign the Devil's book" (enter into a compact with Satan) or suffer grievous harm.

32. HOFFER, *supra* note 8, at 42-43. Accord MICHAEL G. HALL, *THE LAST AMERICAN PURITAN: THE LIFE OF INCREASE MATHER* 256 (1988).

33. ROSENTHAL, *supra* note 6, at 3-4; KENNETH SILVERMAN, *THE LIFE AND TIMES OF COTTON MATHER*, 56-58 (1984) (discussing the turmoil in New England, which included smallpox and other disease outbreaks, earthquakes, fires, bloody religious disagreements between Puritans and Quakers, and political discord). Accord HALL, *supra* note 32, at 256-60. For a more thorough analysis of the social conflict in Salem around the time of the witchcraft trials see PAUL BOYER & STEPHEN NISSENBAUM, *SALEM POSSESSED: THE SOCIAL ORIGINS OF WITCHCRAFT* (1974) (hereinafter *SOCIAL ORIGINS*). For a fuller discussion of the relationship between the Salem events and the Indian Wars, see James E. Kences, *Some Unexplored Relationships in Essex County Witchcraft to the Indian Wars of 1675 and 1689*, 120 *ESSEX INST. HIST. COLLECTIONS* 179 (1984) (discussing, *inter alia*, the possible relationship between the Indian massacres in New England and the outbreak of the witchcraft trials).

34. For a detailed discussion of the Puritan obsessions with and complicated views of the Devil's role in their lives, see GODBEER, *supra* note 6, at 86-121.

35. REIS, *supra* note 20, at 1. For further discussion of gender issues in the Salem trials, see generally CAROL F. KARLSEN, *THE DEVIL IN THE SHAPE OF A WOMAN* (1987).

36. REIS, *supra* note 20, at 1. Women were accused of witchcraft in the Salem cases far more frequently than men. *Id.* at xi. The list of all accused of witchcraft in the Salem trials is set forth in DOCUMENTARY RECORD, *supra* note 6, at 376-378.

37. POWERS, *supra* note 8, at 455.

Despite the strong influence of Puritanism in Salem and other parts of New England, there was widespread belief in the use and efficacy of magic that co-existed with formal religion. "Magical tradition and Puritan doctrine posited two different kinds of relationship between human beings and supernatural power, but there was no fundamental breach in early New England between magical and religious constituencies."³⁸ "Magical thinking" and an unquestioned belief in the invisible world were part of the belief system of early New Englanders, faithful Puritans and non-believers alike. While "folk persons" may have believed in "spells" and the use of poppets and potions, likewise intellectuals held a universal belief in the "unseen hand" that animated natural events.³⁹

At the time of the Salem trials, the Reverend Increase Mather and his son, the Reverend Cotton Mather, were both influential Puritan Ministers and intellectuals enamored with science.⁴⁰ Yet, their scientific views were animated by their belief in the invisible world, both diabolical and divine. Thus, comets and lightning strikes could be evidence of divine communication and prophesy, while unnatural behaviors could be evidence of diabolical existence.⁴¹ This roiling community cauldron of superstitious/religious beliefs coupled with social unrest, however, was not unusual enough to explain the events in Salem.⁴² Was there a match to light the fuel of fear and superstition?

38. GODBEER, *supra* note 6, at 16. For another view on the intersection of magic and religion in New England, see RICHARD WEISMAN, *WITCHCRAFT, MAGIC AND RELIGION IN SEVENTEENTH-CENTURY MASSACHUSETTS* 54 (1984) (emphasizing the "rift between magic and religion").

39. "Magical thinking" does not seem to be confined to our ancestors: athletic superstitions abound, along with plethora anecdotes of our contemporaries' belief in psychics, communication with the dead, paranormal sightings, UFOs, demonic possession, repressed and recovered memories of satanic abuse, and so on. Our lives and culture are replete with magical thinking. For an elegant discussion about and refutation of such belief systems, see generally CARL SAGAN, *THE DEMON-HAUNTED WORLD: SCIENCE AS A CANDLE IN THE DARK* (1995).

40. See ROBERT MIDDELKAUFF, *THE MATHERS: THREE GENERATIONS OF PURITAN INTELLECTUALS, 1596-1728*, at 139-43 (1999) (noting that Increase Mather's preoccupations centered around religion, scientific studies, and the invisible world; the former informing the latter two). Increase Mathers' published works included a treatise on comets, entitled *Kometographia*, in which he explained how comets were predictive of future afflictions and caused a variety of natural disasters. *Id.* at 142.

Cotton Mather likewise shared these interests, with his religious beliefs informing his scientific knowledge and thoughts about the invisible world. See HOFFER, *supra* note 8, at 77-78. For a fuller discussion of Cotton Mather's life and beliefs, see generally MIDDELKAUFF, *supra* note 40, and SILVERMAN, *supra* note 33 (both addressing Cotton Mather's belief in and fascination with the unseen world).

41. See also SILVERMAN, *supra* note 33, at 40-42, 168 (discussing the interest of both Increase and Cotton Mather with science and the invisible world).

42. Many would argue that the events in Salem were far from remarkable. Witchcraft trials were common in Europe, dating back centuries. See generally FOX, *supra* note 3, at 9-23 (discussing the prevalence of witchcraft prosecutions in Europe and New England); WALLACE NOTESTEIN, *A HISTORY OF WITCHCRAFT IN ENGLAND FROM 1558 TO 1718* (1925); REIS, *supra* note 20, at xv (noting a history of European witchcraft dating to the 11th century); SILVERMAN, *supra* note 33, at 88-90 (discussing European

Some scholars opine that the genesis of the Salem witchcraft trials may have been the publication in 1689 of Cotton Mather's widely-disseminated treatise, *Memorable Providences*.⁴³ This treatise described in great detail the demonically-incited suffering of the four Goodwin children, who lived in Boston.⁴⁴ According to Cotton Mather, the Goodwin children—formerly little Christian models of appropriate behavior—began to suffer grievous fits. These afflictions began after the Goodwin's eldest child had an unpleasant interaction with their laundress, "the Daughter of an ignorant and scandalous old Woman . . . whose miserable Husband . . . had sometimes complained she . . . was a Witch."⁴⁵ According to Mather, the laundress' mother came to her daughter's defense and "bestow'd very bad Language upon the Girl," and immediately the child became ill.⁴⁶ Her sisters and brothers were likewise seized and Mather described that they were often tormented at the same time and in the same parts of their bodies. He described the suffering as follows:

Within a few weeks, they were all four tortured every where in a manner so very grievous, that it would have broke an heart of stone to have seen their Agonies.

* * *

The variety of their tortures increased continually; and tho about Nine or Ten at Night they alwaies had a Release from their miseries, and ate and slept all night for the most part indifferently well, yet in the day time they were handled with so many sorts of Ails, that it would require of us almost as much time to Relate them all, as it did of them to Endure them. Sometimes they would be Deaf, sometimes

and Colonial witchcraft prosecutions); SAGAN, *supra* note 39, at 118-29 (discussing the history of witchcraft prosecutions).

Likewise, authors have noted that Salem was not unique in New England in its prosecution of witches. See SILVERMAN, *supra* note 33, at 89 ("Colonial courts tried more than eighty such cases from 1647 to 1691, resulting in twenty executions and many more fines, banishments, and whippings."). See also GODBEER, *supra* note 6, at 154 ("[E]ven omitting the Salem prosecutions, there were at least sixty one trials for witchcraft in seventeenth-century New England.").

43. Cotton Mather, *Memorable Providences, Relating to Witchcrafts and Possessions. A faithful Account of many Wonderful and Surprising Things, that have befallen several Bewitched and Possessed Persons in New-England. Particularly, A Narrative of the marvellous Trouble and Releef Experienced by a pious Family in Boston, very lately and sadly molested with Evil Spirits* (hereinafter *Memorable Providences*), reprinted in GEORGE L. BURR, *NARRATIVES OF THE WITCHCRAFT CASES 19-141* (1914) (collecting narratives of witchcraft writings around the time of the Salem prosecutions written by the Rev. Increase Mather, the Rev. Cotton Mather, and others).

44. See, e.g., ROSENTHAL, *supra* note 6, at 2 (stating "[t]he story of the Goodwin children had been well known through Cotton Mather's account in 'Memorable Providences,' as well as through word of mouth"). See also HANS SEBOLD, *WITCH-CHILDREN: FROM SALEM WITCH-HUNTS TO MODERN COURTROOMS* 68 (1995) (suggesting that a copy of the book was in the Parris household, and noting the wide circulation of the book and its deep impression on readers).

45. *Memorable Providences*, *supra* note 43, at 100.

46. *Id.* at 100-01.

Dumb, and sometimes Blind, and often, all this at once. One while their Tongues would be drawn down their Throats; another-while they would be pull'd out upon their Chins, to a prodigious length. They would have their Mouths opened unto such a Wideness, that their Jaws went out of joint; and anon they would clap together again with a Force like that of a strong Spring-Lock. The same would happen to their Shoulder-Blades, and their Elbows, and Hand-wrists, and several of their joints. They would at times ly in a benumbed condition; and be drawn together as those that are ty'd Neck and Heels; and presently be stretched out, yea, drawn Backwards, to such a degree that it was fear'd the very skin of their Bellies would have crack'd. They would make most pitteous out-cries, that they were cut with Knives, and struck with Blows that they could not bear. Their Necks would be broken, so that their Neck-bone would seem dissolved upon them that felt after it; and yet on the sudden, it would become again so stiff that there was no stirring of their Heads; yea their Heads would be twisted almost round; and if main Force at any time obstructed a dangerous motion which they seem'd to be upon, they would roar exceedingly. Thus they lay some weeks most pittiful Spectacles⁴⁷

After the Goodwin children exhibited these bizarre behaviors, the authorities tested a suspected witch and mother of the Goodwin's laundress, a "Hag" named Glover.⁴⁸ She was asked to repeat the Lord's Prayer—a feat she was unable to accomplish and so was brought to trial.⁴⁹ At trial the defendant admitted she engaged in witchcraft.⁵⁰ According to Cotton Mather's recitation of the events, she also tormented the children in the courtroom.⁵¹ As the defendant held some sort of puppet made from rags seized from her house after the accusation, "one of the Children fell into sad

47. *Memorable Providences*, *supra* note 43, at 101-02.

48. Glover was an Irish Catholic immigrant, who apparently spoke much Gaelic and could only recite the Lord's Prayer in Latin. After Glover's execution, Mather took the eldest Goodwin child to his house, who continued to behave as if she were set upon by demons. One of Mather's attempts to help the girl was to have her read from religious material. He notes that if she tried to read the Bible, her "[e]yes would be strangely twisted and blinded." *Id.* at 112. He notes further that although the girl had little problem reading Quaker texts and "a popish Book she could also endure very well; but it would kill her to look into any Book that (in my Opinion) it might have bin profitable and edifying for her to be reading of." *Id.* at 113. This Puritan distrust of "Catholick" and Quaker religion is discussed in ROSENTHAL, *supra* note 6, at 131-32. *Accord* HOFFER, *supra* note 8, at 79 ("They also believed Roman Catholic priests were in league with the Devil."). For more on Cotton Mather's thoughts about "popish" religion and Quakerism, see MIDDELKAUFF, *supra* note 40, at 215-21, 313-14, and Kences, *supra* note 33, at 183-84, discussing the antipapist prejudice of Puritans in New England. See also SILVERMAN, *supra* note 33, at 88 (on Quakers).

49. *Memorable Providences*, *supra* note 43, at 103.

50. *Id.* at 104.

51. *Id.*

Fits, before the whole Assembly."⁵² Although the judges were skeptical at first, they asked the defendant to repeat the experiment, resulting in the same outcome.⁵³ After a rigorous mental examination by several doctors, Glover was pronounced *Compos Mentis*.⁵⁴

Testimony was taken to develop a history of witchcraft behaviors during the time after the arraignment. Witnesses claimed that as she was dying, one Mrs. Howen had accused Glover of bewitching her to death.⁵⁵ Another family testified that their son had become ill and claimed to see "a black thing with a blue Cap" in his room; which Glover later admitted was she.⁵⁶

On her way to the gallows, Glover apparently claimed that she had not acted alone and that the Goodwin children's torment would continue. Not surprisingly, Mather claimed these torments increased. At some length, Mather described the children's sufferings by the "spectres" that tormented them:

They would cry out of dismal Blowes with great Cudgels laid upon them; and tho' we saw no cudgels nor blowes, yet we could see the Marks left by them in Red Streaks upon their bodies afterward. And one of them would be roasted on an invisible Spit, run into his Mouth, and out at his Foot, he lying, and rolling, and groaning as if it had been so in the most sensible manner, in the world; and then he would shriek, that Knives were cutting of him.⁵⁷

As one might imagine, this was fairly heady reading for Puritans who permitted nothing but religious books.⁵⁸ Mather, a force of moral suasion in the Massachusetts Bay Colonies, was strongly affected by what he had witnessed with the Goodwin children. At the end of *Memorable Providences*, Mather claimed to have "written as plainly as becomes an Historian, as truly as becomes a Christian."⁵⁹ Clearly shaken by images witnessed that could not be rationally explained, Mather intoned, "[b]ut I am resolv'd after this, never to use but just one grain of patience with any man that shall go to impose upon

52. *Memorable Providences*, *supra* note 43, at 104.

53. *Id.*

54. *Id.* at 105. The term *compos mentis* is defined as "sound of mind." BLACK'S LAW DICTIONARY 280 (7th ed. 1999).

55. *Memorable Providences*, *supra* note 43, at 105.

56. *Id.*

57. *Id.* at 107-08.

58. In fact, much of Mather's *Memorable Providences*, particularly the account of the eldest girl's stay at Mather's house, reads like a frightening tale of demonic possession, much like William Peter Blatty's *The Exorcist*. Other scholars have noted the concordance between oral ghost stories of the time and Mather's tales. See, e.g., HOFFER, *supra* note 8, at 41.

59. *Memorable Providences*, *supra* note 43, at 123.

me a Denial of Devils, or of Witches. I shall count that man Ignorant who shall suspect, but I shall count him down-right Impudent if he Assert the Non-Existence of things which we have had such palpable Convictions of."⁶⁰

When the Salem incidents began, the young women alleged to be afflicted acted much like the Goodwin children.⁶¹ The strange illness of Elizabeth (Betty) Parris, daughter of the Reverend William Parris, prompted the Salem witchcraft trials.⁶² Betty was soon joined in illness by her cousin, Abigail Williams.⁶³ Observer Deodat Lawson described Williams' affliction:

[S]he was at first hurried with violence to and fro in the room, (though Mrs. Ingersoll endeavored to hold her,) sometimes making as if she would fly, stretching up her arms as high as she could, and crying "Whish, Whish, Whish!" several times; presently after she said there was Goodwife Nurse and said, "Do you not see her? Why there she stands!" And the said Goodwife offered her the book, but she was resolved she would not take it, saying often, "I won't, I won't, I won't, take it, I do not know what book it is: I am sure it is none of God's book, it is the devil's book, for aught I know." After that, she run to the fire, and begun to throw fire brands, about the house; and run against the back, as if she would run up [the] chimney, and as they said, she had attempted to go into the fire in other fits.

When the afflictions resisted known cures, physician William Griggs determined that Betty Parris' disorder was not from a natural, but diabolical, cause.⁶⁴ Betty and Abigail's complaints were soon echoed by Ann Putnam and Elizabeth Hubbard, the four of whom made many of the original accusations.⁶⁵ The recorded symptoms sounded quite similar to those of the Goodwin children:

60. *Memorable Providences*, *supra* note 43, at 123.

61. *But see* SILVERMAN, *supra* note 33, at 89 ("[I]f the Salem possessions resembled those of the Goodwin children, both were in many features stereotypical." For example, "[t]hey conformed to a pattern classic in European outbreaks of witchcraft since at least the early sixteenth century.").

62. HOFFER, *supra* note 8, at 34-35.

63. *Id.* at 35.

64. "In the latter end of the year 1691, Mr. Samuel Paris, Pastor of the Church in Salem-Village, had a Daughter of Nine, and a Niece of about Eleven years of Age, sadly Afflicted of they know not what Distempers; and he made his application to Physitians, yet still they grew worse: And at length one Physitian gave his opinion, that they were under an Evil Hand." John Hale, *A Modest Inquiry Into the Nature of Witchcraft* (1702), reprinted in *NARRATIVES OF THE WITCHCRAFT CASES*, *supra* note 43, at 413 (1914). *Accord* HOFFER, *supra* note 8, at 35-36.

65. *See* Daniel G. Payne, *Defending against the Indefensible: Spectral Evidence at the Salem Witchcraft Trials*, 129 *ESSEX INST. HIST. COLLECTIONS* 66-67 (1993). Three others also joined the coterie of those afflicted: Mercy Lewis, Mary Walcott, and Mary Warren. HOFFER, *supra* note 8, at 47.

[T]he Afflicted persons cried out of the Indian Woman, named *Tituba*, that she did pinch, prick, and grievously torment them, and that they saw her here and there, where no body else could. Yea, they could tell where she was, and what she did, when out of their humane sight. These Children were bitten and pinched by invisible agents; their arms, necks, and backs turned this way and that way, and returned back again, so as it was impossible for them to do of themselves, and beyond the power of any Epileptick Fits, or natural Disease to effect. Sometimes they were taken dumb, their mouths stopped, their throats choaked, their limbs wracked and tormented so as might move an heart of stone, to sympathize with them, with bowels of compassion for them.⁶⁶

Unlike some early cases of suspected witchcraft in New England, no attempt was made to prevent the young women from accusing anyone of witchcraft. Rather, based upon the witnessed torments and accusations of the young women, three individuals were singled out in late February of 1692 as the persons causing the claimed afflictions,⁶⁷ all of whom were of low social standing. For example, *Tituba* was a slave in the Parris household; Sarah Good went from house-to-house begging; and Sarah Osborne was “an elderly woman with a reputation for immorality.”⁶⁸

Once the Salem accusations got underway, they picked up speed. More were accused and more confessed, inculpating others. In early spring, accusations were made against Martha Corey, Rebecca Nurse, and Sarah Good’s four-year-old daughter, Dorcas.⁶⁹ Twenty-eight people were charged by the end of April and thirty-nine were charged in May.⁷⁰ Those accusations were only the beginning, since more than one hundred and fifty were charged in total.⁷¹

Scholars from various disciplines have revisited the Salem witchcraft trials to find reasons for the symptoms and accusations. Multiple explanations have been suggested by various authors in a variety of disciplines:⁷² hysteria

66. Hale, *supra* note 64, at 413 (emphasis added).

67. HOFFER, *supra* note 8, at 54-55.

68. WITCHCRAFT PAPERS, *supra* note 5, at 7.

69. *Id.* at 9.

70. *Id.*

71. See ROSENTHAL, *supra* note 6, at 205.

72. See, e.g., FRANCES HILL, THE SALEM WITCHCRAFT TRIALS READER 215-305 (2000) (collecting historical essays discussing, *inter alia*, explanations for the witchcraft trials); HOFFER, *supra* note 8, at 154-55 (collecting various articles).

or psychogenic causation,⁷³ agricultural poisoning,⁷⁴ social unrest,⁷⁵ gender-based reasons,⁷⁶ and fraud.⁷⁷ A particularly interesting recent theory is that the afflicted in Salem were really suffering from a form of encephalitis lethargica, a disease spread by mosquitos that affects both farm animals and humans.⁷⁸

The torment observed in Salem may have been real or feigned. If Lauri Winn Carlson's theory of encephalitis is accurate, then some of the observed behaviors in the afflicted may have been real and caused by disease, although that does not explain the explosion of subsequent accusations. Whichever of these possibilities is correct, and whatever the cause of the strange behaviors, the prosecution of people for witchcraft was very real and quite lethal for those accused. Of some curiosity is that over three hundred years later, medical, historical, psychological, legal and sociological scholars continue to analyze the records and literature and continue to posit new theories about why it happened. Not surprisingly, some scholars have ventured that the circumstances are perhaps suggestive of girls who were abused—noting the similarity between the complaints of the girls in Salem and current complaints of child abuse.⁷⁹

What we do know is that the Puritans who brought these cases were concerned about proper procedure and fair trials.⁸⁰ Governor Phips

73. See, e.g., CHADWICK HANSEN, *WITCHCRAFT AT SALEM* x (1969) (arguing that acts of witchcraft were occurring and hysteria was the cause).

74. See LAURIE WINN CARLSON, *A FEVER IN SALEM* 110-46 (1999) (discussing and dismissing ergotism (rye poisoning)); ROSENTHAL, *supra* note 6, at 34-36 (discussing the debate over whether contaminated rye caused ergotism and convulsions interpreted as witchcraft in the victims).

75. See generally SOCIAL ORIGINS, *supra* note 33 (discussing the development of village factionalism).

76. See generally KARLSEN, *supra* note 35 (discussing the role of gender in the Salem trials); REIS, *supra* note 20 (same).

77. ROSENTHAL, *supra* note 6, at 32-36 (discussing the scholarship which posits that fraud explains the Salem trials).

78. See CARLSON, *supra* note 74, at 114-46 (discussing how the intersection of migratory bird routes, mosquitoes and farm land may have encouraged the proliferation of this illness in Salem and other places).

79. See HOFFER, *supra* note 8, at 49:

The abuse of children by adults in their household is too well documented now to be ignored, particularly when the victims begin to act out aggressive fantasies or show other common symptoms like excessive blaming and humiliation, frightening accusations, and name-calling The girls' first reports in these cases at times resemble the testimony in modern child abuse cases.

Id.

As a point of clarification, however, these "girls" ranged in age from eleven or twelve through their twenties and thirties, with Sarah Vibber being the eldest at thirty-six-years old. See ROSENTHAL, *supra* note 6, at 41.

80. Accord FOX, *supra* note 3, at 7 (discussing the evenhandedness of the Massachusetts legal system during that period). Also see Wendel D. Craker, *Spectral Evidence, Non-Spectral Acts of Witchcraft, and Confession at Salem in 1692*, 40 HIST. J. 331, 349 (1997) (citing David Brown, *The*

established a special court, the court of Oyer and Terminer, to handle these cases.⁸¹ The Salem residents relied on official procedures, such as indictments and public trials, and employed the best expert advice available at the time. In John Hale's 1702 publication, entitled *A Modest Enquiry into the Nature of Witchcraft*, he recounts his observations of the judiciary's scrupulous adherence to following proper procedure. He stated:

I observed in the prosecution of these affairs, that there was in the Justice, Judges and others concerned, a conscientious endeavour to do the thing that was right. And to that end they consulted the Presidents [precedents] of former times and precepts laid down by Learned Writers about Witchcraft. As Keeble on the *Common Law*, Chapt. Conjurat[i]on, (an Author approved by the Twelve Judges of our Nation.) Also Sir Mathew Hales *Tryal of Witches*, Printed Anno 1682. Glanvils *Collection of sundry tryals in England & Ireland*, in the years 1658, 61, 63, 64, & 81. Bernards *Guide to Jurymen*, Baxter & R. Burton, their Histories about Witches and their discoveries. Cotton Mather's *Memorable Providences relating to Witchcrafts*, Printed Anno 1689.⁸²

Despite this claimed concern for fairness and certainty, defendants were convicted on flimsy and insubstantial evidence premised strongly upon the belief in the invisible world. The next section of this Article addresses the expert testimony that rendered relevant the unproven relationships between behaviors and witchcraft.

II. THE EXPERTS CONSULTED

Although Salem has received substantial attention for its trials and executions of witches,⁸³ this practice had roots old and deep in both Europe

Forfeitures at Salem, 1692, THE WILLIAM AND MARY QUARTERLY 1, 85-111 (Series No. 3, 1993)) for the proposition that "the legal system meticulously followed the guidelines set forth in English and New English Law." On the other hand, Powers notes that the defendants did not have counsel, few of the judges had legal training, and that "no one showed any fastidiousness about any fine points of law." POWERS, *supra* note 8, at 477. As a result, "almost any kind of damaging evidence was well received and was all the more convincing because it was not rebutted." *Id.*

81. KONIG, *supra* note 2, at 170.

82. Hale, *supra* note 64, at 415-16.

83. See ROSENTHAL, *supra* note 6, at 204-07 (discussing the fact that fewer than twenty to thirty percent of those charged came from Salem or Salem Village (now Danvers); many others came from Andover and other towns). See also DOCUMENTARY RECORD, *supra* note 6, at 376-78 (listing village residence of each accused).

and New England.⁸⁴ The European witchcraft trials placed great reliance on torture to elicit witchcraft confessions and employed various tests and "ordeals" to prove the case. The pre-Salem English method to prove the crime of witchcraft included tests by burning,⁸⁵ along with the "water ordeal." The water ordeal, which Increase Mather termed a "diabolical invention," required the binding of the right thumb to a toe on the left foot and the left thumb to a toe on the right foot.⁸⁶ The accused, thus bound, was tossed into the water; if she floated she was guilty, if she sank, she was innocent.⁸⁷ In either event, it was an unhappy outcome.

The ruling Puritans of Salem demeaned these "folk methods" of proof—such as the water ordeal—as common and unpersuasive,⁸⁸ although they did not wholly outlaw the use of all tests. They approved of physical examinations to reveal "witches' teats" or "devil's marks,"⁸⁹ sanctioned the "touching test," and employed the recitation of the Lord's Prayer test.⁹⁰ The touching test required the accused to touch a victim while she was being afflicted, whereupon the affliction was cured.⁹¹ The recitation of the Lord's Prayer test required the accused to recite the Lord's prayer without error in order to prove his or her innocence.⁹²

Those in charge of the Salem witchcraft investigations and trials prided themselves as the educated elite of the New World.⁹³ They were not easily

84. See generally NARRATIVES OF THE WITCHCRAFT CASES, *supra* note 43, at 1-141 (collecting narratives of witchcraft pre-dating the Salem prosecutions, as written by the Rev. Increase Mather, the Rev. Cotton Mather and others); Brian P. Levack, *Possession, Witchcraft, and the Law in Jacobean England*, 52 WASH. & LEE L. REV. 1613, 1614 (1995) (stating that there were between 100,000 and 200,000 tried for witchcraft between 1450 and 1750 and nearly 100,000 were likely executed by being burned at the stake); REIS, *supra* note 20, at xv (noting a history of European witchcraft dating to the 11th century).

85. This test determined witchcraft by plunging the hands of the accused into boiling water. If the hands showed no burns or scalds after being plunged, the defendant was a witch. See BOOTH, *supra* note 8, at 68.

86. See *id.* at 69 (quoting Increase Mather).

87. This test was also used in various colonies before the Salem witchcraft trials. *Id.* at 69-70.

88. Increase Mather is quoted as saying they were relics of the "dark times of paganism and popery." *Id.* at 68.

89. Witch's or devil's marks were unusual growths that Puritans believed the witch used to suckle her "familiar." These marks might be warts, boils, wound infections, or swellings, in addition to the unusual case of polymastia (more than two breasts) or polythelia (multiple nipples). *Id.* at 79.

90. HOFFER, *supra* note 8, at 104, 118 (discussing the touching test and the recitation of the Lord's Prayer test).

91. BOOTH, *supra* note 8, at 77. See also SEBOLD, *supra* note 44, at 73.

92. BOOTH, *supra* note 8, at 68. Curiously, however, this test was disregarded when necessary, as occurred in the prosecution of George Burroughs, a minister accused of witchcraft. Burroughs was able to recite the Lord's prayer without mistake, but was nonetheless executed. See ROSENTHAL, *supra* note 6, at 146. Burroughs' case is discussed at length *infra* Part IV. There was disagreement, apparently, between Cotton and Increase Mather concerning the appropriateness and efficacy of the Lord's Prayer test. *Id.*

93. Cotton Mather, a prime figure in the trials, was one such member of that educated elite, versed not only in scripture, but in science as well. See HOFFER, *supra* note 8, at 77-78. As Hoffer notes "Cotton

fooled by superstitious belief and considered many of the tests and ordeals to be "going to the devil to catch the devil."⁹⁴ The Reverends Increase Mather and Cotton Mather were influential New England Puritan Ministers intimately involved in the detection and discussion of witchcraft in New England. They both wrote on the subject and often consulted on matters that involved Satanic influence.⁹⁵ The trial judges sought the Mathers' advice about matters relating to evidence, and Cotton Mather initially attempted to guide the trials cautiously, aiming to bring a sense of order to growing potential chaos.⁹⁶ As the trials progressed, however, the advice of Cotton Mather provided justification for the continued use of questionable evidence.⁹⁷ While Increase Mather is sometimes credited with helping to end the trials,⁹⁸ the writings of Cotton Mather surely caused some of the conflagration and fanned the flames once ignited.⁹⁹

Although the experts eschewed folk tests to root out demons, there was much agreement in the mid-to-late seventeenth-century that witchcraft was real¹⁰⁰ and that it was provable by well-accepted means as authorities on the

and Increase Mather agreed that the 'illiterate' masses needed a guide and that such guide must be 'learned, very learned.'" *Id.* at 77.

94. The phrase "going to the devil for help against the devil" is a condemnation of the use of such magic practices as the baking of a witches' cake to find out who was tormenting the victims. See Craker, *supra* note 80, at 343 (citing 2 CHARLES UPHAM, SALEM WITCHCRAFT 95-96 (1867)).

95. See, e.g., Cotton Mather, *A Brand Pluck'd out of the Burning* (1693), reprinted in NARRATIVES OF THE WITCHCRAFT CASES, *supra* note 43, at 255; *Memorable Providences*, *supra* note 43, at 92; Cotton Mather, *The Wonders of the Invisible World* (1693) (hereinafter *Wonders*), reprinted in NARRATIVES OF THE WITCHCRAFT CASES, *supra* note 43, at 209; Increase Mather, *An Essay for the Recording of Illustrious Providences* (1684), reprinted in NARRATIVES OF THE WITCHCRAFT CASES, *supra* note 43, at 8. See also Payne, *supra* note 65, at 66-67 (discussing the influence of Increase and Cotton Mather's writings on the Salem trials).

96. See e.g., SILVERMAN, *supra* note 33, at 98-99 (discussing the letter Cotton Mather wrote to John Richards, a member of the court in the Salem cases, before the trials began, urging caution in the use of spectral evidence for purposes of conviction).

97. See *Several Ministers*, *supra* note 9, discussed *infra*, notes 109-116 and accompanying text.

98. See MIDDELKAUFF, *supra* note 42, at 153-54 (discussing Governor Phips' reliance on Increase Mathers' *Cases of Conscience* in finding a way to end the trials and executions and noting the various ways Mather "acted to restore sanity" during the trials). "Increase, more than anyone else, had stopped the whole grisly business." *Id.* Nevertheless, Increase concurred in Cotton Mather's written defense of the trials, *Wonders*, *supra* note 97, and "thereby joined his son in the gallery of villains who attempted to excuse the bloody trials." *Id.* at 159-60.

99. See, e.g., *Memorable Providences*, *supra* note 45; *Several Ministers*, *supra* note 9; *Wonders*, *supra* note 95.

100. "[T]hat there are such evil angels [as Witches] it is without all Question. The Old Testimony assures us of it" SAMUEL G. DRAKE, ANNALS OF WITCHCRAFT IN NEW ENGLAND xi (1869) (quoting SIR MATHEW HALE, WORKS OF HALE (1661)). Accord Hale, *supra* note 64, at viii (introduction by Richard Trask, Archivist, Town of Danvers, Massachusetts) (1973) ("That Hale was firmly convinced of the existence of witchcraft in the Salem Village area in 1692 cannot be denied. During the first half dozen months of the witchcraft outbreak there was too much evidence in favor of it for him not to believe."); WITCHCRAFT PAPERS, *supra* note 5, at 10-11 (discussing the widely-held views about witchcraft that

subject instructed in treatises.¹⁰¹ In the Salem cases, the judges relied upon a few, well-known publications relating to proof of witchcraft. Scholars cite the importance in the Salem cases of William Perkins' *Discourse on the Damned Art of Witchcraft*¹⁰² and Richard Bernard's *Guide to Grand-Jury Men*¹⁰³ addressing the discovery and conviction of witches.¹⁰⁴ Perkins was a Cambridge-educated English Puritan minister, who relied upon careful proof—or perhaps more accurately, careful proof as understood in the late sixteenth and early seventeenth centuries. William Perkins, who strongly influenced Increase Mather, disavowed torture and ordeals, and did not approve of spectral evidence.¹⁰⁵

Perkins distinguished between evidence yielding a presumption that the accused was engaged in witchcraft and evidence sufficient for conviction. According to Perkins, confessions and the testimony of two reputable witnesses of the accused's complicity were sufficient evidence for conviction.¹⁰⁶ Perkins deemed other types of evidence relevant to support the allegations of witchcraft, which Perkins deemed "presumptions." For purposes of analyzing the Salem trial evidence, certain statements of Perkins seem particularly compelling with respect to the relevance of syndromes and profiles:

[I]f after cursing there followeth death, or at least some other mischief. For witches are wont to practise their mischievous facts

permeated all social stratifications). See also FOX, *supra* note 3, at 11 (stating "that belief in witches appears to have been a universal phenomenon"); REIS, *supra* note 20, at 55 ("[C]lergy, magistrates, and laity in seventeenth-century New England held a common theological understanding of the devil's powers and how to defeat his suggestions and tortures.").

Other scholars disagree with the claim that at the time of the Salem trials, there was universal belief in witchcraft or the supernatural powers of witches. See, e.g., ROSENTHAL, *supra* note 6, at 7 (arguing that there was disagreement about the universality of these beliefs). "In theory, belief in witchcraft represented an accepted principle within the dominant theology of the day in colonial Massachusetts; in practice, claims of witchcraft were usually regarded with skepticism and perceived as superstitions of the folk." *Id.* See also *id.* at 24-25 (arguing against the universal nature of the belief and stating that "Cotton Mather would not have written so obsessively on behalf of the existence of his invisible world if some universal view of the subject had existed").

101. See, e.g., Hale, *supra* note 64, at 415-16 (discussing the use of authorities during the trials). See also MIDDELKAUFF, *supra* note 40, at 154-55 (noting the reliance of both Increase and Cotton Mather on the writings of the Reverend William Perkins and the Reverend Richard Bernard).

102. WILLIAM PERKINS, *A Discourse of the Damned Art of Witchcraft*, reprinted in THE WORKS OF WILLIAM PERKINS 587 (Ian Breward ed., 1970).

103. RICHARD BERNARD, GUIDE TO GRAND-JURY MEN (1627) (cited in GODBEER, *supra* note 6, at 160).

104. See, e.g., GODBEER, *supra* note 6, at 160 (citing these studies as "the two most influential studies of witchcraft as a legal problem").

105. For the influence that the writings of William Perkins had on Increase Mather, see MIDDELKAUFF, *supra* note 40, at 155-56.

106. PERKINS, *supra* note 102, at 604-605.

by cursing and banning. This also is a sufficient matter of examination, not of conviction. [Syndrome proof].

[I]f after enmity, quarreling or threatening a present mischief doth follow. For parties devilishly disposed, after cursings do use threatenings and that also is a great presumption. [Syndrome proof].

* * *

[S]ome do add this for a presumption; if the party suspected be found to have the devil's mark. For it is commonly thought, when the devil maketh his covenant with them, he always leaveth his mark behind him, whereby he knows them for his own [Profile proof].

* * *

Lastly, if the party examined be unconstant, or contrary to himself, in his deliberate answers, it argueth a guilty mind and conscience which stoppeth the freedom of speech and utterance [Profile proof].¹⁰⁷

Not all of the judges were pleased with the direction of the trials after they began, and Judge Saltonstall, one of the three presiding judges, resigned after the first person to be convicted was hanged at Salem. According to some scholars, Saltonstall was appalled by what had occurred at the trial and possibly contacted Governor Phips about his concerns.¹⁰⁸ The Governor sent an entreaty to the local ministers—the experts on witchcraft—asking for advice about issues raised in the prosecutions.¹⁰⁹ Two ministers witnessed what had occurred at the trials and met with Cotton Mather, who, after consultation, replied in a document entitled *The Return of Several Ministers Consulted*.¹¹⁰ In that document, the ministers urged “very critical and exquisite caution” in the prosecutions, lest “there be a door opened for a long train of miserable consequences, and Satan get an advantage over us; for we should not be ignorant of his devices.”¹¹¹ Two paragraphs bear recitation:

- V. When the first inquiry is made into the circumstances of such as may lie under any just suspicion of witchcrafts, we could wish that there may be admitted as little as is possible of such noise, company, and openness, as may too hastily expose them that are examined, and that there may nothing be used as a test,

107. PERKINS, *supra* note 102, at 602-03.

108. HOFFER, *supra* note 8, at 92.

109. *Several Ministers*, *supra* note 9, at 117.

110. *Id.* at 117-18.

111. *Id.* at 117.

for the trial of the suspected, the lawfulness whereof may be doubted among the people of God; but that the directions given by such judicious writers as *Perkins* and *Bernard* be consulted in such a case.

- VI. Presumptions whereupon persons may be committed, and, much more, convictions whereupon persons may be condemned as guilty of witchcrafts, ought certainly to be more considerable than barely [i.e., merely] the accused person be represented by a spectator unto the afflicted, inasmuch as 'tis an undoubted and a notorious thing that a Demon may, by God's permission, appear, even to ill purposes, in the shape of an innocent, yea, a virtuous man. Nor can we esteem alterations made in the sufferers by a look or touch of the accused to be an infallible evidence of guilt, but frequently liable to be abused by the Devil's legerdemains.¹¹²

Mather and the ministers were expressing concern that the Devil may take the shape of an innocent person, thus questioning whether a spectral appearance was actually indicative of an accused's concordance with Satan. Although this letter can be interpreted as a "prescription that precluded the reliance on spectral evidence,"¹¹³ the trial judges continued on "as if nothing had been written."¹¹⁴ The trials continued on at full force, the judges still admitting and relying upon spectral evidence.

Some cite the last sentence of the *Several Ministers* as encouraging the vigor of the prosecutions.¹¹⁵ It provided: "Nevertheless, We cannot but humbly Recommend unto the Government, the speedy and vigorous Prosecution of such as have rendered themselves obnoxious, according to the Direction given in the Laws of God, and the wholesome Statutes of the *English Nation*, for the Detection of Witchcrafts."¹¹⁶ Armed with this "ambidextrous"¹¹⁷ advice, the trial court continued on, admitting spectral evidence and convicting defendants of witchcraft.

112. *Several Ministers*, *supra* note 9, at 118.

113. ROSENTHAL, *supra* note 6, at 70.

114. *Id.* at 71.

115. See, e.g., SILVERMAN, *supra* note 33, at 100 (arguing that this statement made Cotton Mather a "villain to history").

116. *Several Ministers*, *supra* note 9, at 118.

117. See SILVERMAN, *supra* note 33, at 100 (quoting Robert Calef's, *More Wonders of the Invisible World*, who describes the document as "perfectly ambidexter, giving as great or greater encouragement to proceed in those dark methods, than cautions against them"). Calef was an outspoken critic of both Mather and the trials. *Id.* at 100-01.

Even after the trials concluded and a growing concern about their fairness and accuracy developed,¹¹⁸ neither Cotton nor Increase Mather vacillated in the belief that witchcraft was real. Cotton Mather wrote a vigorous defense of the trials and the correlative need for vigorous prosecutions in *Wonders of the Invisible World*.¹¹⁹ In *Cases of Conscience Concerning Evil Spirits Personating Men* (1692), Increase Mather condemned much of the evidence admitted in the trials, but did not hesitate in his firm belief of the existence of witchcraft. He stated:

[T]here are Devils and Witches, the Scripture asserts, and experience confirms, That they are common enemies of Mankind, and set upon mischief, is not to be doubted: That the Devil can (by Divine permission) and often doth vex men in Body and Estate, without the Instrumentality of Witches, in undeniable: That he often hath, and delights to have the Concurrence of Witches, and their consent in harming men, is consonant to his Native Malice to man, and too Lamentably exemplified.¹²⁰

III. THE TRIAL EVIDENCE

We may never fully uncover the reason that the Salem witchcraft trials escalated so dramatically, but one explanation for the growth of the accusations was the discovery by several accused witches that confession and accusation of others was a likely way to avoid the gallows.¹²¹ Indeed, there was much approval of confessions as the surest evidence of guilt.¹²² Cotton Mather himself wrote of the importance of confessions in assuring proper convictions,¹²³ and the renowned witchcraft expert William Perkins had also ordained their utility.¹²⁴ The benefit of false confession and false accusation

118. See Thomas Brattle, *Letter of Thomas Brattle, F.R.S., reprinted in NARRATIVES OF THE WITCHCRAFT CASES*, *supra* note 43, at 169; Robert Calef, *More Wonders of the Invisible World, reprinted in NARRATIVES OF THE WITCHCRAFT CASES*, *supra* note 43, at 296. See also *infra* Part V (discussing the end of the trials).

119. *Wonders*, *supra* note 95, at 209.

120. *Cases of Conscience*, *supra* note 1, A2-3 (1693).

121. See, e.g., ROSENTHAL, *supra* note 6, at 29 (noting that "[i]n Salem, only those who did not confess were executed"). Accord REIS, *supra* note 20, at 126. But see Craker, *supra* note 80, at 346-49 (arguing against the relative importance of confession as a way to avoid execution).

122. Michael Dalton, another influential writer of the time, affirmed the importance of confession. MICHAEL DALTON, *THE COUNTRY JUSTICE* 383 (1618), cited in Payne, *supra* note 65, at 67-68. See also ROSENTHAL, *supra* note 6, at 28 ("When one confronted the invisible world, confession offered the most trusted evidence of witchcraft."). See also FAIGMAN, *supra* note 25, at 35 (discussing the importance of Dalton's works in the trials).

123. See HOFFER, *supra* note 8, at 80-81.

124. See PERKINS, *supra* note 102, at 604.

was apparent after the initial wave of convictions and hangings, since those who clung to claims of innocence were executed.¹²⁵

During the trials, witnesses began piecing together historical memories of strange events that occurred after an unpleasant interaction with the accused which, as Perkins had instructed, was evidence of witchcraft. For example, while the victims would come into court and identify the defendant as the spectre bewitching them, other witnesses would provide historical evidence of the defendant's witchcraft acts as well. Robert Calef, who wrote scathingly about the trials after their conclusion, summed up the evidence as follows:

In the Tryals, when any were Indicted for Afflicting, Pining, and wasting the Bodies of particular persons by Witchcraft; it was usual to hear Evidence of matter foreign, and of perhaps Twenty or Thirty years standing, about over-setting Carts, the death of Cattle, unkindness to Relations, or unexpected Accidents befalling after some quarrel.¹²⁶

A. Categories of Evidence

Much of the trial evidence seems to break into a number of discreet categories, although arguably some evidence seems to fit into more than one. These categories are: (1) confessions; (2) reputation evidence; (3) physical evidence; (4) spectral evidence; (5) syndrome evidence; and (6) profile evidence. The first three are discussed as a group; the remaining three are considered separately; and four trials are examined to discuss the use of syndrome and profile evidence.

1. Confessions, Physical Evidence, and Reputation

Confessions played a curious role in the Salem witchcraft trials. Some defendants admitted their complicity with the devil—often testifying about “signing the devil’s book”—while others steadfastly maintained their innocence. Cotton Mather was firmly convinced that confession was the

125. See ROSENTHAL, *supra* note 6, at 42-43 (discussing that confession and/or accusation of others became ways to avoid the gallows). Accord POWERS, *supra* note 8, at 489 (noting that it “soon became evident that no confessed witch went to the gallows,” and commenting that confessing and inculcating non-confessing suspects might be an escape from the gallows or even a “passport to freedom”); REIS, *supra* note 20, at 126.

126. Calef, *supra* note 118, at 373-74.

strongest evidence to support a proper conviction¹²⁷ as was Perkins.¹²⁸ While many have written about the reasons for these confessions,¹²⁹ as well as their importance, it is indeed a curious and much-studied part of the trials that so many people confessed to something most of us do not believe was true.

To determine whether one was a witch, factfinders could also rely on reputation or character evidence of the accused. For example, Cotton Mather wrote that the defendant in the Glover trial, which pre-dated the Salem trials, possessed a poor reputation.¹³⁰ Experts such as Perkins opined on the importance of reputation, noting that if a person was defamed as a witch, that yielded a strong suspicion.¹³¹ In certain trials, such as Bridget Bishop's and Sarah Good's, reputation likely added to the reasons for conviction.¹³²

Although it most likely played a minor role, physical evidence was apparently also introduced into the trials. This type of evidence would include "poppets" or dolls made for diabolical purposes, along with pins, nails, and other physical evidence of witchcraft.¹³³

2. Spectral Evidence

Spectral evidence, of course, is the most vilified and most difficult evidence to comprehend. According to some sources, it was a of dubious

127. HOFFER, *supra* note 8, at 80-81; SILVERMAN, *supra* note 33, at 104.

128. See PERKINS, *supra* note 102, at 604.

129. See, e.g., HANSEN, *supra* note 73, at 88 (noting that by confession, an accused could save his or her life). See also REIS, *supra* note 20, at 124 (addressing Puritan women's fears and beliefs that they "had embraced the devil"). Robert Calef, writing shortly after the trials, noted the coercive methods employed to obtain confessions:

There are numerous Instances, too many to be here inserted, of the tedious Examinations before private persons, many hours together; they all that time urging them to Confess (and taking turns to perswade them) till the accused were wearied out by being forced to stand so long, or for want of Sleep, etc. and so brought to give an Assent to what they said; they then asking them, Were you at such a Witch-meeting, or have you signed the Devil's Book, etc. upon their replying, yes, the whole was drawn into form as their Confession.

Calef, *supra* note 118, at 376. But see Craker, *supra* note 80, at 345-50 (arguing against the relative importance of confessions in the role of deciding whom to try or hang).

130. Mather described her as "the Daughter of an ignorant and scandalous old Woman . . . whose miserable Husband . . . had sometimes complained [she] . . . was a Witch." *Memorable Providences*, *supra* note 43, at 100.

131. PERKINS, *supra* note 102, at 602. Perkins here also cautioned that the "wise and prudent judge ought carefully to look that the report be made of men of honesty and credit." *Id.*

132. See the discussion of Bridget Bishop and Sarah Good, *infra* Part IV.

133. For example, in Bridget Bishop's trial, John Bly and his son testified that they found "Severall popitts made up of Raggs And hoggs Busells wth headles pins in Them. Wth the points out ward" in the cellar wall of Bishop's home. See WITCHCRAFT PAPERS, *supra* note 5, at 101.

value for many in 1692 as well.¹³⁴ The definition of spectral evidence is somewhat elusive and it is difficult to imagine this type of evidence ever being admissible in court.

One scholar provides a useful description: "*Spectral evidence* refers to the common belief that, when a person had made covenant with the devil, he was given permission to assume that person's appearance in spectral form in order to recruit others, and to otherwise carry out his nefarious deeds."¹³⁵ Alleged witchcraft victims testified that the spectre of a witch would appear to them—often at night in their bedrooms—and urge them to cast their lot with the devil and his followers. For example, in the trial of George Burroughs, Mercy Lewis testified that she witnessed "the apparition of Mr. George Burroughs, whom I knew very well, which did grievously torture me, and urged me to write in his book."¹³⁶ There were also claims that these spectres would not only attempt to lure the victims into joining the devil's band of followers, but they would also threaten to inflict very real injury on the victims if the victims did not.¹³⁷

Only those self-selected victims with special sight could see spectres,¹³⁸ although it would be fair to say that many believed it.¹³⁹ Spectral evidence was consistently admitted in the Salem trials, as a review of the trial documents establishes.¹⁴⁰ Generally, it was admitted into trials in three different ways: testimony by observers about witnessing victims afflicted by spectres; observations in the court of victims apparently being afflicted; and testimony by victims about spectral torment that occurred outside of the court.

In the first type of spectral evidence, there was testimony from observers about the fits and strange behaviors of the girls believed to be afflicted by witches. For example, in the trial of George Burroughs, Thomas and Edward Putnam supplied affidavits stating that they heard Mercy Lewis declare that the defendant had appeared to her in a spectral form and that they "also beheld her tortures which we cannot express, for sometimes we were ready to fear that every joint of her body was ready to be displaced."¹⁴¹

134. See, e.g., HOFFER, *supra* note 8, at 78. Hoffer remarks that it was questionable for someone like Cotton Mather to rely on the experts from 1590 (like Perkins) without question in 1690. "Concepts of probability, rationality, and causation had greatly changed in the passing of a century . . .". *Id.*

135. Craker, *supra* note 80, at 332.

136. DOCUMENTARY RECORD, *supra* note 6, at 76.

137. *Id.*

138. Craker, *supra* note 80, at 332.

139. Payne, *supra* note 65, at 62.

140. See WITCHCRAFT PAPERS, *supra* note 5, at 19.

141. DOCUMENTARY RECORD, *supra* note 6, at 76.

In the second category were in-court demonstrations of spectrally-caused discomfort, as occurred in the proceedings against Martha Corey and the others accused. Observer Deodat Lawson recorded one scene:

It was observed several times, that if she [Goodwife Corey] did but bite her Under lip in time of Examination the persons afflicted were bitten on their armes and wrists and produced the Marks before the Magistrates, Ministers and others. And being watched for that, if she did but Pinch her Fingers, or Graspe one hand hard in another, they were Pinched and produced the Marks before the Magistrates, and Spectators. After that, it was observed, that if she did but lean her Breast against the Seat, in the Meeting House, (being the Barr at which she stood,) they were afflicted.¹⁴²

The third type of spectral evidence admitted was testimony by victims about events that they experienced in places other than the courtroom. They testified about their visions (spectres as well as ghosts) and what these visions said or did to them. In George Burroughs' trial, for example, Ann Putnam testified that she was visited by the apparitions of two women who claimed to be Burroughs' [deceased] wives. They told Putnam that Burroughs had murdered them.¹⁴³ Mercy Lewis testified that Burroughs had appeared to her and carried her off to a very high mountain, offering to give her his Kingdom, if only she would sign his book. She testified that when she refused Burroughs' offer, he tormented her dreadfully.¹⁴⁴

Wendel D. Craker argues compellingly that no defendants were tried or hanged on spectral evidence alone, but opines that the trials relied upon more traditional types of witchcraft evidence, what he terms "non-spectral acts of malefic witchcraft."¹⁴⁵ Many of these "non-spectral acts of malefic witchcraft" fit within the definition of syndrome evidence.

142. Deodat Lawson, *A Brief and True Narrative of Witchcraft at Salem Village* (1692), reprinted in *NARRATIVES OF THE WITCHCRAFT CASES*, *supra* note 43, at 156.

143. DOCUMENTARY RECORD, *supra* note 6, at 74.

144. *Id.* at 76. The story told in the Burroughs trial is quite similar to the biblical story of the Devil carrying Jesus to the mountaintop as found in the gospel of Matthew. HOFFER, *supra* note 8, at 115.

145. Craker, *supra* note 80, at 132. Craker uses this phrase, in part, to distinguish between "black magic that springs from a malefic spirit, and so-called white magic that could be used for benevolent purposes." *Id.* at n.1. He describes "non-spectral malefic acts of witchcraft" as follows:

The concept was deeply embedded in the culture that some individuals, through the devil's arts, could obtain magical powers by which to cast spells, pronounce curses, and cause accident, storms, sickness and death. Such persons were alleged to have power to foretell the future, and to perform feats of strength While the appearance of spectres was limited to those few bewitched individuals who had been given a 'special sight', the non-spectral acts of malefic witchcraft were openly visible to anyone who observed the misfortunes of life, and chose to diabolic construction upon them.

Id. at 132.

3. Syndrome Evidence

There are two categories within the type of evidence here termed "witchcraft syndrome" evidence. In the first, witnesses told stories about cattle dying after the accused had cursed them ("bewitched cattle syndrome"), or children becoming sick and dying after an unpleasant interaction with the accused ("bewitched child syndrome"). In this category the victims truly were afflicted physically, but the causative factor was deemed demonic, not biological; what Craker termed "acts of malefic witchcraft."

The second type of syndrome evidence consisted of observations of the alleged fits and bizarre symptomology of the victims ("spectral syndrome"). These behaviors may have been feigned, or they may have been real (or some of both); there is still no agreement about their cause. Nevertheless, these behaviors are within my definition of witchcraft syndrome evidence. Thus, the claims of "biting, pricking, burning, and poking" along with the writhing, strange movements, and the like, are also collected under this category of witchcraft syndrome evidence.

4. Profile Evidence

The category of evidence that this Article refers to as "witchcraft profile" includes (1) unusual physiological marks known to be characteristic of witches, such as a "witch's mark",¹⁴⁶ and (2) inexplicable attributes believed to be of demonic origin, such as unnatural strength or the inability to say the Lord's prayer. As is true in contemporary cases, the use of profile evidence was far more limited than syndrome evidence in the Salem trials.

IV. FOUR TRIALS: SYNDROME AND PROFILE EVIDENCE

In the following section, four trials are reviewed and discussed in terms of admitted syndrome and profile evidence: Bridget Bishop; Sarah Good; Rebecca Nurse; and George Burroughs.¹⁴⁷

A. Bridget Bishop

Bridget Bishop has been the subject of much writing, commentary and discussion, not only because she was the first defendant tried and executed in

146. Witches' marks are described *supra* at notes 22 and 91.

147. These four are chosen primarily because there are extensive records of these trials and Boyer & Nissenbaum, in their book *Salem-Village Witchcraft*, have updated the language from these four trials (and one other), rendering them more accessible to the reader.

Salem, but also because her life seemed more colorful than many other Puritans.¹⁴⁸ Historian Chadwick Hansen went farther, claiming Bishop was likely a practicing witch. "She had a long-standing reputation for witchcraft; it was rumored that she had bewitched her first husband . . . to death. In 1679/80, during her second marriage . . . she had been brought before the Court of Assistants for witchcraft . . . Her present husband, Edward Bishop, had accused her of witchcraft . . ." ¹⁴⁹ Whatever the truth about Bishop, she was not well-liked within the community, and few probably shed a tear for her at the time of execution.

One indictment¹⁵⁰ against Bishop stated that she had "Tortured Afflicted Pined, Consumed, wasted: & tormented" her victims.¹⁵¹ According to the death warrant, Bishop was executed because of her affliction of Abigail Williams, Ann Putnam, Jr., Mercy Lewis, Mary Walcott, and Elizabeth Hubbard.¹⁵² Scholar Bernard Rosenthal argues that spectral evidence played a "central role" in her trial.¹⁵³ He states:

Accusers confronted her who had previously accused her of having spectrally afflicted them in public on the day of her examination; yet in trying to defend herself against those charges, the same accusers presented her and the court with new fits in response to new assaults by her specter, which only they could see. Added to this, her accusers remained healthy, so Bridget Bishop received her sentence of death for pining, consuming, and wasting a group of accusers who did not manifest symptoms of such affliction and had reputations with some people for bad character.¹⁵⁴

Bishop's trial consisted of testimony from several witnesses that she (or her spectre) visited and tormented them at night,¹⁵⁵ along with testimony about

148. See, e.g., HOFFER, *supra* note 8, at 82-83 (noting that Bishop was a "disputatious and troublesome woman," who had likely "transgressed almost all of [the] . . . expectations of virtue in a woman"). Hoffer continues: "Notoriously and defiantly, she had run through her first two husbands' estates and kept a house of ill repute with her doddering third husband's consent." *Id.* at 84. But see ROSENTHAL, *supra* note 6, at 71-74 (noting the likelihood of historical error in conflating Bishop with another woman); WITCHCRAFT PAPERS, *supra* note 5, at 95-97 (relating testimony of the Rev. John Hale that may have started the confusion).

149. HANSEN, *supra* note 73, at 64.

150. There appear to have been four separate indictments against her. All of these indictments charged the defendant with having "afflicted, pined, consumed wasted and tormented" the victims. See WITCHCRAFT PAPERS, *supra* note 5, at 90.

151. *Id.* at 87.

152. ROSENTHAL, *supra* note 6, at 68.

153. *Id.*

154. *Id.* at 68-69.

155. In addition to the usual victims, who were the named victims in the indictments, a number of other witnesses provided evidence about nighttime visits. See, e.g., testimony of Samuel Gray, Richard

unusual events or behaviors that occurred after the witnesses interacted with Bishop.

Wendel Craker, however, discusses the ample use of non-spectral witchcraft evidence introduced in the trials, stating "[n]early everyone recognizes the presence of non-spectral evidence in the trial of Bridget Bishop."¹⁵⁶ While there is likely to remain disagreement among historians about the relative importance of spectral evidence in the trials, it is clear that in the Bishop trial, a great deal of the evidence that was introduced fits well within the conception of syndrome evidence.

The first type of syndrome evidence admitted in the trial occurred during the examination of Bishop. It consisted of the exhibitions of the accusers' strange behavior, which was believed to be caused by Bishop. Bishop denied the charges of harming the girls by witchcraft. "At which charge she seemed to be very angry, and shaking her head at them, saying it false."¹⁵⁷ The recorder of the examination, Ezekial Cheever, wrote "[t]hey [the victims] are all greatly tormented (as I conceive) by the shaking of her head."¹⁵⁸ Later in the examination, when asked how she responded to the charges of murder, Bishop responded "I am innocent. I know nothing of it. Now she lifts up her eyes and they [the victims] are greatly tormented again."¹⁵⁹ Finally, as Bishop is being led away, Cheever again notes: "Now she is going away, they [the victims] are dreadfully afflicted. Five afflicted persons do charge this woman to be the very woman that hurts them."¹⁶⁰ As a final note, Cheever adds that "I have also in her examination taken notice that all her actions have great influence upon the afflicted persons and that have been tortured by her."¹⁶¹

At Bishop's trial, William Stacey testified that after completing some work for the defendant, she paid him three pence. But he had not gone above "3 or 4 rods before he looked in his pocket where he put it, for it, but could not find any."¹⁶² This witness also testified that after meeting Bishop, his "horse stood still with a small load going up the hill, so that the horse striving to draw, all his gears and tacking flew in pieces, and the cart fell down."¹⁶³ More unexplained events causally related to Bishop followed after contact

Coman, John Louder, John Cooke, and Susannah Sheldon, in *WITCHCRAFT PAPERS*, *supra* note 5, at 94-109.

156. Craker, *supra* note 80, at 337.

157. DOCUMENTARY RECORD, *supra* note 6, at 37.

158. *Id.*

159. *Id.* at 38.

160. *Id.*

161. *Id.*

162. *Id.* at 41.

163. *Id.*

with her. Stacey claimed that he was unable to lift a bag of corn weighing only two bushels.¹⁶⁴

Other witnesses concurred in tales about the strange behavior related to Bishop. In one episode that seems to suggest a "bewitched pig syndrome," John and Rebecca Bly testified that Bishop had quarreled with them about the price of a sow. After Bishop left, the sow:

was taken with strange fits, jumping up and knocking her head against the fence, and seemed blind and deaf, and would not eat, neither let her pigs suck, but foamed at the mouth, which Goody Hinderson hearing of, said she believed she was overlooked, and that they had there cattle ill in such a manner at the eastward when she lived their, and used to cure them by giving of them red ocre and milk, which we also gave the sow. Quickly after eating of which she grew better, and then for the space of near two hours together she, getting into the street, did set off jumping and running between the house of said deponents and said Bishops as if she were stark mad. And after that, was well again. And we did then apprehend or judge, and do still, that said Bishop had bewitched the sow.¹⁶⁵

Ample testimony was introduced in the trials establishing that a quarrel with the accused was followed by illness or death. Curses by the accused were followed by misfortune. In fact, this testimony fit precisely with the useful evidence suggested by the witchcraft expert William Perkins: a presumption of witchcraft arises if "after enmity, quarreling or threatening a present mischief does follow."¹⁶⁶

According to the testimony of Samuel and Sarah Shattuck, their boy became ill after having contact with Bishop. They described his affliction as follows:

And ever since, this child hath been followed with grievous fits as if he would never recover more, his head and eyes drawn aside so as if they would never come to rights more, lying as if he were in a manner dead, falling anywhere either into fire or water, if he be not constantly looked to, and generally in such an uneasy and restless frame, almost always running to and fro, acting so strange that I cannot judge otherwise but that he is bewitched, and by the circumstances do believe that the aforesaid Bridget . . . Bishop, is

164. DOCUMENTARY RECORD, *supra* note 6, at 41.

165. *Id.* at 47.

166. PERKINS, *supra* note 102, at 602.

the cause of it. And it has been the judgment of doctors such as lived here . . . that he is under an evil hand of witchcraft.¹⁶⁷

The Reverend John Hale testified that after becoming acquainted with Bishop, he observed Christian Trask, wife of John Trask, become "distracted."¹⁶⁸ In her more lucid moments, Mrs. Trask claimed that Bishop had bewitched her.¹⁶⁹ Hale claimed that when Trask eventually died, he observed three deadly wounds:

a piece of her windpipe cut out, and another wound above that, through the windpipe and gulle[t] to the vein they call jugular. So that I then judged and still do apprehend it impossible for her with so short a pair of scissors to mangle herself so, without some extraordinary work of the devil or witchcraft.¹⁷⁰

Again, Bishop's involvement in the death was suspected.

The Sheriff of Essex County appointed a group of women to conduct physical examinations of Bridget Bishop and others.¹⁷¹ According to the written results of the first exam, Bishop had a "preternatural excrescence of flesh between the pudendum and anus, much like to teats, and not usual in women."¹⁷² In the second physical exam, conducted several hours later, Bishop was discovered to be "in a clear and free state from any preternatural excrescence as formerly seen by us."¹⁷³ The implication in this physiological change was that Bishop's "familiar" had sucked from her in the intervening period.¹⁷⁴ Bridget Bishop was found guilty, the death warrant signed on June 8,¹⁷⁵ and she was hanged on June 10, 1692.¹⁷⁶

167. WITCHCRAFT PAPERS, *supra* note 5, at 43-44.

168. From the context of the writing it appears that "distracted" is used to connote depression or some other form of cognitive impairment.

169. WITCHCRAFT PAPERS, *supra* note 5, at 49.

170. *Id.* at 50.

171. *Id.* at 30.

172. *Id.* at 31.

173. Curiously, although many of the names from the first and second physical exams are the same, the "marks" (which were used instead of signatures) of the first group do not match their "marks" in the second exam. Thus, while the mark of Elanor Henderson is similar to a backward "C" in the first exam, the mark ascribed to her in the second exam resembles two front slashes: "//." The possible significance of this difference is discussed in ROSENTHAL, *supra* note 6, at 77.

174. For more on the subject of witches' teats, see *supra* notes 22, 91.

175. WITCHCRAFT PAPERS, *supra* note 5, at 109.

176. *Id.* at 83.

B. Sarah Good

Sarah Good, one of the first three women accused of witchcraft by the affected girls, was indicted for acts committed upon Sarah Vibber,¹⁷⁷ Elizabeth Hubbard, and Ann Putnam. The indictment accused Good of practicing "wicked arts" upon Vibber, by which Vibber "was and is tortured, afflicted, pined, consumed, wasted and tormented, and also alleged sundry other acts of witchcraft."¹⁷⁸

Like Bridget Bishop, Sarah Good lived on the fringes of Salem society, apparently panhandling and moving from household to household performing whatever tasks were provided.¹⁷⁹ Samuel and Mary Abbey testified that they had let Sarah Good live with them, but had to turn her out, since "Sarah Good was so turbulent a spirit."¹⁸⁰ Sarah's own husband had called her a witch¹⁸¹ and claimed "with tears that shee is an enemy to all good."¹⁸² Sarah Good's four year old daughter, Dorcas, confessed to witchcraft, going so far as to claim she had suckled a familiar, from a spot on her hand.¹⁸³ Examiners observed a "deep red spot, about the bigness of a flea bite."¹⁸⁴ Thus, the accusations of witchcraft against Sarah Good surprised few and likely upset even fewer.

When Sarah Good was examined in the court, the accusing girls were asked to "look upon her, and see, if this were the person that had hurt them."¹⁸⁵ According to the transcribed testimony, as soon as the girls looked at Good and identified her as one who had harmed them "they were all tormented."¹⁸⁶ Testimony was taken from a variety of witnesses who claimed to see the apparition of Sarah Good, whose torment included biting, pricking, and pinching the victim, as well as choking.¹⁸⁷ In addition, Tituba had

177. Sarah Vibber was apparently thirty-six years old at the time of the trials, although she is often referred to as one of the "girls" who made accusations. Her name appears both as "Viber" and "Bibber" in the documents. DOCUMENTARY RECORD, *supra* note 6, at 11.

178. *Id.* at 11.

179. HOFFER, *supra* note 8, at 24.

180. DOCUMENTARY RECORD, *supra* note 6, at 14.

181. "[H]er housband had said that he was afraid that shee was a witch or would be one very quickly . . ." *Witchcraft Papers*, *supra* note 5, at 357.

182. *Id.*

183. HOFFER, *supra* note 8, at 66. The Puritans believed (and many testified) that the witches had "familiaris," or imps, which were small animals or birds or even strange creatures, that suckled from the witches' teats. These familiaris signified that the devil had "taken possession of the women's bodies." REIS, *supra* note 20, at 113. Chadwick Hansen describes familiaris as "a messenger assigned to a witch by the Devil." HANSEN, *supra* note 73, at 32.

184. HANSEN, *supra* note 73, at 54 (citing Lawson, *supra* note 142, at 160).

185. WITCHCRAFT PAPERS, *supra* note 5, at 356.

186. *Id.*

187. DOCUMENTARY RECORD, *supra* note 6, at 12-14.

confessed to witchcraft and had inculpated Sarah Good, as did Dorcas Good (Sarah Good's daughter), Deliverance Hobbs, and Abigail Hobbs.¹⁸⁸

Samuel and Mary Abbey testified against Sarah Good. They first informed the court that they had permitted the Good family to live in their house, since the Goods were destitute.¹⁸⁹ However, after they "could not suffer her to live in their howse any Longer,"¹⁹⁰ they "began to Lose Cattle, and Lost severall after an unusall Manner, in drupeing Condition and yett they would Eate: and your Deponents have Lost after that manner 17 head of Cattle within two years, besides Sheep, and Hoggs: and both doe believe they Dyed by witchcraft."¹⁹¹

Another witness, Sarah Gadge, told a similar story. After refusing Sarah Good entry into her house, Good began muttering and scolding.¹⁹² The very next morning, one of Gadge's cows died in "A Sudden, terrible & Strange, unusall maner soe that some of the neighbors & said Deponent did think it to be done by witchcraft."¹⁹³ Despite their "opening" the cow after its death, Thomas Gadge, Sarah Gadge's husband, said they could find no natural cause for the cow's demise.¹⁹⁴

Two young men also testified that Good had bewitched their cattle. Henry Harrick testified that after his father sent Sarah Good away from his barn for fear that she would light the barn on fire with her pipe smoking, she replied that it would cost him one or two of his best cows.¹⁹⁵ According to another young witness, fourteen year old Jonathon Batchelor, cattle were removed from their places and several had been set loose in a strange manner.¹⁹⁶

Sarah Vibber testified about being visited by the the spectre of Sarah Good. Vibber claimed that Good had tormented her and her four-year old child. She claimed that her child had had a great fit and was almost impossible to hold.¹⁹⁷ Vibber also testified that she had witnessed the spectre of Sarah Good tormenting Mercy Lewis.¹⁹⁸

Sarah Good's husband, William, testified that the night before his wife was examined on witchcraft charges, "he saw a wart or tett a little belowe her

188. WITCHCRAFT PAPERS, *supra* note 5, at 362-63.

189. *Id.* at 368.

190. *Id.*

191. *Id.*

192. *Id.* at 369.

193. *Id.*

194. *Id.*

195. *Id.* at 375.

196. *Id.*

197. *Id.* at 376.

198. *Id.*

Right shoulder which he never saw before.”¹⁹⁹ Nevertheless, a physical examination of Good by a group of women failed to discover any unnatural findings.²⁰⁰ Sarah Good was found guilty, the death warrant was signed on July 12,²⁰¹ and she was hanged on July 19, 1692.²⁰²

C. Rebecca Nurse

Rebecca Nurse and Martha Corey were named by the girls in the second wave of witchcraft accusations. Both Corey and Nurse were older women in good standing in the Salem community.²⁰³ Neither woman was prepared for the accusations, and even “Corey’s sarcastic dismissal and Nurse’s earnest bewilderment at the charges did not deter the growing number of unofficial witchfinders.”²⁰⁴ Like Bishop and Good, Nurse was indicted for witchcraft as a result of the claims that she had “tortured afflicted consumed Pined wasted & tormented” the four complaining witnesses, Ann Putnam, Abigail Williams, Mary Walcott and Elizabeth Hubbard.²⁰⁵

During her initial examination before the court, Rebecca Nurse was accused of tormenting the girls, which was graphically displayed by the complaining witnesses: “Ann Putnam in a grievous fit cried out that she hurt her.”²⁰⁶ When Nurse exclaimed “Oh Lord help me, & spread out her hands,” the “afflicted were grievously vexed.”²⁰⁷ When Nurse turned her head to the side, “so were the afflicted taken.”²⁰⁸

After the indictments were returned, dozens of residents signed a petition on behalf of Rebecca Nurse, claiming they never had any grounds to suspect her of anything for which she stood accused.²⁰⁹ Other residents were not of a similar mind. In addition to the standard allegations consisting of visionary spectral evidence, there were several instances of syndrome evidence.

The Reverend Samuel Parris, Nathaniel Ingersol, and Thomas Putnam provided testimony that they had witnessed the torture of Ann Putnam senior, her daughter Ann, Mary Walcott, and Abigail Williams during the examination of Rebecca Nurse.²¹⁰ Thomas and Edward Putnam testified that

199. WITCHCRAFT PAPERS, *supra* note 5, at 372.

200. DOCUMENTARY RECORD, *supra* note 6, at 31.

201. WITCHCRAFT PAPERS, *supra* note 5, at 378.

202. *Id.* at 355.

203. HOFFER, *supra* note 8, at 64.

204. *Id.* at 65.

205. WITCHCRAFT PAPERS, *supra* note 5, at 588.

206. *Id.* at 584.

207. *Id.* at 585.

208. *Id.* at 587.

209. *Id.* at 592-93.

210. *Id.* at 598.

they had witnessed Ann Putnam during and after her fits and saw her "much afflicted, being bitten, pinched, her limbs distorted, & pins thrust into her flesh, which she charged on Rebekah Nurse that she was the Acter thereof & that she saw her do it."²¹¹ They also claimed they observed, during the examination, that when Nurse "did clinch her hands, bite her lips, or hold her head aside the said Putnam Hubbard & Williams was set in the same posture to her great torture & affliction."²¹²

John and Hannah Putnam related a particularly upsetting incident about the death of their infant, although he had been thriving in the first eight weeks of life.²¹³ Hannah Putnam testified that after she had "reported" information about Nurse, she was "taken with strange kinds of fits," but recovered quickly.²¹⁴ Her child, however, did not fare as well. She stated that quickly after her recovery, "our poor young child was taken about midnight with strange and violent fits which did most grievously affright us, acting much like to the poor bewitched persons, when we thought they would indeed have died."²¹⁵ The child's grandmother (also a Putnam), said that she "feared an evil hand upon it."²¹⁶ The child's "strange and violent fits" continued on for two days, until he succumbed to "a cruel and violent death."²¹⁷

Sarah Houlton testified about another incident linking death to Nurse's alleged witchcraft. She claimed that one Saturday morning, Rebecca Nurse yelled at Sarah's husband, Benjamin, because his pigs had gotten into her field.²¹⁸ Nurse would not be placated, but continued "railing and scolding a great while together."²¹⁹ Within a short time, Benjamin Houlton was "taken with a strange fit in the entry, being struck blind and struck down two or three times."²²⁰ He continued to languish through the summer, suffering stomach pains and attacks of blindness. Two weeks before he died, however, he was "taken with strange and violent fits."²²¹ The implication of this testimony was that Nurse had bewitched him.

As with Bridget Bishop, the examining women found evidence on Rebecca Nurse of a "preternatural excrescence of flesh between the pudendum

211. WITCHCRAFT PAPERS, *supra* note 5, at 602.

212. *Id.*

213. DOCUMENTARY RECORD, *supra* note 6, at 27.

214. *Id.* at 28.

215. *Id.*

216. *Id.*

217. *Id.*

218. *Id.* at 29.

219. *Id.*

220. *Id.* at 30.

221. *Id.* Although neither Houlton nor Hannah Putnam ever testified explicitly that Nurse actually caused the deaths, the implications seem clear from the testimony.

and anus, much like teats, and not usual in women."²²² However, upon later examination, "instead of that excrescence within mentioned, it appears only as a dry skin without sense [i.e. without sensation]."²²³ Nurse was found guilty and she was hanged on July 19, 1692.²²⁴

D. George Burroughs

George Burroughs, a minister in Salem from 1680 to 1682,²²⁵ was only one of approximately thirty men accused of witchcraft in the Salem trials.²²⁶ One scholar claims Burroughs was a habitual liar and bragged about his unusual powers.²²⁷ Others note that Burroughs had a reputation for abusive behavior toward his wives.²²⁸ Hannah Harris testified about how cruel Burroughs had been to his wife and how he chided his daughter when she claimed that he had caused her mother's illnesses.²²⁹

At trial, Ann Putnam testified that both Burroughs' spectre and his late wives appeared to her and told her Burroughs had murdered them.²³⁰ Like Bridget Bishop and Sarah Good, George Burroughs created a great deal of controversy in the village of Salem, and few were likely surprised by the allegations of witchcraft against him.

Unlike the other trials discussed herein, Burroughs' trial employed a few examples of syndrome evidence primarily related to the witnessing of spectral torture. For example, Edward and Thomas Putnam claimed they were with Ann Putnam and witnessed her "tortured and heard her refuse to write in the [Devil's] book."²³¹ These same witnesses also witnessed the spectral visits to Mercy Lewis, "and also beheld her tortures which we cannot express, for sometimes we were ready to fear that every joint of her body was ready to be displaced."²³²

The Putnams also testified about the physical symptoms of the complaining witnesses during the examination of Burroughs, when the "aforesaid persons were most dreadfully tormented during the time of his examination, as if they would have been torn all to pieces, or all their bones

222. DOCUMENTARY RECORD, *supra* note 6, at 31.

223. *Id.* (alteration in original). For a discussion of the possibility of fraud attending these investigations, see ROSENTHAL, *supra* note 6, at 77.

224. WITCHCRAFT PAPERS, *supra* note 5, at 583.

225. See HANSEN, *supra* note 73, at 74.

226. See DOCUMENTARY RECORD, *supra* note 6, at 376-78 (listing all accused).

227. HANSEN, *supra* note 73, at 76-77.

228. REIS, *supra* note 20, at 157.

229. WITCHCRAFT PAPERS, *supra* note 5, at 83.

230. HANSEN, *supra* note 73, at 74-75.

231. DOCUMENTARY RECORD, *supra* note 6, at 74.

232. *Id.* at 76.

put out of joint, and with such tortures as no tongue can express."²³³ Thomas and Edward Putnam stated they believed Burroughs had caused the girls' suffering through witchcraft.²³⁴

In one unusual bit of testimony, Elizer Keysar related a story about being in Thomas Beadle's house while Burroughs was in another part of the house. Capt. Daniell King was also there and encouraged Keysar to speak to Burroughs. Keysar, however, claimed to not want to speak with Burroughs for fear "that he was the chief of all persons accused for witchcraft, or the ringleader of them all, and told him [King] also that I believed if he was such an one, his Master, meaning the devil, had told him before now what I said of him."²³⁵

That same evening, Keysar testified that he saw "very strange things appear in the chimney, I suppose a dozen of them, which seemed to me to be something like jelly that used to be in the water and quaver with a strange motion and then quickly disappeared."²³⁶ Keysar also saw a light, as big as his hand which quivered and shook and seemed to have an upward motion.²³⁷ To all these sightings Keysar ascribed diabolical causation, and by implication, the influence of Burroughs.

More than any of the other Salem trials, George Burroughs' case relied on profile evidence to assist in establishing his guilt. Primarily, the profile evidence against Burroughs rested upon claims of his unusual strength. For example, he was accused "by nine persons for extraordinary Lifting, and such Feats of Strength, as could not be done without a Diabolical Assistance."²³⁸ The witnesses recited that he was a "very puny Man, yet he had often done things beyond the strength of a Giant."²³⁹ One feat of strength included holding a seven-foot gun in one hand straight forward as if it were a pistol.²⁴⁰ Another claim was that Burroughs lifted a full barrel of molasses with but two fingers of one of his hands in the bung and carried it.²⁴¹ George Burroughs was convicted of witchcraft and hanged on August 19, 1692.²⁴²

233. DOCUMENTARY RECORD, *supra* note 6, at 78-79.

234. *Id.*

235. *Id.* at 75.

236. *Id.*

237. *Id.*

238. *Wonders*, *supra* note 95, at 216. Accord DOCUMENTARY RECORD, *supra* note 6, at 85.

239. *Wonders*, *supra* note 95, at 219 (trial of George Burroughs).

240. *Id.* See also DOCUMENTARY RECORD, *supra* note 6, at 84 (testimony of Simon Willard and Capt. Wm Wormal), 85 (testimony of Thomas Greenslit).

241. DOCUMENTARY RECORD, *supra* note 6, at 84 (testimony of Samuel Webber), 85 (testimony of Thomas Greenslit).

242. WITCHCRAFT PAPERS, *supra* note 5, at 151.

V. SALEM TRIAL EPILOGUE

The Salem witchcraft trials commenced in the spring with Bridget Bishop and continued throughout the summer of 1692 until August, when people began questioning the trials and the evidence admitted.²⁴³ A group of ministers watching the trials approached Increase Mather and asked for his opinion about appropriate evidence concerning proof of witchcraft.²⁴⁴ Mather worked on his position throughout the summer and presented his work on October 3, 1692, after it had been signed by thirteen other ministers (Cotton Mather did not sign it).²⁴⁵ From August 1 through October 3, 1692, while Increase Mather wrote, several more people were executed, including Giles Corey, who was pressed to death for refusing to plead to the indictment.²⁴⁶

In his essay *Cases of Conscience Concerning Evil Spirits Personating Men*,²⁴⁷ Increase Mather critiqued much of the evidence admitted in the cases, singling out spectral evidence for particular scorn.²⁴⁸ Mather concluded that Satan could "impose on the Imaginations of Persons Bewitched, and to cause them to Believe that an Innocent, yea that a Pious person do's torment them, when the Devil himself doth it."²⁴⁹ Thus, by concluding that the Devil could impersonate the innocent (a question that had haunted the clergy throughout the trial), Mather condemned convictions premised upon spectral evidence and the "touching test," concluding that "evidence in this Crime [of Witchcraft] ought to be as clear as in any other Crimes of a Capital Nature."²⁵⁰ Mather was careful not to criticize the judges who had sat on the trials, stating "[t]hey are wise and good men, and have acted with all Fidelity according to their Light."²⁵¹ Mather determined that for a proper conviction, there must be the testimony of two credible witnesses, like any other capital case.²⁵² Perhaps to assure the community that had convicted so many people during the summer,

243. HOFFER, *supra* note 8, at 129.

244. *Id.* See also HALL, *supra* note 32, at 262.

245. HOFFER, *supra* note 8, at 130. Cotton Mather wrote his own reflections on the trials in *The Wonders of the Invisible World*, *supra* note 95, at 209. Cotton Mather's interpretation of the trials differs from Increase Mather's. While the elder Mather raised concerns about the quality of evidence used to convict, the younger Mather reviewed five of the trials and determined "real and malicious witches" were executed. SILVERMAN, *supra* note 33, at 116. The five trials were Bridget Bishop, George Burroughs, Susanna Martin, Elizabeth How, and Martha Carrier. See *Wonders*, *supra* note 95. Cotton Mather's fear of the devil was stronger than his fear of injustice.

246. See WITCHCRAFT PAPERS, *supra* note 5, at 26-27.

247. *Cases of Conscience*, *supra* note 1 (although written and privately circulated in the fall of 1692, the essay was not published until the beginning of 1693).

248. See WITCHCRAFT PAPERS, *supra* note 5, at 27.

249. *Cases of Conscience*, *supra* note 1, at 1.

250. *Id.* at 52.

251. *Id.* at postscript.

252. *Id.* at 65-66.

Mather reaffirmed that free confession was good grounds for conviction.²⁵³ In conclusion, Mather provided a warning for future trials, stating:

It were better that Ten Suspected Witches should escape, than that one Innocent Person should be Condemned It is better that a Guilty Person should be ABSOLVED, than that he should without sufficient ground of Conviction be condemned. I had rather judge a *Witch* to be an honest woman, than judge an honest woman a witch.²⁵⁴

A few days after Mather's *Cases of Conscience* was issued, the influential merchant and scientist Thomas Brattle²⁵⁵ wrote a scathing (unaddressed) letter about the trials.²⁵⁶ In the letter, dated October 8, 1692, Brattle noted there were about fifty people still in jail who had confessed to being witches—suggesting that the sheer number of confessors raised doubt about the validity of the confessions.²⁵⁷ Brattle also complained about the use of the “touching test” in court,²⁵⁸ the reliance upon spectral evidence,²⁵⁹ and the search for the “witch’s mark.” He stated about the accused:

They are searched by a Jury; and as to some of them, the Jury brought in, that [on] such or such a place there was a preternatural excrescence. And I wonder what person there is, whether man or woman, of whom it cannot be said but that, in some part of their body or other, there is a preternatural excrescence. The term is a very general and inclusive term.²⁶⁰

Governor Phips acted swiftly. On October 12, 1692, he wrote a letter that indicated innocent people had been caught up in the trials, stopped the

253. *Cases of Conscience*, *supra* note 1, at 59.

254. *Id.* at 66-67. Although Increase Mather is credited with acting to “restore sanity,” *see* MIDDELKAUFF, *supra* note 40, at 154, he did add a postscript to *Cases of Conscience* in which he noted that he had “perused and approved” Cotton Mather’s *The Wonders of the Invisible World*. *See* SILVERMAN, *supra* note 33, at 263.

255. WITCHCRAFT PAPERS, *supra* note 5, at 27 (discussing the reputation of Brattle). *See also* Brattle, *supra* note 118, at 167-68; FOX, *supra* note 3, at 5 n.6 (quoting PERRY MILLER, *THE NEW ENGLAND MIND: FROM COLONY TO PROVINCE* 196 (1961), for the proposition that Brattle was not only a merchant, but a “mathematician, and an amateur astronomer whose contributions won him the gratitude of Sir Isaac Newton”).

256. *See* Brattle, *supra* note 118, at 167-90. Robert Calef later wrote a vitriolic critique of the trials as well. *See* Calef, *supra* note 118, at 291-393.

257. Brattle, *supra* note 118, at 173.

258. *Id.* at 171.

259. *Id.* at 176.

260. *Id.* at 175. Notably, one of the complaints of Brattle echoes a common modern concern about the use of profiles: their overly inclusive nature that nets the innocent along with the guilty.

proceedings, and disbanded the Court of Oyer and Terminer.²⁶¹ The remaining group of about fifty accused witches were tried by a special court of judicature convened to handle the cases, with the admonishment that no spectral evidence could be admitted.²⁶² Not surprisingly, forty-nine of the fifty-two tried were acquitted.²⁶³ Governor Phips gave reprieves to those convicted.²⁶⁴ From beginning to end, the Salem witchcraft trials lasted less than a year.

VI. SALEM'S IMPLICATIONS FOR MODERN TRIALS

Why study the Salem Witchcraft Trials? Without doubt, it is a subject that fascinates, as the number of contemporary books written on the subject amply demonstrates. We can consider the Salem Witchcraft Trials as an antecedent without contemporary implication, a symbolic relic of less enlightened times where superstition triumphed over sense. We can also revisit the Salem trials to understand and appreciate how they engendered modern criminal procedural protections emanating from the trials' abuses. These first two reasons seem to share a view that we have traveled far in three hundred years. To some extent, we have. Most of us believe in the primacy of science over superstition, and our technological advancements are breathtaking. The last few centuries have witnessed the law's progress in creating rights and crafting safeguards for defendants in criminal trials.

A third reason to revisit these trials is to ask whether they provide current lessons: Are there parallels to existing trial or pre-trial procedures?²⁶⁵ The primary lesson this Article addresses is whether we have imported cognitive errors from a seventeenth century trial.

Profiles and syndromes have become useful arrows in the modern prosecutorial quiver.²⁶⁶ Sexual abuse prosecutions rely on psychological evidence relating to the victim²⁶⁷ and rape prosecutions commonly employ

261. See ROSENTHAL, *supra* note 6, at 181 (citing WITCHCRAFT PAPERS, *supra* note 5, at 861-63).

262. WITCHCRAFT PAPERS, *supra* note 5, at 27-28.

263. *Id.* at 28.

264. *Id.*

265. There are a number of questions from the Salem trials that may have modern parallels. For example, why did so many people confess to impossible acts of witchcraft? Perhaps the cause was the spectre of harsh punishment. Possibly, psychological compulsion caused the confessions. What was the role of forfeiture in animating the prosecution? Finally, was the close connection between religion and government part of the problem? Although far beyond the scope of the inquiry here, these questions pose other fertile areas to examine.

266. This Article does not address the problems of defendants relying on syndrome evidence to establish a justification or excuse for their actions. Rather, the comparison here is to the proof of the crime; thus, the focus solely is on the prosecution's use of syndromes to prove its case.

267. See, e.g., MORIARTY, *supra* note 24, at §§ 8:21-26.

rape trauma syndrome evidence either in the case in chief or in rebuttal.²⁶⁸ Law enforcement's reliance on various profiles, including the drug courier profile, is also substantial.²⁶⁹ However, the most glaring problem with using syndrome and profile evidence in modern trials is that much of the testimony is freely admitted without a determination of whether there is an actual relationship between the behaviors and the criminality. The accuracy and efficacy of profiling has not yet been established and the use of syndromes, unfortunately, has preceded the science.

There are numerous obvious political, social, and legal reasons why courts have been willing to accept this evidence without sufficient foundation. While such motives may be benevolent, their effectuation may not. The obvious danger of easing the way to introduce untested evidence is that the reach may exceed the proper grasp; by reducing the rigor of the analysis of the evidence, we may be convicting the innocent along with the guilty—an abhorrent result of good intentions.

One reason why syndrome and profile evidence has not been subjected to a rigorous analysis may be the somewhat ephemeral distinction between so-called “hard science” and “soft-science.”²⁷⁰ While the former includes such disciplines as microbiology, physics, astronomy, and chemistry, the latter is thought to include psychology, economics, sociology, and criminal justice. While many courts have fallen in line with the United States Supreme Court mandate of *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,²⁷¹ requiring proof of scientific reliability for hard science expert testimony. For disciplines such as psychology and criminal justice courts have often required neither proof of reliability nor even of the “general acceptance”²⁷² of such evidence.²⁷³

268. See, e.g., MORIARTY, *supra* note 24, at §§ 9:7-11

269. See *infra* Part VI.A (discussing the drug courier profile).

270. Of course, another explanation, in the author's opinion, is that courts historically have freely admitted evidence that favors the prosecution.

271. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993).

272. The genesis of the “general acceptance” test is *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923). The *Frye* test was originally used in the federal courts and in most states but has been superceded by some variant of the *Daubert* test in roughly thirty-five states. See generally MORIARTY, *supra* note 24, at appendix 1A (providing a state-by-state analysis of the admissibility of expert evidence).

273. A number of states have specifically held that social science expert evidence is subject to a less rigorous standard of admissibility. See, e.g., *Logerquist v. McVey*, 1 P.3d 113, 133 (Ariz. 2000) (en banc) (declining to apply the *Frye* standard to repressed memory expert testimony, but applying a more liberal standard of admissibility); *People v. Ward*, 83 Cal. Rptr. 2d 828, 831 (Cal. Ct. App. 1999), *review denied* (1999) (declining to apply the *Frye* standard to psychological expert testimony, but applying a more liberal standard of admissibility); *Campbell v. People*, 814 P.2d 1, 8 (Colo. 1991)(same); *Wilson v. Phillips*, 86 Cal. Rptr. 2d 204, 207 (Cal. Ct. App. 1999), *review denied* (1999) (same); *Brooks v. People*, 975 P.2d 1105 (Colo. 1999) (discussing the inapplicability of *Frye* to social science evidence); *Nenno v. State*, 970 S.W.2d 549, 561 (Tex. Crim. App. 1998) (declining to use the *Daubert* standard to govern the admissibility of psychological evidence, but permitting a less rigorous standard).

Many have argued that the reliability of syndrome and profile evidence is premised upon the experienced observations of the expert. For example, law enforcement officers arrest hundreds if not thousands of drug traffickers and thus claim to have learned to recognize such traffickers. Testifying psychologists may have treated numerous trauma victims (of both adult rape and child sexual abuse) and on the basis of their experience believe they are qualified to provide insights into the behaviors of such victims. The valuable knowledge and insight of those who treat trauma victims cannot, nor should not, be discounted. So too, law enforcement experience is a central facet of an officer's occupation.²⁷⁴ The experience-based method of gaining knowledge is of course valid—we learn how to ride a bike by riding a bike—but it seems to have inherent limitations when it is relied on in proving that victim and suspect behaviors are meaningfully correlated with crime.

One plausible reason that courts have not required greater specificity or supporting data in defining profiles is their historical deference to law enforcement's expertise in fighting crime. When law enforcement claims it knows how drug dealers act, courts listen. As the Supreme Court remarked in *Ornelas v. United States*, "[t]o a layman the sort of loose panel below the back seat armrest in the automobile involved in this case may suggest only wear and tear, but to Officer Luedke, who had searched roughly 2000 cars for narcotics, it suggested that drugs may be secreted inside the panel."²⁷⁵

Perhaps courts have not required greater reliability in syndrome evidence because of the disagreement that exists among psychologists about the definition of psychology itself: Is it a scientifically-premised discipline or an experientially-based skill?²⁷⁶ While clinicians treat and evaluate patients,

274. See, e.g., *Ornelas v. United States*, 517 U.S. 690, 700 (1996) (remarking that "our cases have recognized that a police officer may draw inferences based on his own experience in deciding whether probable cause exists"). See also *United States v. Sokolow*, 490 U.S. 1, 8 (1989) (quoting *United States v. Cortez*, 449 U.S. 411, 418 (1981)) In *Sokolow*, the Court noted the role that common sense and experience-based conclusions about behavior have on officers' decisions to stop and search: "The process does not deal with hard certainties, but with probabilities. Long before the law of probabilities was articulated as such, practical people formulated certain common-sense conclusions about human behavior; jurors as fact-finders are permitted to do the same—and so are law enforcement officers." *Id.*

275. *Ornelas*, 517 U.S. at 700 (1996). There is a certain irony that courts defer to police experts, but subject teratologists and epidemiologists to a far more searching inquiry. Compare *Ornelas*, 517 U.S. at 700 (allowing police officers to draw inferences based on their experiences in deciding whether probable cause or reasonable suspicion exists), with *Daubert v. Merrell Dow Pharmaceuticals, Inc.* 43 F.3d 1311, 1316 (9th Cir. 1995) (*Daubert II*) (remarking on the daunting task of resolving disputes among "well-credentialed scientists about matters squarely within their expertise" and permitting expert testimony about birth defects only when it amounts to "scientific knowledge," constitutes "good science," and is derived from "the scientific method").

276. This dilemma is at the heart of the continuing controversy on repressed memory and is thoughtfully discussed in the American Psychology Association's report thereon. See APA Working Group, *Final Conclusions of the American Psychological Association Working Group on Investigation of Memories of Childhood Abuse*, 4 PSYCHOL. PUB. POL'Y & L. 933, 934 (1998) (stating that "one of the most

researchers design tests to evaluate theories. Their respective goals are as different as the methodologies employed.

The concern of this Article, however, is on the quality of the evidence admitted in prosecutions: Are experience-premised conclusions about the relationship between specific crimes and specific behaviors of sufficient quality that they should be readily accepted as probable cause or evidence or should courts require more rigorous proof of such a relationship? It may not seem that there is a need to choose one over the other; experience informs research and research informs experience. But courts have been willing, by and large, to accept law enforcement and psychological expert evidence premised solely on an experiential basis.

In his article, *Kumho and How We Know*,²⁷⁷ Professor Sanders addresses the ways individuals process information, distinguishing between what he calls "experiential processing" and "rational processing."²⁷⁸ The former involves a more simple system for processing information, "representing events as concrete exemplars rather than abstract symbols, is shaped by emotionally significant past experiences, and is outcome-oriented rather than process-oriented."²⁷⁹ The latter system is more "analytic, logical and abstract, and . . . uses more highly differentiated constructs."²⁸⁰

While we use both systems to learn and assimilate information, Professor Sanders argues compellingly that "the epistemological needs of the legal system argue for tests that push experts toward rational processing justification of their positions."²⁸¹ He suggests that the expert must be able to describe "objectively the way in which the hypothesis at issue can be tested and how the expert puts the hypothesis to the test."²⁸²

Thus, in testifying about profile evidence at probable cause hearings or trial, the expert would have to describe how the profile was devised, how effective it has been in identifying the suspects, and the rate at which it has failed to properly identify suspects and the rate at which it has incorrectly identified innocent people. A similar methodology could be employed for those who testify about syndrome evidence. One benefit to requiring this greater rigor in the presentation of all types of expert testimony is the likely exposition of the potential errors that can infect the experience-based process:

consistent observations emerging from our deliberations has to do with the very divergent epistemologies and definitions used by psychologists who study memory and those who study and treat the effects of trauma").

277. Joseph Sanders, *Kumho and How We Know*, 64 LAW & CONTEMP. PROBS. 373 (2001).

278. *Id.* at 374.

279. *Id.* at 393.

280. *Id.*

281. *Id.* at 404.

282. *Id.* at 373, 409.

various forms of bias, reliance upon stereotypes, and actual prejudice. While experience-based knowledge may give rise to the recognition of a correlation between behaviors and crime, there are good reasons to subject those recognitions to testing.

In the three hundred years since Salem, how we process information has not changed radically, although what we know has increased exponentially. One way we learn is by recognizing correlations between seemingly unrelated occurrences—what we might commonly term insight.²⁸³ A talented contemporary, Kary Mullis, had a “eureka” moment (an insight) enabling him to see the previously unseen connections resulting in the discovery of the polymerase chain reaction (PCR), which revolutionized DNA replication.²⁸⁴ Other contemporaries have had less successful revelations, such as the “discovery” of cold fusion.²⁸⁵ Insights may provide the next great discovery; more likely, however, an insight may be just another wrong-headed idea. Insights into behaviors are what supports the theories of profiles and syndromes: observers derive a theory about why certain groups of people seem to act in meaningfully predictable ways. While these insights may be helpful in forming hypotheses, they are not the equivalent of reliable data and need to be tested to determine their validity.

The Supreme Court trilogy on expert evidence, *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,²⁸⁶ *General Electric Co. v. Joiner*,²⁸⁷ and *Kumho Tire Co. v. Carmichael*,²⁸⁸ collectively points to the importance of employing the scientific method in determining evidentiary reliability where such a method

283. Philosopher Bernard Lonergan provides one of the most comprehensive discussions of the concept of insight as it relates to learning. See generally BERNARD J. F. LONERGAN, S.J., *INSIGHT: A STUDY OF HUMAN UNDERSTANDING* (3d ed. 1970). For a brief and more approachable explanation of the concept of insight, see Mary Ann Glendon, *Why Cross Boundaries?*, 53 WASH. & LEE L. REV. 971, 974-77 (1996) (providing a concise statement of the meaning of insight and arguing in favor of the benefits of cross-disciplinary research).

284. See KARY MULLIS, *DANCING NAKED IN THE MIND FIELDS* 3-14 (1998) (describing the process of discovery and the PCR method of DNA testing).

285. See generally GARY TAUBES, *BAD SCIENCE: THE SHORT LIFE AND WEIRD TIMES OF COLD FUSION* (1993) (relating the story of the claims by scientists that had “discovered cold fusion” and how subsequent testing failed to replicate the claimed results).

286. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). In *Daubert*, the Supreme Court overruled the *Frye* standard governing admissibility of scientific evidence, which had required that the court find that a novel scientific theory be “generally accepted” within the relevant scientific community to be admissible. See *Frye v. United States*, 293 F. 1013, 1014 (D.C. Cir. 1923). The *Daubert* Court stated that to qualify as “scientific knowledge,” an inference or assertion must be derived by the scientific method.” *Daubert*, 509 U.S. at 590. The Supreme Court suggested four factors that might be helpful in making that determination: whether the theory or technique can be tested (“falsifiability”); whether the theory has been subjected to peer review and publication; what is the known rate of error; and whether there is general acceptance of the theory. *Id.* at 593-94.

287. *General Electric Co. v. Joiner*, 522 U.S. 136 (1997).

288. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999).

fits with the proposed testimony. There are multiple interpretations of the Supreme Court's trilogy on expert evidence, but one interpretation is that the Court's conclusion in *Kumho Tire* suggests that if possible, expert testimony should be tested by the scientific method.²⁸⁹ "[A] trial court *should* consider the specific factors identified in *Daubert* where they are reasonable measures of the reliability of expert testimony."²⁹⁰ Amended Federal Rule of Evidence 702, which became effective in December 2000, supports the argument that for expert evidence to be admissible, greater reliability is required at all stages of the analysis.²⁹¹ While a strict scientific method will not apply to all types

289. In *Kumho Tire*, Justice Breyer provides as an example of non-science the perfume sniffing expert, able to distinguish multiple scents solely with the use of his nose. *Id.* at 151. But psychology is not perfume sniffing; psychology rests on science; perfume sniffing seems more akin to an unusual talent. "Falsifiability" in the latter case is a simple question: blindfold the sniffer and see if he can do what he claims. Psychological falsifiability needs to follow a truer scientific model: hypothesis, controlled testing, publication and discussion of results, avoidance of false positives and negatives, and so on.

In addressing the "flimsiness of the whole dichotomy between 'technical' and 'scientific knowledge'" Professor Beecher-Monas aptly states that "[t]estimony of all kinds either has empirical support or it does not. The type of data may be different, as may be the means of gathering it, but the argument still must meet the requirements of intellectual honesty, which is the essence of the scientific method." Erica Beecher-Monas, *The Heuristics of Intellectual Due Process: A Primer for Triers of Science*, 75 N.Y.U.L. REV. 1563, 1573 n.32 (2000). What constitutes science and the scientific method would overwhelm this Article, but suffice it to say, science must be more than conclusions of causation based upon observations of behaviors; which by no standard satisfies the "requirements of intellectual honesty." *Accord* Faigman, *supra* note 25, at 70-76 (decrying the use of syndrome evidence that is pseudoscience with a noble, if misguided purpose).

For helpful and contemporary discussion of the various approaches to scientific method, see David Goodstein, *How Science Works* 69-75, in REFERENCE MANUAL ON SCIENTIFIC EVIDENCE (2d ed. 2000)), and Beecher-Monas, *supra* note 289.

290. *Kumho Tire*, 526 U.S. at 152 (emphasis added). While it is true that the *Kumho* Court tempered the quoted statement with the recognition that the trial judge has "broad latitude" to determine whether *Daubert*'s specific factors are reasonable measures of reliability, it is to be hoped that trial and appellate courts will not use this discretionary standard to avoid the question of reliability in syndrome cases. *Id.* at 153. Some courts seem to be hearing the call. *See, e.g.,* *United States v. Velarde*, 214 F.3d 1204 (10th Cir. 2000) (reversing and remanding conviction where the district court failed to determine the reliability of child abuse expert testimony pursuant to *Kumho Tire*); *United States v. Charley*, 189 F.3d 1251 (10th Cir. 1999), *cert. denied*, 528 U.S. 1098 (2000) (same holding with respect to the evidence, but finding such error harmless). *But see* *State v. Kinney*, 171 Vt. 239, 250 n.2, 762 A.2d 833, 842 n.2 (2000) (citing *Daubert* factors as "illustrative" but choosing not to employ the factors to analyze Rape Trauma Syndrome evidence, since the trial court "could find the evidence admissible because its reliability equals that of other technical evidence [that trial courts have discretion to admit]"). Of course, both *Daubert* and the Federal Rules of Evidence govern the admission of testimony at trial, and do not speak to determinations of reasonable suspicion or probable cause. However, since some courts admit profile evidence at trial, such evidence would then be subject to Federal Rule of Evidence 702.

291. Amended Federal Rule of Evidence 702 (effective December 1, 2000) provides as follows:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and

of expert evidence, Professor Sanders' call for use of more rational processing seems entirely warranted where the experts allege a meaningful relation between behaviors and crime.

Is there a difference between evidentiary methodology in the Salem Witchcraft Trials and contemporary prosecutions? Is science really the difference?²⁹² Increase and Cotton Mather, in addition to being men of God, thought of themselves as men of science. But what is currently perceived as science differs from what constituted science in 1692. Hypotheses, controlled studies, tests, retests and determinations of error rates combine to yield a more well-grounded outcome than conclusions based solely on observation and experience.²⁹³ Where the scientific method does not fit, *Daubert*, *Kumho*, and amended Federal Rule of Evidence 702 contemplate that objective data should be presented to the court to establish reliability—in line with Professor Sanders' suggestion of the importance of requiring "rational processing."²⁹⁴

It is a legitimate criticism of this Article that the comparison to the Salem evidence is inexact, since few syndromes or profiles are admitted as substantive evidence in the prosecution's case-in-chief to prove the elements of the crime.²⁹⁵ Occasionally, drug courier profile evidence is admitted to rebut a defendant's claim that he was an innocent dupe, but it is more typically

(3) the witness has applied the principles and methods reliably to the facts of the case.

FED. R. EVID. 702.

292. Professor Fox notes that in the Salem cases, "the law was keeping very much in step with the scientific thought of the day." FOX, *supra* note 3, at 110.

293. In *Daubert*, the Supreme Court chose Sir Karl Popper's falsifiability test as the favored scientific method. The Court explained that "a key question . . . [is] whether a theory or technique . . . can be (and has been) tested." *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 593 (1993) (quoting, *inter alia*, KARL R. POPPER, CONJECTURES AND REFUTATIONS: THE GROWTH OF SCIENTIFIC KNOWLEDGE 37 (5th ed. 1989), for the proposition that "the criterion of the scientific status of a theory is its falsifiability, or refutability, or testability"). Professor Beecher-Monas explains that Popper's theory of falsifiability comprises three concepts: "testability, openness to critique, and rationality." Beecher-Monas, *supra* note 289, at 1584.

Defining science and scientific method is, of course, a proposition far beyond the scope of this Article and one that has yielded numerous answers, ranging from the commonly-quoted Popperian falsifiability test to the equally common reference to Thomas Kuhn's "revolutionary" view of scientific discovery. See THOMAS S. KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS, 7 (2nd ed., enlarged 1962, 1970) ("[A] new theory . . . is seldom or never just an increment to what is already known. Its assimilation requires the reconstruction of prior theory and the re-evaluation of prior fact, an intrinsically revolutionary process . . ."). For further insight into the nature of this problem, see Goodstein, *supra* note 289, at 67. See generally THE STRUCTURE OF SCIENTIFIC THEORIES (Frederick Suppe ed., 2d ed. 1973) (discussing scientific method and theory); Sanders, *supra* note 277 (discussing the competing views of science).

294. Sanders, *supra* note 277, at 374.

295. See, e.g., *Frenzel v. State*, 849 P.2d 741, 749 (Wyo. 1993) (holding evidence of Child Sexual Abuse Accommodation Syndrome (CSAAS) was inadmissible to prove the abuse actually occurred). But see *Crawford v. State*, 754 So. 2d 1211, 1216 (Miss. 2000) (permitting physician to testify about "common behaviors of sexually abused children" as substantive evidence of the crime, since the doctor avoided the use of the term "syndrome").

relied upon by law enforcement in the determination of probable cause. Most syndrome evidence is admitted simply to educate the jury about unusual behaviors or to rehabilitate credibility once it has been attacked.²⁹⁶ But this "social framework" testimony,²⁹⁷ as it is sometimes called, still begets the unanswered question: Is the behavior in question actually related to the crime? Although drug courier profile use may be limited to permitting officers to engage in a search of a person or his property, still unanswered is whether the profile is meaningfully predictive of criminal behavior. For purposes of developing the connection between the Salem cases and modern trial evidence, this Article next addresses the drug courier profile and syndrome evidence admitted in child sexual abuse cases and in rape cases.

A. Drug Courier Profile

The "drug courier profile" is an abstract of characteristics found to be typical of persons transporting illegal drugs.²⁹⁸ While there is no specified and comprehensive list of characteristics or behaviors that constitute such a profile, the United States Supreme Court has listed the following behaviors in discussing a drug courier profile for traffickers in airports:

1. Traveling to or from a "source city," where narcotics are often distributed;

296. See, e.g., *State v. Edelman*, 593 N.W.2d 419, 423 (S.D. 1999) (testimony educating the jury about CSAAS and why the behaviors occur not error); *State v. Loose*, 994 P.2d 1237, 1239 (Utah 2000) (holding admissible testimony that a particular child's behavior is "consistent with" symptoms commonly exhibited by sexually abused children). Accord Robert P. Mosteller, *Syndromes and Politics in Criminal Trials and Evidence Law*, 46 DUKE L. J. 461, 463-64 (1996) (explaining the various uses of syndrome-type testimony and the importance of syndrome-type evidence to defeat erroneous stereotypic beliefs on the part of the jury). But see Mary Ann Mason, *The Child Sexual Abuse Syndrome: The Other Major Issue in State of New Jersey v. Margaret Kelly Michaels*, 1 PSYCHOL. PUB. POL'Y & L. 399, 406-07 (1995) (discussing the problems with admitting expert rebuttal evidence in child sexual abuse prosecutions and concluding "the rebuttal exception may become the password by which a wide range of expert unreliable testimony is permitted into the courtroom"). In rape cases, the syndrome evidence is sometimes introduced to rebut the defense of consent. See, e.g., *State v. Huey*, 699 P.2d 1290, 1295 (Ariz. 1985) (stating that where the question is one of consent, testimony concerning rape trauma syndrome would be admissible); *State v. Marks*, 647 P.2d 1292, 1299 (Kan. 1982) (holding that "qualified expert psychiatric testimony regarding the existence of rape trauma syndrome is relevant and admissible in a case . . . where the defense is consent"); *State v. Liddell*, 685 P.2d 918, 923 (Mont. 1984) (holding that testimony regarding rape trauma syndrome is "admissible to aid a jury in determining whether there was consent to engage in a sexual act which all parties agree occurred").

297. "Social framework" testimony is a coinage of Laurens Walker and John Monahan, who describe it as the introduction of "general research results . . . used to construct a frame of reference or background context for deciding factual issues crucial to the resolution of a specific case." Laurens Walker & John Monahan, *Social Frameworks: A New Use of Social Science in Law*, 73 VA. L. REV. 559, 559 (1987).

298. *Florida v. Royer*, 460 U.S. 491, 494 (1983).

2. Paying for an airline ticket in cash;
3. Carrying no luggage other than carry-ons;
4. Staying for a very short visit after a very long flight;
5. Using an alias;
6. Nervousness;
7. Using public transportation, particularly taxicabs; and
8. Carrying a lot of cash.²⁹⁹

However, these factors are not the only ones relied upon, nor indeed are they useful for eliminating potential subjects to stop. Justice Marshall remarked on the profile's "chameleon-like way of adapting to any particular set of observations" in his dissent in *United States v. Sokolow*.³⁰⁰ Not only does the profile change to fit the suspect, contradictory behaviors are often relied upon for the same purpose, including deplaning first, last or in the middle, one way tickets or round trip tickets, nonstop flights and non-direct flights, traveling alone or traveling with a companion, acting nervously and acting too calmly.³⁰¹ Judge Charles Becton notes that rather than using the profile as a guideline, the agents may "selectively modify the profile during the initial stop and thereafter customize it to fit any hapless traveler who had the misfortune to catch the agent's 'trained eye.'"³⁰²

299. See *United States v. Sokolow*, 490 U.S. 1, 8 (1989) (upholding officers' reliance upon the first four behaviors as providing reasonable suspicion to stop pursuant to *Terry v. Ohio*, 392 U.S. 1 (1968)). See also David Cole, *Discretion and Discrimination Reconsidered: A Response to the New Criminal Justice Scholarship*, 87 GEO. L.J. 1059, 1077-78 (1999) (listing profile factors that Drug Enforcement Agency officers have testified about in court).

300. *Sokolow*, 490 U.S. at 13 (1989) (Marshall, J. dissenting) (quoting the Court of Appeals in *United States v. Sokolow*, 831 F.2d 1413, 1418 (9th Cir. 1987)).

301. *Id.* at 13-14.

302. Charles Becton, *The Drug Courier Profile, 'All Seems Infected That Th' Infected Spy'*, 65 N.C.L.REV. 417, 438 (1987) (citing, inter alia, Barbara D. Underwood, *Law and the Crystal Ball: Predicting Behavior with Statistical Inference and Individualized Judgment*, 88 YALE L.J. 1408 (1979)). Judge Becton lists a number of behaviors that caused law enforcement officers to stop suspects traveling in airports:

(1) Arriving from Los Angeles, the white male had an "unusual limp" and "a very obvious, large bulge on the right inside calf."

(2) The nervous Hispanic had no luggage and continued to look over his shoulder as he walked in an unusual pattern in the terminal, having completed his cross-continental flight from California.

(3) After disembarking and then staring at two plain-clothed federal DEA agents, this female, who had purchased a one-way ticket from Los Angeles to the Dallas-Fort Worth airport with cash, rushed to the ladies' room with her new luggage.

(4) "[Pulvano] was dressed in blue jeans and a wrinkled long-sleeve shirt with his shirt tail hanging out. It was this attire that first brought [Pulvano] to the attention of [the drug agents]. Particularly, Agent Mathewson thought appellant's appearance was 'disheveled' and not in conformance with that of the other passengers on the flight, most of whom appeared to be businessmen."

Drug courier profiles on the highways are equally vague and inconsistent. One commentator lists the following characteristics derived from various cases:

[A]ppearing to be a foreigner; driving a one-way rental car; paying for the rental car with cash or with someone else's credit card; traveling across country; carrying a small amount of luggage; appearing to be nervous and in a hurry when stopped by police; driving below the speed limit; driving above the speed limit; looking at the police vehicle; not looking at the police vehicle; traveling on a route known to be used by drug couriers; driving a late-model car or large luxury car; traveling late at night or early in the morning; appearing to be a husband and wife team of Spanish descent; driving a car while wearing jeans with a tie, being nervous, not making eye contact, coming from a "source" city and placing the car's registration on the passenger seat; driving a dirty car; and driving a clean car.³⁰³

Certain concerns with the drug courier profile are relevant to the problems inherent in the Salem trials. First, the profile is overly broad and divines criminal activity from numerous non-criminal behaviors, thus imposing on the rights of innocent people.³⁰⁴ Thomas Brattle noted a similar flaw of over-inclusiveness in his complaint about the Salem trials' reliance on witches'

(5) "Royer was first observed by [DEA agents] as he walked across the concourse of the [airport] towards the National Airlines ticket counter, carrying two apparently heavy-laden suitcases. . . . [T]hose aspects of Royer's behavior which attracted the attention of the officers . . . were the facts that (a) Royer was carrying American Tourister baggage of a type which 'seemed to be standard brand for marijuana smuggling'"

(6) DEA agent Paul Markonni took just four minutes to select his suspect. "Williams was carrying a small tote bag which did not appear to be full" when he stepped off the flight from Miami at the Atlanta International Airport. "Williams walked away from the gate at a rapid pace and glanced twice back at the departing gate." He claimed no luggage, and, after exiting on the upper level, he glanced around quickly and walked toward the short-term parking lot.

(7) As the last passenger to disembark from a commercial airline flight originating in Los Angeles, a source city, . . . the casually dressed black male nervously checked his watch, walked quickly through the concourse, and tried to leave the airport in a taxi.

Id. at 420-21.

303. Diana Patton, *Highway Drug Courier Profiles in Y2K: Another Nail in the Coffin of the Fourth Amendment?*, 38 ARIZ. ATT'Y 34, 35 (2001) (citations omitted).

304. Professor Paul Finkelman notes that "[i]n the war on drugs careful and individualized evaluations seem to have been all but abandoned. . . . Police now stop anyone who fits a profile, regardless of whether he or she has done anything illegal or even suspicious, in the ordinary sense of the term." Paul Finkelman, *The Second Casualty of War: Civil Liberties and the War on Drugs*, 66 S.CAL. L. REV. 1389, 1421 (1993).

marks, where he noted that many people have "preternatural excrecence,"³⁰⁵ and questioned what person it was who did not have such a mark.³⁰⁶

Second, contradictory behaviors are considered probative of criminal activity: for example, deplaning first, last, or in the middle.³⁰⁷ In the Salem witchcraft trials, while the inability to say the Lord's Prayer without error was evidence of guilt, the ability to recite it flawlessly did not absolve George Burroughs, who was hanged for witchcraft.³⁰⁸

The profile's overly broad and chameleon-like qualities combine to legitimize an officer's hunch that certain individuals look like criminals—without requiring any proof that such people actually *are* criminals.³⁰⁹ The primary problem in determining how often the profile can distinguish the guilty from the innocent is the lack of meaningful data about behaviors actually related to drug trafficking. As one article notes, "[t]he self-contradictory nature of the profile 'factors' defeats any claim that they were empirically based."³¹⁰ Although there does seem to be more data currently being collected, to date it does not appear to support either the efficacy or even the accuracy of these profiles.³¹¹

Third, the now-documented use of race (even if not articulated as part of the profile) as a factor in determining whom to stop is a major flaw with profiles.³¹² It is pernicious both that race is relied upon and that courts have

305. This phrase likely referred to skin tags, moles or warts.

306. Brattle, *supra* note 118, at 175.

307. *United States v. Sokolow*, 490 U.S. 1, 13-14 (1989) (Marshall, J. dissenting).

308. See ROSENTHAL, *supra* note 6, at 146.

309. Professor Anthony Thompson discusses eloquently the social science research that explains how law enforcement officers may use categorizations based upon their underlying beliefs about race, gender and ethnicity to make decisions about individuals—independent of the actual validity of the belief or the officers' conscious awareness of such beliefs. See Anthony Thompson, *Stopping the Usual Suspects: Race and the Fourth Amendment*, 74 N.Y.U. L. REV. 956, 983-90 (1999).

310. Jerome H. Skolnick & Abigail Caplovitz, *Guns, Drugs, and Profiling: Ways to Target Guns and Minimize Racial Profiling*, 43 ARIZ. L. REV. 413, 424 (2001).

311. David Rudovsky discusses the lack of empirical support for the drug courier profile in *Law Enforcement By Stereotypes and Serendipity: Racial Profiling and Stops and Searches Without Cause*, 3 U. PA. J. CONST. L. 296, 311 n.89 (2001), where he notes that in the 52,000 "body searches" conducted by customs officials in 1998, ninety-six percent yielded no contraband and over half of all searches were of African Americans or Latinos. In the Buffalo airport, the police were correct in their profile premised stops only ten times out of the 600 encounters. *United States v. Hooper*, 935 F.2d 484, 500 (2d Cir. 1991) (Pratt, J. Dissenting). See also *United States v. Montilla*, 733 F. Supp. 579, 580 (W.D.N.Y. 1990), *rev'd on other grounds*, 928 F.2d 583 (2d Cir. 1991) (stating that a monthly stop of eighty bus passengers by the DEA in New York yielded only three to four arrests).

312. *Id.* Rudovsky collected numerous studies establishing the use of racial profiling in customs searches and in a variety of American cities and states. In Philadelphia, he notes that one study indicated that the ratio of car and pedestrian stops of African Americans made in predominantly white police districts was up to ten times higher than one would expect from population data. *Id.* at 301. Another study established disproportionate racial stopping of pedestrians in New York, while another study in Illinois established the disproportionate stopping and searching of Hispanic motorists in Illinois. *Id.* at 300-02.

not addressed the fact that race is not meaningfully correlated with drug crimes.³¹³ If this is true in the twenty-first century, is it any surprise that a West Indian slave was the first accused of witchcraft in Salem?³¹⁴

B. Child Sexual Abuse Syndrome Evidence

A most obvious parallel between the evidence in the Salem case and in modern trials is the use of syndrome evidence in child sexual abuse prosecutions.³¹⁵ Child sexual abuse is notoriously difficult to prove and there are abundant reasons to incarcerate the wrongdoer and protect the child. This sympathetic motivation has frequently led to relaxing the rules of evidence in these cases. As more than one court has remarked, "[w]e have already recognized the necessity of a liberal interpretation of the rules in cases involving child molesting."³¹⁶

There are generally three categories of syndromes: the sexual abuse behavioral syndrome; the sexual abuse accommodation syndrome; and the use of Post-Traumatic Stress Syndrome (generally referred to as "Post-Traumatic Stress Disorder" or "PTSD").³¹⁷ The first of these is a loose description of a constellation of possible behaviors associated with sexual abuse. They may include bedwetting, nightmares, excessive masturbation, sexualized play, low self-esteem, fear, clinginess, and drawing figures with exaggerated or missing limbs.³¹⁸ What makes these behaviors relevant evidence is the cause and

313. See, e.g., Rudovsky, *supra* note 311, at 302 (remarking that in the Philadelphia study, stops of African-Americans were less likely to result in arrests than stops of whites). Rudovsky also provides data that whites are more likely to use drugs, and DEA officials have admitted that whites constitute the majority of drug traffickers. *Id.* at 309. So too, Human Rights watch has reported that blacks constituted sixteen percent of admitted drug sellers and whites constituted eighty-two percent. *Id.* For further discussion on the issue of racial profiling, see publications collected in Thompson, *supra* note 309, at 956 n.1.

314. FAIGMAN, *supra* note 25, at 33-34; HOFFER, *supra* note 8, at 54-55; WITCHCRAFT PAPERS, *supra* note 5, at 9. Professor Tracey Maclin discusses the historical use of racial profiling dating from 1693 in *Race and the Fourth Amendment*, 51 VAND. L. REV. 333, 334-36 (1998).

315. Other scholars compare the Salem witchcraft trials to the repressed memory cases in which adults claim to recover memories of childhood sexual abuse. See, e.g., FAIGMAN, *supra* note 25, at 37. However, while Professor Faigman's position is fully supportable, few repressed memory cases result in criminal prosecution and therefore that type of evidence does not fit within the construct of this Article.

316. See *State v. Moran*, 728 P.2d 248, 250 n.2 (Ariz. 1986) (quoting *State v. Rivera*, 678 P.2d 1373, 1377 n.1 (Ariz. 1984)). The *Moran* court went on to note that "liberal interpretation is one thing and complete abrogation . . . is another." *Id.*

317. For a more complete discussion of these categories, see MORIARTY, *supra* note 24, §§ 8:9-8:25. PTSD is explained in § 5:40.

318. See, e.g., *State v. Silvey*, 894 S.W. 2d 662, 671 (Mo. 1995) (en banc) (holding it is proper for a social worker to testify about "behaviors and other characteristics commonly observed in sexually abused victims"). In that case, the mother of the child also testified about the child's "bed-wetting, loss of appetite, hyperactivity, nightmares, wetting and soiling her pants, and chewing her fingers until they were raw." *Id.* at 665; see also MORIARTY, *supra* note 24, § 8:22 (collecting cases addressing behavioral profile evidence).

effect relationship implicit between the abuse (the cause) and the behaviors (the effect). Without this implicit relationship, these behaviors are no more meaningful than the fact that children routinely prefer peanut butter to sardine sandwiches.

Many behavioral scientists researching abuse have trouble finding a concrete list of behaviors associated with sexual abuse. One meta-analysis stated:

The range of symptoms, the lack of a single predominant symptom pattern, and the absence of symptoms in so many victims clearly suggest that diagnosis is complex. Because the effects of abuse can manifest themselves in too many ways, symptoms cannot be easily used, without other evidence, to confirm the presence of sexual abuse. Yet the absence of symptoms certainly cannot be used to rule out sexual abuse. There are too many sexually abused children who are apparently asymptomatic.³¹⁹

The Child Sexual Abuse Accommodation Syndrome (CSAAS), by contrast, seeks to explain how children adjust to, or accommodate, the abuse. According to Roland C. Summit, the psychiatrist who introduced the theory, CSAAS consists of some or all of five elements: (1) secrecy; (2) helplessness; (3) entrapment and accommodation; and (4) delayed or (5) conflicted disclosure and retraction.³²⁰ Summit's framework was intended to provide a common language for those working with abused children and was not meant as a diagnostic tool.³²¹ "The syndrome does not detect sexual abuse. Rather, it assumes the presence of abuse, and explains the child's reaction to it."³²² Nevertheless, CSAAS has been introduced as substantive evidence of sexual abuse³²³ and to educate the jury about children's common reactions to abuse.³²⁴

Despite the prevalent admission of CSAAS into evidence, Professor Mary Ann Mason notes that "there is no consensus in the behavioral science

319. K. Kendall-Tackett, et al., *Impact of Sexual Abuse on Children: A Review and Synthesis of Recent Empirical Studies*, 13 PSYCHOL. BULL. 164, 175 (1993).

320. Roland C. Summit, M.D., *The Child Abuse Accommodation Syndrome*, 7 CHILD ABUSE & NEGLECT 177, 177 (1983).

321. *Id.* at 191.

322. John E.B. Myers, *Expert Testimony in Child Sexual Abuse Litigation*, 68 NEB. L. REV. 1, 67 (1989).

323. See, e.g., *Crawford v. State*, 754 So. 2d 1211, 1216 (Miss. 2000) (permitting physician to testify about "common behaviors of sexually abused children," as substantive evidence of the crime, since the doctor explicitly rejected the use of the term "syndrome").

324. See, e.g., *State v. Edelman*, 593 N.W.2d 419, 423 (S.D. 1999) (testimony educating the jury about CSAAS and why the behaviors occur not error).

community that delay, recantation, or inconsistency are indicators of sexual abuse. Many children are quite straightforward about the incident of abuse.³²⁵

A conjoined problem is that many courts fail to require qualified experts in this area and, instead, find expertise without academic credentials or research awareness. Many courts permit testimony by experts whose knowledge is based primarily on their experience observing children believed to be abused.³²⁶ In one particularly extreme example of syndrome testimony based upon observation/experience alone, the Virginia Court of Appeals in *Lane v. Commonwealth* upheld the conviction of a defendant accused of raping his stepdaughter where a detective testified about recantation phenomenon (part of CSAAS).³²⁷ He testified based solely on his six years' experience as a detective, with training in the area of alleged sexual abuse, and ten hours specialized training on the issue of recantation.³²⁸ The court never addressed whether recantation is reliably associated with sexual abuse or whether this witness would have any possible way of knowing if it was reliably associated.

In many state and federal courts, clinicians routinely testify that child sexual abuse victims suffer from Post-traumatic Stress Disorder (PTSD), a condition that often follows from trauma.³²⁹ For example, in *State v.*

325. Mason, *supra* note 296, at 408. In another article analyzing the admissibility of CSAAS, Mason noted that "some courts do not seem troubled by this lack of acceptance in the relevant scientific community." Mary Ann Mason, *Expert Testimony Regarding Characteristics of Sexually Abused Children: A Controversy on Both Sides of the Bench*, in *EXPERT WITNESSES IN CHILD ABUSE CASES* 217, 226 (Stephen J. Ceci, et al. eds., 1998).

326. See, e.g., *State v. Griffin*, 564 N.W.2d 370, 374 (Iowa 1997) (permitting a social worker to testify about BWS primarily on the strength of her credentials and expertise); *State v. Watson*, 599 A.2d 385, 386-87 (Conn. App. Ct. 1991) (holding one year's experience counseling battered women after college sufficient to qualify witness as an expert on delay in reporting rape); *State v. Hicks*, 148 Vt. 459, 461-62, 535 A.2d 776, 777 (1987) (holding witness with master's degree in social work with five-years experience as a caseworker with sexually abused children qualified to testify that it is common for victims to delay reporting); see also *MORIARTY*, *supra* note 24, § 2:6.

327. *Lane v. Commonwealth*, No. 2161-98-2, 1999 WL 1133576, at *1 (Va. Ct. App. Sept. 28, 1999).

328. *Id.* at *1. Other courts have also approved of police officers as expert witnesses about mental processes in rape and abuse cases. See, e.g., *People v. Turner*, 608 N.E.2d 906, 912-13 (Ill. App. Ct. 1993) (permitting police officer with two years' experience working with sexually abused children to testify "it was normal" for abused children to initially deny the abuse); *State v. Peeler*, 614 P.2d 335, 338 (Ariz. Ct. App. 1980) (permitting police officer to testify about a sexual assault victim's mental condition and general competence after an assault); *People v. Gallegos*, 644 P.2d 920, 927-28 (Colo. 1982) (permitting police officer to testify that victim's "nervous giggle" during her testimony was an emotional reaction to the stress of testifying and not indicative that she was taking the situation as a joke).

329. See, e.g., *State v. Alberico*, 861 P.2d 192, 209 (N.M. 1993) (collecting cases on the issue of the admissibility of PTSD and upholding the admission of evidence concerning PTSD in sexual abuse prosecutions); *State v. Nemeth*, 694 N.E.2d 1332, 1339 n.2 (Ohio 1998) (remarking that "[m]any other medical sources recognize that PTSD can manifest in children as a result of child abuse"); *State v. Catsam*,

Alberico,³³⁰ the Supreme Court of New Mexico approved the admissibility of evidence concerning PTSD and stated "if a complainant suffers from PTSD symptoms, it indicates that she might have been sexually abused."³³¹ The court also concluded that "PTSD testimony is also probative of sexual abuse in that it tends to prove what it purports to prove."³³² The claim that PTSD is truly probative of sexual abuse may not be currently supportable.³³³

PTSD, recognized by the American Psychological Association in the DIAGNOSTIC AND STATISTICAL MANUAL IV (DSM-IV),³³⁴ is a set of "characteristic symptoms following exposure to an extreme traumatic stressor

148 Vt. 366, 369-70, 534 A.2d 184, 187 (1987) (holding PTSD evidence admissible to assist the jury to understand the behavior of the victim); *Chapman v. State*, 18 P.3d 1164, 1171 (Wyo. 2001) (stating that PTSD "has achieved acceptance in the fields of psychiatry and psychology" and holding it should be admissible evidence to explain a child victim's behavior following abuse).

The Florida Supreme Court, in deciding to allow the discovery doctrine to extend the statute of limitations in recovered memory of sexual abuse cases cited literature claiming that "[m]any victims of incest abuse exhibit signs of Post-Traumatic Stress Disorder ("PTSD"), a condition characterized by avoidance and denial that is associated with survivors of acute traumatic events such as prisoners of war and concentration camp victims. Like others suffering from PTSD, incest victims frequently experience flashbacks and nightmares well into their adulthood." *Hearndon v. Graham*, 767 So. 2d 1179, 1182 (Fla. 2000) (citing Jocelyn B. Lamm, Note, *Easing Access to the Courts for Incest Victims: Toward an Equitable Application of the Delayed Discovery Rule*, 100 YALE L.J. 2189, 2194 (1991)). The court did note, however, there was disagreement with the theory of repressed memory.

Although the Florida courts do not allow testimony about "child abuse victim profile" (behaviors of sexually abused children) to be admitted in a child sexual abuse prosecution to prove the abuse, see *Hadden v. State*, 690 So. 2d 573, 575 (Fla. 1997), the court of appeals allowed evidence that PTSD can be caused by such abuse. See *Gould v. State*, 745 So. 2d 354, 357 (Fla. Dist. Ct. App. 1999).

330. *State v. Alberico*, 861 P.2d 192 (N.M. 1993).

331. *Id.* at 209.

332. *Id.* at 213.

333. See, e.g., Kendall-Tackett, et al., *supra* note 319, at 174 (discussing the relationship between sexual abuse and PTSD and noting that although many abused children may suffer symptoms explainable by the PTSD model, "the theory and the empirical findings do not support PTSD symptomatology as universal to sexual abuse or as the most characteristic pattern").

334. DSM-IV, at 424-27 (1994). In one article, the authors also note that inclusion in the DSM-IV does not prove general acceptance of the disorder, stating: "The DSM-IV is simply an agreed upon set of terms and descriptions—a catalog. It does not provide, and was not intended to provide, documentation of the general acceptance of the existence [or etiology] of disorders." William M. Grove & R. Christopher Barden, *Protecting the Integrity of the Legal System: The Admissibility of Testimony from Mental Health Experts under Daubert/Kumho Analyses*, 5 PSYCHOL. PUB. POL'Y & L. 224, 230 (1999). These authors analyze PTSD in the manner suggested by *Daubert* and *Kumho* and conclude that it should not survive such scrutiny. *Id.* at 232.

Other researchers have remarked favorably on PTSD as a "well-developed, generalized theory of traumatic processes." Kendall-Tackett et al., *supra*, note 319, at 173; Edgar Garcia-Rill & Erica Beecher-Monas, *Gatekeeping Stress: The Science and Admissibility of Post-Traumatic Stress Disorder*, 24 U. ARK. LITTLE ROCK L. REV. 9, 39 (2001). See also Thomas D. Lyon & Jonathon J. Koehler, *Where Researchers Fear to Tread: Interpretive Differences Among Testifying Experts in Child Sexual Abuse Cases*, in EXPERT WITNESSES IN CHILD ABUSE CASES, *supra* note 325, at 257-58 (arguing in favor of the admissibility of PTSD as it relates to child sexual abuse).

involving direct experience of an event that involves actual or threatened death or serious injury," or learning about or witnessing such an event.³³⁵

There is a great deal of agreement about the validity of PTSD's association with trauma,³³⁶ but there are concerns about its forensic use as proof of a specific type of trauma. One article discussing the validity of evidence relating PTSD symptoms to child sexual abuse found the relationship to be weak.³³⁷ The authors state that the "absence of a consistent pattern of PTSD disorders in sexually abused children underscores the ethical and forensic problems associated with using it as a diagnostic category to substantiate that the child has been sexually abused."³³⁸ Moreover, PTSD symptomology is not abuse-specific. It has been associated with various types of trauma, such as rape, violence, natural disasters, and war experiences.³³⁹

There are also concerns that certain individuals may be more predisposed to develop PTSD following trauma.³⁴⁰ While there are legitimate reasons for clinicians to use CSAAS and PTSD constructs for therapeutic purposes, the courts' willingness to permit such behaviorally-based evidence as proof of crime is dangerous. As in the Salem witchcraft trials, if the factfinder is permitted to correlate victim behaviors with a type of criminal activity without any rigorous proof of the underlying validity of the relationship, there is a danger of erroneous conviction. One article notes that although acceptance of the label does not necessarily imply acceptance of the causal theory, "PTSD positively invites misunderstanding on this score; its diagnostic requirement of a trauma event invites experts to commit the *post hoc ergo proper hoc* fallacy, assuming that the trauma caused the PTSD."³⁴¹ This same fallacy plagued the Salem witchcraft trials, where it was assumed that misfortune really did follow from witches' curses.

335. DSM-IV, at 424. These characteristics include re-experiencing the trauma through recollections, dreams, or flashbacks; persistent avoidance of stimuli associated with the trauma, and persistent symptoms of increased arousal, including hypervigilance or an exaggerated startle response. *Id.* at 428.

336. See, e.g. Garcia-Rill & Beecher-Monas, *supra* note 334, at 30 (discussing widespread agreement about PTSD as "textbook science" for more than twenty years).

337. See Celia B. Fisher & Katherine Whiting, *How Valid Are Child Sexual Abuse Validations?*, in *EXPERT WITNESSES IN CHILD ABUSE CASES*, *supra* note 325, at 165-66 (discussing studies that did not establish that sexually abused children met the PTSD criteria).

338. *Id.* at 166. The authors temper this statement with the recognition, however, that PTSD is valid to "assess the impact and therapeutic implications of known sexual abuse." *Id.*

339. DSM-IV, at 424.

340. See Regina Schuller & Diane H. Crocker, *The Scientific Status of Research on the Sexual and Physical Abuse of Children*, § 9-2.1.1 in *MODERN SCIENTIFIC EVIDENCE: THE LAW AND SCIENCE OF EXPERT TESTIMONY* (David Faigman, et al. eds., 1997 & Supp. 2000) (noting that age and gender, among other variables, are significantly associated with PTSD).

341. Grove & Barden, *supra* note 334, at 232.

While continuing research more accurately develops the relationship between PTSD and specific types of traumas, courts should be more rigorous in analyzing the evidence prior to its admission, a process often not complied with to date.

C. Rape Trauma Syndrome Evidence

Rape Trauma Syndrome (RTS) originated in a study conducted in a Boston City Hospital in the early 1970's. It was an observationally-based self-reporting study of ninety-two women who claimed to be the victims of forcible rape.³⁴² The authors of this study described a two-phase recovery process of the victims to integrate the event and recover. In the first phase, the "acute" phase, women experienced a great deal of disorganization, a prevalent feeling of fear, and in roughly equal numbers, reacted with either emotional volatility or with subdued emotions.³⁴³ The acute phase reactions also included physical trauma and physical reactions, including skeletal muscle tension, elevated startle reactions, and gastrointestinal and genitourinary disturbances.³⁴⁴ Emotional disturbances were also common, with displays of anger, fear, humiliation, embarrassment, and revenge.³⁴⁵ In the long-term phase of recovery, the study's authors found that all the victims experienced disorganization in their lives along with three primary indicators: increased motor activity, such as moving, traveling and contacting support systems; nightmares; and development of phobias.³⁴⁶

Although RTS testimony has been admissible in many jurisdictions for quite a while, it is generally not admissible as substantive evidence of rape, but rather for the purpose of determining whether the sexual contact was consensual.³⁴⁷ Some courts also admit RTS testimony to help explain how women react to rape and their possibly odd or unusual behaviors.³⁴⁸

342. See Ann Wolbert Burgess & Linda Lytle Holstrom, *Rape Trauma Syndrome*, 131 AM. J. PSYCHIATRY 981 (1974).

343. *Id.* at 982

344. *Id.*

345. *Id.* at 982-83.

346. *Id.* at 983-84.

347. See, e.g., *State v. Marks*, 647 P.2d 1292, 1299 (Kan. 1992) ("[Q]ualified expert psychiatric testimony regarding the existence of rape trauma syndrome is relevant and admissible in a case such as this where the defense is consent."). See also MORIARTY, *supra* note 24, § 9:9.

348. See, e.g., *People v. Hampton*, 746 P.2d 947, 952 (Colo. 1987) (holding RTS admissible to explain (1) why rape victims may delay reporting the crime; (2) the various stages of emotional adjustment that the victim goes through following a rape; and (3) the frequency of delay in reporting the crime when the victim knows her attacker); *State v. Kinney*, 171 Vt. 239, 250, 762 A.2d 833, 842 (2000) (holding RTS and "associated typical behavior of adult rape victims is admissible to assist the jury in evaluating the evidence, and frequently to respond to defense claims that the victim's behavior after the alleged rape was inconsistent with the claim that the rape occurred").

In the last thirty years, there have been many studies conducted following up Burgess & Holstrom's initial work. According to current literature, the general stages of the RTS are not supportable,³⁴⁹ although the subsequent studies confirm the finding that "rape survivors experience more depression, anxiety, fear, and social and sexual problems than do other women."³⁵⁰ Yet, the wide-ranging testimony admitted under the rubric of RTS neither matches the RTS stages nor the recognition that rape survivors are more depressed or anxious than others. Rather, the testimony includes delays in reporting, reporting inconsistently about the rape, and recanting the claim of rape.³⁵¹

The difficulty of prosecuting rape cases is well-established, and far too few victims seek to prosecute these cases because of the re-experience of trauma engendered by the trial. But in the desire to assist the victims of these crimes, courts have often disregarded the need to rigorously examine the connection between victims' alleged traumatically-induced behaviors and the crime. In Salem, some victims suffered and died terrible deaths that were attributed to witchcraft. Yet while the deaths were real, the connection to witchcraft was not. So too here, while the allegation of rape may well be accurate, the victim's exhibition of various behaviors are not necessarily meaningfully related to rape. As some current researchers have noted, many of the original stages of RTS are simply not supportable.³⁵²

It may be that the use of PTSD will provide a more accurate explanation of what victim behaviors follow rape,³⁵³ but to date, courts have permitted wide-ranging expert testimony about RTS without requiring a solid empirical basis.

CONCLUSION

T.S. Eliot, a descendant of one of the trial judges at Salem, wrote in the mid-twentieth century:

There is, it seems to us
At best, only a limited value

349. See Patricia A. Frazier & Eugene Borgida, *Rape Trauma Syndrome: The Scientific Status of Research on Rape Trauma Syndrome*, § 10-2.3.3, in *MODERN SCIENTIFIC EVIDENCE: THE LAW AND SCIENCE OF EXPERT TESTIMONY*, *supra* note 340 ("In short, descriptions of the stages of RTS are not supported in the literature.").

350. Laura E. Boesch, et al., *Rape Trauma Experts in the Courtroom*, 4 *PSYCHOL. PUB. POL'Y & L.* 414, 417 (1998) (collecting studies).

351. See MORIARTY, *supra* note 24, at §§ 9:8-9:10.

352. *Id.* at 417.

353. See Garcia-Rill & Beecher-Monas, *supra* note 334, at 39 (explaining why PTSD is more useful in explaining why some women may delay reporting rape).

In the knowledge derived from experience.

The knowledge imposes a pattern, and falsifies³⁵⁴

At this watershed moment where law has intersected so meaningfully with science, courts have the opportunity to revisit prior assumptions about syndromes and profiles and to correct the errors of the past. By requiring greater rigor in analyzing such evidence, courts can avoid the same flawed pattern that plagued the Salem witchcraft trials, and bring about a new era of analysis based on data, rather than superstition.

354. T.S. ELIOT, EAST COKER, THE FOUR QUARTETS, *in* THE COMPLETE POEMS AND PLAYS, 1909-1950, at 125 (1971).

