

Trials and Errors:

Blind Tests Before the Franklin Commission

Recounting a series of ingenious experiments, the report of the Franklin Commission appointed by the King of France in 1784 to investigate Mesmerism is rightly regarded as a landmark in the history of medicine and of scientific inquiry itself. In a number of these tests, blinded subjects failed to identify objects that had been ritually “magnetized,” or, conversely, fell into the belief that ordinary objects were charged with animal magnetism. However, the blinding of test subjects did not originate with the Franklin Commission; on the contrary, this device was used on and off from the late 16th to the late 17th centuries in formal and informal investigations of persons showing symptoms of bewitchment. Blind tests were devised ad hoc and did not pass from one case to another in the manner of an established method. The originality of the Franklin Commission’s work lay not in the blinding of test subjects but in raising what had been an improvisation into a method.

Blind and Nonblind Tests

In the early 1780’s Paris was swept by enthusiasm for Mesmerism, a ritual performed in the name of healing by a recently arrived Viennese medical doctor professedly in touch with “animal magnetism.” It is a measure of the charisma of Anton Franz Mesmer that the new art was named not for this astonishing force of Nature but for himself. Exotically costumed and accompanied by celestial music, Mesmer sent the cosmic fluid coursing through groups of patients, many of them women, packed body to body in capacious iron vats. The intensity of the current, or of the rite itself, induced convulsive “crises” that may or may not have been

sexual in character. A fashion that gave rise to such Dionysian assemblies was bound to attract the attention of the authorities.

In 1784 Louis XVI appointed a commission of eminent men of science, including Franklin and Lavoisier, to investigate the suspect phenomenon. The commissioners decided to concentrate their inquest not on the curative or noncurative effects of the Mesmeric treatment but on the logically prior issue of the existence or nonexistence of animal magnetism. Unless the imagination can relieve our ills (which is an issue unto itself), animal magnetism cannot be the salubrious force proclaimed by Mesmer if it does not exist.

In experiments designed to determine if subjects were actually responding to animal magnetism, the investigators led them to suppose that objects had been magnetized à la Mesmer or (conversely) that objects which had been ritually magnetized had not been so treated at all; if in each instance the subjects reacted to what they believed, not to the object itself, then one could conclude with some confidence that the vaunted power of animal magnetism was entirely in their minds. The key was to keep the subjects blind to the hand of the investigators. At times, indeed, a literal blindfold was employed:

We chose for the experiment an orchard [in Franklin's estate at Passy] in which fruit trees with long trunks were planted equally spaced in a line. We asked [Mesmer's disciple] M. Deslon to magnetise one of them. M. Deslon had brought with him a young man about twelve years old who was very sensitive to magnetism; he was kept under watch while the experiment was prepared so that there could be no suspicion that he knew what was happening. We took him, blindfolded, and presented him successively

to different trees far away from the one that had been magnetised. From the first tree the youth began to have some impressions; these increased gradually at each tree and, at the fourth, although it was not magnetised and was very far from the tree that had been magnetised, the young man fell into a crise [that is, a Mesmeric crisis], his limbs became rigid and he lost consciousness.¹

The corresponding experiment with ordinary and magnetized water resembles, but is not identical to, a blind test designed by Lavoisier, as recorded in a plan that survives in his collected works. In the course of making a strong argument that the Passy experiments were probably designed by Lavoisier (and not, as many seem to believe, Franklin), I. M. L. Donaldson describes blind tests like the water and tree experiments as “truly revolutionary.”² However, the technique of blinding subjects for the purposes of investigation did not enter the world in the latter 18th century.

A few years before Donaldson called attention to Lavoisier’s plan for the Passy experiments, Ted Kaptchuk traced them directly (that is, without intervening links) to “trick trials” associated with a series of spectacular public exorcisms in late-16th century France.³ In 1599 Marthe Brossier, who had become a celebrated demoniac after accusing a neighbor of bewitching her, was put to the test by a bishop who administered common water as holy water and exhibited a piece of iron as a relic of the true cross; she failed both times. Our record of these deceptions comes from a pamphlet of considerable brilliance by the physician Michel Marescot and colleagues, in which the tricks occupy a single passage and constitute but one proof among many that the demoniac was shamming.⁴ The affair itself was an episode in an

extended drama. In England it was antedated by another cause célèbre: the Warboys case, which stood as a kind of Case One for a series of bewitchments and helped establish the repertoire of symptoms of bewitchment for English purposes. While blind tests figure sporadically in investigations of these and other cases, we will see that the point is not how much the Franklin Commission owed to them, but how profoundly unlike the work of that Commission they were.

Unlike Marthe Brossier, the victims in the Warboys case were found to be genuinely afflicted, and the case terminated in the hanging of each of the accused.⁵ That so much rode on claims of bewitchment which might or might not be true made testing these allegations all the more important. However, two factors worked against blind testing of accusers. First, it was not they who were on trial, but the accused. Second, in the Warboys case and others, and throughout the Salem witch trials, great emphasis was placed on the behavior of accusers *when they saw the accused*. Time and again in the transcripts of the Salem trials, the violent reaction of “the afflicted” to the sight of the accused is specifically noted as evidence of witchcraft. In the very first interrogation in Salem, on March 1, 1692, when Sarah Good was brought into the crowded meeting-house, those who had named her as a witch were seized by tortures so expressive that the judge inquired of the accused, “Why do you thus torment these poor children?” (Four months later Sarah Good was hanged.) Shaken by such performances, “even shrewd observers on guard against fakery often became convinced that they had a diabolical source.”⁶ Maybe it was the same shrewdness that led judges to make the accused touch those who had fallen into fits in unison at the sight of them; a witch’s touch removes the injuries she or he has caused. When the afflicted were then instantly cured, it was as if the guilt of the

accused had been proved before the eyes of the community by a double demonstration. But as impressive as these spectacles were, they could not, of course, prove that the accusers were not dissembling; with the accused in full view, they could have faked the reactions they were supposed to have in the presence of a witch. An accused witch who was eventually executed, Martha Carrier, alleged just that.⁷

Theatrics like those in the Salem courtroom not only do not obviate the need for blind tests, they illustrate it. It is an open question whether the Salem prosecutions could have survived the counter-spectacle of blindfolded accusers misidentifying or failing to identify their supposed tormentors. The most trenchant contemporary critic of the Salem witch-hunt, the merchant Thomas Brattle, openly ridiculed the claim that “the afflicted” could see with their eyes closed, and all but challenged the court to put their preternatural abilities to the test.⁸ Blind tests were not a thing unknown, either. Increase Mather in *Cases of Conscience* (1693) and Cotton Mather in *Wonders of the Invisible World* (1693) both cite a blind test in the 1662 trial in England which was regarded in New England as an important precedent for the Salem trials.⁹ The test, moreover, strongly suggested that one of the principal witnesses against the accused in this capital case feigned bewitchment. (See below.) If only such a tool had been employed in Salem. At the time, however, blind tests did not carry over from one investigation to another, were not used systematically, and were not described as a procedural model to be followed by others. Perhaps it would not have been quite so easy for the presiding judge and the transcriber of the proceedings to write off the embarrassing result of the blind test in the 1662 case if such testing had been an established method of verification.

Instead, the scattered blind tests in the literature of bewitchment from Warboys to Salem read like clever improvisations. At one point in the byzantine case of William Somers (1597-98), for example, “when a woman accused for a witch was closely [that is, secretly] brought in for an experiment . . . the boy neither cried at her coming or going nor slept as he was wont whilst she stayed in the house”¹⁰—evidence that he did not sense the woman’s presence and that his bewitchment was therefore spurious. As suggestive as it was, this blind test left no imprint on other investigations, quite unlike the work of the Franklin Commission. I will argue that the originality of the Commission lay not in its use of blind testing per se, but in making such tests methodical and systematic. In contrast to the designer of the trick in the Somers case, the Franklin Commission framed not one but many tests, all probing the same question, all pointing in the end to the same conclusion. In effect, the Commission meticulously replicated its own findings. And whereas blind tests from Warboys to Salem did not pass by tradition from one case to the next but seem to be invented anew each time, we will see that the Franklin Commission’s influence is evident in a historic investigation of the placebo effect conducted fifteen years later in England.

Accused witches were subjected to all manner of tests: they had pins stuck in them, were burned and swum, were made to recite the Lord’s Prayer, were made to stare at their victims. The more tests they failed, the better. While tests of accusers (as opposed to exhibitions by accusers) were less common, they too were a methodological jumble, and few investigators seem to have felt that blind tests stand above all others or represent the last word of verification. Mary Glover, an accuser whose case is reviewed below, was given a burn test immediately after a blind test, both of which she passed. In the Cullender case, also reviewed

below, an accuser failed a blind test which the court proceeded to disregard. A rare blind test in the Salem courtroom, briefly noted in the trial transcript (and below), came to nothing when two of the accusers happened to lose the power of speech; in short order, the judges moved on to the business of interrogating the accused. Moreover, in contrast to the account of the tree experiment at Passy (where we learn, for example, how the blindfolded subject proceeded through the orchard), a number of reports of blind tests in witch investigations leave out details—a lack of clarity suggestive of a certain indifference toward method itself.

The sundry blind tests that did take place in England and New England seem to have been performed in a purely ad hoc manner. In the one and only account of the Warboys case a blind test comes about spontaneously, not by design, and later investigators were not inspired by the Warboys example to design blind tests of their own. They performed such tests not because others had shown their value and laid down the elements of sound procedure, but—in many cases—because they or someone else first staged a test that was misconceived, misleading or uninterpretable. In brief, poor tests led to better ones. Just as blind tests from Warboys to Salem had an impromptu character foreign to the work of the Franklin Commission, many arose in response to defective tests that preceded them.

The Warboys Witches

Around the time of Marthe Brossier, blind tests were used not only to confute claims of demonic possession but—quite to the contrary—to prove that a victim was actually suffering

preternatural torments. Blind tests could not have been a method in the sense of an established procedure if there was no agreement about what it was a method *for*.

In a notable instance that precedes the Marthe Brossier sensation, a blind test appears to take shape without a plan. I refer to the Warboys case of 1589-93, centering on the alleged bewitchment and torment of the Throckmorton daughters by their neighbor Alice Samuel in concert with her husband and daughter. A few years later, when Anne Gunter, at her father's insistence, began to simulate the symptoms of bewitchment, it was the narrative of this case which she used as a manual.¹¹

Like the victims of witchcraft who would follow them, the Throckmorton girls, beginning with the nine-year-old Jane, suffered strange, disturbing symptoms including trances and convulsions. When Alice Samuel came to visit, Jane grew worse, suddenly exclaiming, "Did you ever see one more like a witch than she is?" There seems to be some connection between the symptoms of affliction and the sight of a witch. Later, in the midst of a violent fit and with her eyes "closed as though she had been blind," Jane scratched at the coverlet of her bed while crying out, "Oh that I had her, Oh that I had her." Her uncle, wondering what this meant, extended his hand to her; she took it reluctantly and would not scratch it. At this point he surreptitiously had the suspected witch, Mother Samuel, put her hand into the child's, and the child immediately scratched furiously, in conformity with the tradition that a bewitched person improves if she scratches her tormentor and draws blood. The latter part of this "experiment" (as it is called) reads as follows:

Master Pickering [Jane's uncle] went into the hall and took Mother Samuel by the hand (who went as willingly as a bear to the stake) and brought her to the further side of the bed from the child, who lay scraping with her nails on the bed covering, saying, Oh that I had her, then the said Master Pickering in very soft speeches (so that the child could not hear) said to Mother Samuel Put your hand to the child's hand, but she would not, then the said Master Pickering for example's sake put his hand to the child's hand, so did also Mistress Andley & others at the same instant, but the child would scarce touch, much less scratch any of their hands, then the said Master Pickering without either malice to the woman, confidence, or opinion in scratching (only to taste by this experiment whereto the child's words would tend) took Mother Samuel's hand and thrust it to the child's hand, who no sooner felt the same but presently the child scratched her, with such vehemence that her nails broke . . . with the force and earnest desire that she had to revenge.¹²

Though one wonders whether the child could not possibly hear something whispered at her bedside, this "experiment" is represented as a blind test.

Innocent of "malice, confidence or opinion," Master Pickering did not have a plan to put a suspected witch to the test; he simply wanted to find out the meaning of the child's provocative cry, that is, "to taste by this experiment whereto the child's words would tend." Here then is a test performed without benefit of blueprint or method. By offering their hands to Jane Throckmorton, Master Pickering and his associates unwittingly provide the comparison necessary to make Jane's assault on Mother Samuel's hand interpretable. That is, unless the

child had already shown that she would not scratch an innocent hand, her attack on Mother Samuel would not necessarily prove the latter's guilt. However, unlike the carefully scripted (and more securely blind) tests at Passy, the test in this case takes shape virtually by itself. Evidently the author or authors of this highly partisan account, who had the power to mold the facts as they liked, wanted the scratch test to arise from a spontaneous sequence of events, not to reflect a preconceived plan that might look like a trap.

Though *The Most Strange and Admirable Discovery of the Three Witches of Warboys* is saturated with the fantastic, readers found it believable, and it served as the record of a sort of paradigm case of witchcraft that ended (as noted) in the execution of the accused and her confederates. While the record of the Warboys case "set a pattern for English witch-accusations that was . . . taken across the Atlantic by English colonists to appear in an extreme form in Salem, Massachusetts,"¹³ it did not also set a pattern of blind testing. After all, the scratch test occupies but a single fleeting episode in a lengthy narrative. In that it depends on the position the child happens to be lying in, it does not offer a replicable model anyway. Blind tests do figure in the next case to be considered, which in some ways echoes the Warboys case; but they emerge only after a false start, evolving independently rather than reproducing an existing model.

The Mary Glover Case

Before she was confronted with the hand of Mother Samuel while turned away with her eyes closed, Jane Throckmorton refused to scratch the hands of others extended to her "for

example's sake." In other cases, a blind test follows a demonstration that fails to prove anything.

In 1602 fourteen-year-old Mary Glover (whose grandfather had been burned at the stake during the reign of Mary) fell grievously ill and began to exhibit the symptoms of bewitchment after an argument with an old charwoman, Elizabeth Jackson. Her case too became a cause célèbre, one all the more dramatic in that it took place in the heart of the kingdom, London itself.

Like Jane Throckmorton, Mary Glover was tested by her uncle (William Glover, an alderman) in his own house. In this case, however, Mary was simply confronted with the old woman to see if she would react—what we might call a sighted test. React she did. With the house filing with spectators, a second such test and then a third were performed,¹⁴ as if those who staged them sought to add proof to proof. Yet tests like these prove nothing, as Mary was not blind to her persecutor's presence and could conceivably have been feigning bewitchment at her hands. That her symptoms grew more pronounced and more stereotypical under testing¹⁵ might mean that the trials somehow called forth her affliction as they were expected to do or (to the contrary) that she took advantage of them to enact her illness with maximum effect. A better way to test Mary's sensitivity to the presence of Elizabeth Jackson might be to disguise someone else as Elizabeth Jackson, disguise Elizabeth Jackson as someone else, and see if Mary saw through the masquerade. If she were truly bewitched, she would know the woman responsible for her suffering.

So it was done, but not by William Glover. It was John Croke, the city Recorder and former speaker of the House of Commons, who conducted the new tests. First he had Mary

confronted with a woman similar in age and stature to Elizabeth Jackson, dressed in the suspect's hat and concealed with a muffler, and when she had no reaction, he doubled the deception, saying, "I am glad to see this, Mary; I hope thou shalt touch her freely many times hereafter, and never be afraid."¹⁶ When he then confronted Mary with Elizabeth Jackson, with her face covered and wearing the other woman's hat, "the maid's countenance altered" and she began to intone the same ominous nasal phrase she used before in the presence of the old woman: "hang her, hang her." At this point, however, the narrative turns, and Mary's ability to see through disguises is upstaged by a physical trial in which Mary endures burns without reaction, whereas Elizabeth Jackson cries out. As in the Warboys case, the report of the blind test is confined to a single passage in an extended narrative and receives no special emphasis.

Inasmuch as Croke "had obviously begun his tests with the suspicion that the girl was dissembling,"¹⁷ he must have believed that the tests originally staged in William Glover's house were spectacle and nothing more. Perhaps he was inspired by the very worthlessness of these exhibitions to attempt something better. In the end his tests, conducted in his own quarters and not in a dwelling that had become a playhouse, convinced him of Mary's veracity. However, like the Warboys case before it, the Mary Glover case certainly did not provide other investigators with a tried method of blind testing. In the 1662 case discussed below, the investigators hit upon the blind test through their own stumbling efforts; they did not inherit an established procedure which they simply applied. For that matter, when an expert medical witness in the trial of Elizabeth Jackson herself was called in soon thereafter in another case of bewitchment, he blinded the subject but administered a quite novel test.

The Use of a Placebo: The Anne Gunter Case

If ever a blind test could have been expected to carry over from one case to another, it might be the disguise test used with Mary Glover. Not only did her case and that of Anne Gunter occur virtually back-to-back, not only were blind tests employed in both, but one and the same physician figured in both. Yet not only did the blind test of Mary Glover not provide a template for the other investigation, but the test of Anne Gunter exposed a counterfeiter while that of Mary Glover (as reported) confirmed the veracity of a patient suffering preternatural torments.

In 1604 young Anne Gunter began to suffer the telltale symptoms of bewitchment. With her case attracting attention, she gave demonstrations to fascinated spectators, contorting her frame, lying in a trance while trumpets were blasted beside her, and—still more impressive—spewing pins.¹⁸ Upon reflection, it is clear that such exhibitions prove very little and that only a tenuous line divides symptoms of possession from stagecraft.

After James I himself became acquainted with the case, he decided to take a close look at it. Among those known to be skeptical of the bewitchment of Anne Gunter's predecessor Mary Glover was the physician Edward Jorden, who believed that her symptoms arose from hysteria (or "the mother") but also scented counterfeiting, and presumably it was because of his suspicions that James referred Anne Gunter to him for testing. If Mary Glover was not bewitched and yet was somehow able to identify the accused in disguise, then the test was defective, and therefore nothing of the sort should be used with Anne Gunter. A more cunning and exacting test was needed.

As reported in the biographical preface of the fourth edition of a work by Jorden, when the King heard of Anne Gunter's exploits he sent for her,

and pretending great pity to her, told her, he would take care for her relief, in which thing he employed Doctor Jorden, who, upon examination, reported to the King, that he thought it was a cheat; and tincturing all she took with harmless things, made her believe that she had taken physic, by the use of which, she said, she had found great benefit. The doctor acquainting his Majesty that he had given her nothing of a medicinal nature, but only what did so appear to the maid.¹⁹

While the test is reported with a certain indifference to procedural detail, it appears that that Jorden surreptitiously gave Anne Gunter a placebo in order to assess the veracity of her symptoms of bewitchment. As a skeptical physician, he must have suspected a condition which had no possible medical explanation and added one too many theatrical embellishments to an already performative disorder. Under these circumstances, the use of a placebo represents an adaptation of the unofficial medical tradition of treating with "harmless things" at one's own professional discretion.

Let us assume Jorden had already treated patients with placebos in the belief that patients expect treatment, and if they respond to a false treatment then nothing is wrong with them. Such a "test" would be of doubtful value, if only because symptoms often wax and wane, so that the decline of a symptom following administration of a placebo does not necessarily mean it was fictitious. What makes the testing of Anne Gunter different is that Jorden had

every reason to believe that a patient who spews pins, among other exhibitions, is either preternaturally afflicted or, more likely, performing a stunt. The case is not medical at all, and therefore if the patient reports a response to medical treatment, or the appearance of treatment, she can only be feigning.

In an interesting example of bad tests bringing forth better ones, it was Anne Gunter's public demonstrations of bewitchment that provoked James and Jorden, working in concert, to employ their ruse. It should be said, though, that Anne Gunter was in no position to deny the "great benefit" of a treatment recommended to her by the reigning monarch. The placebo test was a trial that could not fail, and thus constitutes a unique event, not a reproducible method. In any case, what proved Anne Gunter's imposture once and for all was not her response to a sham treatment but her confession to the King after he promised to indemnify her for "what damage should accrue from the discovery."²⁰

The Case of William Perry

A variation on the pattern of a meaningless test followed by a blind one figures in the story of the unmasking in 1620 of the "the boy of Bilson," William Perry, another simulator of bewitchment. Among the performances that appeared to give "most just reasons for the presumption that he was possessed and bewitched" was his practice of falling into a fit whenever he heard the preamble to the gospel of John: "In the beginning was the Word."²¹ By tradition, the Devil could not abide this text,²² which is the reason it had been read in the

presence of Jane Throckmorton; when the recitation ceased, her fit ceased, and when it resumed so did it.

But the practice of reacting to a standard text gives no grounds, let alone “most just grounds,” for an inference of bewitchment. The performance could be faked, and in Perry’s case it was. Suspecting the boy after observing him closely for some time, the Lord Bishop of Coventry and Lichfield decided to test his purported sensitivity to the famous words by rendering them in Greek—in effect, blinding the boy cognitively.

“Boy, it is either you or the Devil that abhors the words of the Gospel. And if it be the Devil, being so ancient a scholar of almost six thousand years’ standing, he knows and understands all languages in the world. So he cannot but know when I recite the same sentence in the Gospel out of the Greek text. But if it be yourself, then you are an execrable wretch who plays the Devil’s part in loathing that part of the Gospel of Christ which, above all other Scriptures, expresses the admirable union of the God-head and manhood in one Christ. . . . Wherefore look to yourself, for you are now to be put on trial.”²³

Having put the boy on notice that he was about to test him, the bishop then recited another verse in Greek to which the boy reacted as if it were John 1:1; conversely, he did not react when the actual text was read. Much as one of the Franklin Commission’s test subjects reacted to unmagnetized water but not its magnetized double, so the dissembling boy responded to the wrong text and failed to respond to the right one. Thus the bishop showed that exhibitions

which looked to many like indubitable evidence of possession were in fact meaningless. A probative test was elicited by demonstrations that proved nothing at all.

After Dr. Jorden tested Anne Gunter with “harmless things,” he tested his own conclusion that she was counterfeiting by reciting the Lord’s Prayer and the Creed first in English, then in Latin. Anne reacted to the English but not the Latin.²⁴ This might be considered a template for the testing of William Perry, except that Jorden’s ruse was reported decades after the fact, when the story of Perry and his unmasking at the hands of an astute bishop had already receded into the past. Similarly, while a skeptical cleric tricked Marthe Brossier into believing that the opening of the Aeneid came from a conjuring manual, she was also given tests of her understanding of Greek and English in which the blind was compromised. William Perry had no such luck.

The Cullender and Denny Case

As accusations of witchcraft played out in court, the victims were often on hand like an accusing chorus to give demonstrations of their sufferings. Consider a well-known case tried in Bury St. Edmunds in 1662, wherein Rose Cullender and Amy Denny were accused of bewitching the daughters of Samuel Pacy, Elizabeth and Deborah, aged eleven and nine respectively. The girls suffered terrible fits in the tradition of Jane Throckmorton but, like Anne Gunter, also spewed pins.

At one point in the trial, at the direction of the judge—the renowned Matthew Hale—Amy Denny was secretly brought into the presence of Elizabeth Pacy,

and she touched her hand; whereupon the child without so much as seeing her, for her eyes were closed all the while, suddenly leaped up, and caught Amy Denny by the hand, and afterwards by the face; and with her nails scratched her till blood came, and would by no means leave her till she was taken from her, and afterwards the child would still be pressing towards her, and making signs of anger conceived against her.²⁵

The encounter reads like a free translation of the scene in the Warboys case in which Jane Throckmorton identifies Mother Samuel with eyes closed and claws at her violently. Is this attack on Amy Denny, then, proof of her iniquity? Only if we believe that the child never opened her eyes. Perhaps this is an account made to appear more credible than it really is by its conformity with conventions of bewitchment as codified by the Warboys case. While we are intended to infer that the touch test was conclusive because it was blind, a later touch test, this time employing an actual blindfold, yielded a different result.

The account of the trial continues:

During the time of the trial, there were some experiments made with the persons afflicted, by bringing the persons to touch them; and it was observed, that when they were in the midst of their fits, to all men's apprehension wholly deprived of all sense and understanding, closing their fists in such manner, as that the strongest man in the court

could not force them open; yet by the least touch of one of these supposed witches, Rose Cullender by name, they would suddenly shriek out, opening their hands, which accident would not happen by the touch of any other person.

And lest they might privately see when they were touched by the said Rose Cullender, they were blinded with their own aprons, and the touching took the same effect as before.²⁶

While this account of “some experiments” does not concern itself overmuch with procedural details, it appears that (a) when the girls were touched “in the midst of their fits” by Rose Cullender they would react in a telltale manner; (b) this touch test may have been repeated; and (c) the girls were then “blinded with their own aprons,” touched by the same Rose Cullender, and exhibited the same reaction. However, if the blindfolded girls indeed reacted “as before,” the sequence itself led them to expect that it was none other than Rose Cullender who touched them. Besides, what if their fits were simulated in the first place?

An “ingenious person” in fact objected that “there might be a great fallacy in the experiment” in that the children “might counterfeit this their distemper. . . . Perceiving what was done to them, they might in such manner suddenly alter the motion and gesture of their bodies, on purpose to induce persons to believe that they were not natural, but wrought strangely by the touch of the prisoners.”²⁷ The court would be well advised to blind the children, lead them to expect the accused, and present them with someone else; unless and

until this was done, the evidence of the touch test signified nothing. And so, at the behest of judge Hale, the error was corrected:

Amy Denny was conveyed from the bar and brought to the maid: they put an apron before her eyes, and then one other person touched her hand, which produced the same effect as the touch of the witch did in the court. Whereupon the gentlemen returned, openly protesting, that they did believe the whole transaction of this business was a mere imposture. This put the court and all persons into a stand.²⁸

The proceedings came back to life when Mr. Pacy argued on behalf of his child that she could perfectly report “diverse things” that occurred while she was in her fits, an ability that seems unfortunately consistent with feigning. This curious defense was accepted by the court as invalidating the blind test.

Only by ignoring that demonstration was the court able to save the credibility of the accusers of Amy Denny and Rose Cullender, both of whom were hanged. The case was the subject of legal comment for decades—mainly, it seems, because of Hale’s uncustomary refusal to evaluate the evidence for the jury.²⁹ Perhaps Hale did not know what to do with a series of provocative tests that yielded what looked like conflicting results.

As in other instances, the serial “experiments” in this courtroom drama suggest that the administration of blind tests had not yet been reduced to a method. If it had been, the court would not have committed the blunder of staging pointless tests (that is, simply having Rose Cullender touch her accusers, a prefiguration of the sighted tests in Salem) before introducing

two successive refinements of the procedure. Only on the last iteration, when the subject was blindfolded and deceived (as in Passy), did the experiment yield a significant result, one ignored by the judge who ordered the test itself. The impression left by the transcript of the trial is that the tests of the accused were makeshift and that the court was disinclined to accept the one test that cast doubt on the veracity of the accusers. The court worked by trial and error but failed to be instructed by its errors. Certainly the one well-conceived test did Rose Cullender and Amy Denny no good. It is an ominous sign that this case stood as a legal landmark for the learned of Salem, Massachusetts, and that its standards of evidence governed the witch trials there.³⁰

In attempting to explain away his daughter's misidentification of a third party as a witch, Mr. Pacy incidentally suggested to the court that "possibly the maid might be deceived by a suspicion that the witch touched her when she did not."³¹ If this means the Devil made Elizabeth react to an innocent in order to discredit her and thereby save his agents Rose Cullender and Amy Denny, then the Devil can and will confound blind tests whenever he so chooses, rendering them meaningless or worse. Sometimes their results may be valid and sometimes (as in the present case) not. It goes without saying that there can be no point or purpose in employing blind tests in witch investigations if their outcome is so treacherous. Perhaps this is why Cotton Mather, who reported the Cullender case at length in his *Wonders of the Invisible World*, was not troubled by the scarcity of such tests in Salem.

The Elizabeth Clawson Case

A defender of the Salem proceedings might have argued that there was a perfectly good reason the court of Oyer and Terminer did not much bother with blind tests of accusers. In the eyes of the court, the strongest evidence was not spectral sightings, not even confessions, but reports by persons of good character of harm done to them by the accused.³² Those of good character have already been found to be true to their word, and this sort of common knowledge, acquired under real conditions over the course of years, necessarily outweighs the results of any experiment in the courtroom. An authority cited by Cotton Mather specifically warns judges to make certain that accusers of witches are persons of “honesty and credit” but makes no mention of blind tests to prove they can identify their persecutor.³³

In the case of affliction enacted in the courtroom, the judges seem to have assumed veracity. In the records of the Salem proceedings it is repeatedly noted that accusers went into fits when an accused witch entered the courtroom and looked at them, that their fits ceased when they were touched by the accused, and likewise ceased when the accused confessed. To the recorders of these performances, such tests, which were anything but blind, amounted to damning proofs of guilt. In a world without a playhouse the court itself became a playhouse.

A striking sign of indifference to the niceties of blind testing in the New England investigations is that in one instance the wrong parties were blindfolded. As reported in writing by six accused witches, “We were blindfolded, and our hands were laid upon the afflicted persons, they being in their fits and falling into their fits at our coming into their presence, as they said; and some led us and laid our hands upon them, and then they said they were well, and that we were guilty of afflicting them. Whereupon, we were all seized, by a warrant from the Justice of the peace and forthwith carried [from Andover] to Salem.”³⁴ If a blindfold were to

serve any investigative purpose, the accusers—not the accused—would have worn one. However, tests of accusers were rare in New England. In one such instance, the judges had a suspected witch from another village, Deliverance Hobbs, brought into the Salem courtroom without mention of her name, to see if her accusers could identify her.³⁵ With the suspect living at some distance from the accusers and thus out of eyeshot, the judges apparently believed they were conducting a blind test. However, Deliverance Hobbs was known to one of the accusers, Mercy Lewis. In addition, she attended the public interrogation of her stepdaughter in Salem three days before,³⁶ so that it required no preternatural ability for the twelve-year-old Ann Putnam, Jr. to name her. The judges, then, took little care with the niceties of this nominally blind test. The transcript of the examination of Deliverance Hobbs on April 22, 1692 records the test in passing, then proceeds to the substance of her interrogation, with the following comment appended: “NOTE: All the sufferers free from affliction during her examination after once she began to confess.”³⁷

The blind test of Deliverance Hobbs’ accusers was not blind at all, and the same could be said of a feat of identification by an accuser at some distance from these events. In an incident contemporaneous with the outbreak in Salem village but set in Connecticut, the 17-year-old servant Katherine Branch was seized with conventional symptoms of bewitchment, including some that seemed to entail invisible agency, such as tormenting pinches. (It was symptoms like these that were certified as preternatural in origin by the self-taught physician William Griggs, consulted at the onset of the outbreak.) She began to have visions of Goody Clawson, at one point describing “her whole attire” to her master Sergeant Daniel Westcott, with whom the alleged witch had a minor feud. When Westcott went to investigate, he found Goody Clawson

“attired exactly as she was described by the person afflicted,”³⁸ as if the ability to describe her garb sight unseen proved that Katherine Branch was indeed bewitched. However, we do not know when she last saw her and her master’s persecutor. Was it recently? For that matter, how many outfits did Goody Clawson own? That Westcott did not think to ask such questions suggests that his standards of evidence were not high. Yet the same Daniel Westcott took part in a test of Katherine Branch’s veracity that amended a prior test to make it blind.

The Katherine Branch case offers a striking example of the administration of a blind test on the heels of a test that proved nothing whatsoever. Just as “an ingenious person” revised the “experiments” performed to test the accusers of Rose Cullender and Amy Denny, an acute observer pointed out the critical flaw of a certain test of Katherine Branch and made its correction possible.

The testimony of Sarah Ketcham. She saith that being at Daniel Westcott’s house, Thomas Austin being there, Katherine Branch being there in a fit . . . I asked them how she was; they said she hath had new fits. . . . Thomas Austin said she knew that she was bewitched. I told him I did not believe it, for I said I did not believe there was any witch in the town. He said he knew she was for, said he, I have heard say that if a person were bewitched, take a naked sword and hold over them and they will laugh themselves to death; and with that he took a sword and held it over her and she laughed extremely. Then I spoke something whereby I gave them to understand that she did so because she knew of the sword; whereupon Daniel made a sign to Thomas Austin to hold the sword again that she might not know of it, which he did and then she did not laugh at all nor

change her countenance: further in discourse I heard Daniel Westcott say that when he pleased he could talk her out of her fits . . . Stamford, September 7, 1692.³⁹

Like other tests discussed here, the second sword trick is an improvisation, contrived on the spot to correct the fatal flaw of the first trick. It comes about in the course of conversation among several parties when one objects that unless the subject is blind, a sword test proves nothing. That the objector happens to be Sarah Ketcham suggests that one did not need to be a physician, bishop, or man of science to grasp the principle of the blind test. Common sense sufficed. But common sense sometimes fails us, which is why those assembled at the Westcott house attempted at first a test that could not prove anything, like the display of indicted witches to their accusers in the Salem courtroom. In the end, Elizabeth Clawson was acquitted, though Daniel Westcott, who had taken part in the ruse that cast doubt on the veracity of her accuser, continued to support his servant.

The Franklin Commission and Its Legacy

Referring to the spectacle of France enthralled to the folly of Mesmerism, Jean-Sylvain Bailly, a member of the Franklin Commission, lamented, “It was a scandal for Europe to see a people enlightened by all the sciences and the arts—a people among whom philosophy has made its greatest progress—forget the teachings of Descartes, who was philosophy’s reviver.”⁴⁰ But philosophy for Descartes was also method; and it was the Franklin commissioners’ sense of method that led them to frame a detailed plan for testing blinded subjects before undertaking

their experiments at Passy. In the report of the tree experiment quoted above, we learn the layout of the orchard, the care taken to maintain the blind, and the sequence of the subject's "impressions," all exemplifying the Commission's meticulous sense of procedure. By contrast, blind tests in the witch investigations were largely blueprint-less; their authors simply invented or reinvented them as they went. The anonymous "ingenious person" responsible for the key test in the Cullender case belongs to a line of skeptics, ranging from James I to Sarah Ketcham, all of whom understood the principle of the blind test and had something to do with devising one. So too, whereas the Franklin commissioners ran not one test but an entire series yielding one and the same conclusion, ad hoc tests like the last in the Cullender case were isolated events, and may well have been easier to dismiss for that reason.

The Parisian physicians who reviewed the Brossier affair did not propose blind tests as a necessary procedure of investigation, possibly because they furnished but one proof among many that the demoniac was an impostor, and that one not necessarily the most compelling. The pamphlet in question was translated into English in the interim between the Warboys and Glover cases but did not have the effect of establishing the sort of blind tests used in the examination of Marthe. After all, the physicians expressed a deep skepticism toward theatrical performances of bewitchment much like those in the Warboys and Glover cases, both written up by reporters strongly in sympathy with the afflicted. From the records of the Warboys case to the Salem prosecutions, performances of affliction were received as evidence of affliction, not as presumptive evidence of shamming, as in the Brossier affair.

Whereas in the Brossier affair blind tests were administered by skeptical clerics and recounted by skeptical physicians, in England and New England blind tests were performed by

believers of the afflicted, disbelievers of the afflicted, and persons who managed to be both (John Croke and Daniel Westcott, for example). In all, they were performed opportunistically. The unique value of blind tests was so generally ignored that when such a test stunned the courtroom in the Cullender case, the most esteemed judge of the age set it aside, did not call the jury's attention to it (contrary to his usual practice of evaluating the evidence), and allowed both accused witches to hang. In Salem the judges made a halfhearted try at a blind test of the accusers of Deliverance Hobbs, looked on in wonder as two of them made a shambles of it, and in short order got on with the business of attempting to make the accused confess. Daniel Westcott ignored the outcome of a blind test he himself set in motion. In the cases under review none of those who performed a blind test, or semblance of one, seem to have felt that they were either following or establishing a procedural model. At this point we are in a position to appreciate the scientific contribution of the Franklin Commission: not its use but its *methodical* use of blind tests.

As evidence of the influence of the Franklin report, Donaldson cites the physician John Haygarth's historic exposé of the Perkins "tractor," an instrument supposedly capable of drawing ills out of the body by the force of "animal electricity."⁴¹ Haygarth was well aware of the Franklin Commission, and if I am correct that what distinguished the work of the Commission was not blinding per se but methodical blinding, then we might expect an investigator as astute as Haygarth to devote attention to that very point. So he does.

In his pamphlet's preamble, Haygarth lays out the method of an appropriate test of the Perkins tractors. "Let their merit be impartially investigated, in order to support their fame, or to correct the public opinion, if merely formed upon delusion," he writes.

Such a trial may be accomplished in the most satisfactory manner, and ought to be performed without any prejudice. Prepare a pair of false, exactly to resemble the true tractors. Let the secret be kept inviolable, not only from the patient, but every other person. Let the efficacy of both be impartially tried, *beginning always with the false tractors* [emphasis added]. The cases should be accurately stated, and the reports of the effects produced by the true and false tractors be fully given, in the words of the patients.

The strict requirements for the construction of the wooden tractor and the maintenance of the blind are entirely in keeping with the Franklin Commission's standards of procedure. But why is it important to use the false (that is, wooden) tractors first? The implied answer is that even if the true (that is, metal) tractor works not by virtue of "animal electricity" but merely by its own charisma, it could well appear effective if tested first; whereas if the wooden tractor is tested first and works like the metal instrument simply because the patient mistakes it for the latter, then we can conclude provisionally that the Perkins tractor is indeed a sham.

Suppose, though, that Haygarth had begun his experiment before he had thought through these methodological matters. He might then have used the metal tractor first, only to realize that the trial could not actually prove anything. After all, if a wooden tractor then worked just as well, this could be written off as a carry-over effect of the authentic power of the first tractor. But Haygarth did not walk into this procedural fallacy as the informal trialists of the 17th century might have done. In the very first trial reported (conducted on January 7, 1799),

wooden tractors were used with five patients suffering from chronic rheumatism, of whom all but one “assured us that their pain was relieved, and three much benefited from the first application of this remedy.” That false tractors were used first in the first experiment means that Haygarth had a thought-out plan, a method, for the conduct of his experiments before undertaking them; he did not arrive at a sound procedure only after blundering through a defective one. Thus, while blind testing did not carry over from one investigation to another in the trials reviewed above (if it had, it might have made the jump from Bury to Salem), it did carry over from the Franklin Commission to Haygarth. Appropriately, in writing up the first tests, Haygarth observes that the fashion of the Perkins tractor “resembles, in a striking manner, that of animal magnetism, which merited the attention of Franklin, when ambassador from America, and other philosophers at Paris.”

The adjudication of witchcraft takes us into a strange world of tests and proofs bearing only a misleading resemblance to a well-conducted investigation like Haygarth’s. From the Warboys case to the Salem trials (held when Franklin’s parents were adults), meaningful tests of accusers were few; after all, it was suspected witches, not the witnesses against them, who were on trial. The blind tests that did take place did not become models for later investigators. When the Franklin Commission took up the investigation of a putative force of Nature that still had an element of the miraculous in it, there was nothing makeshift or improvised about its procedures. Its work followed a plan carefully framed in advance. The Commission did not introduce blind testing. It made blind testing methodical, and in so doing helped elevate method itself into a principle of scientific conduct.

¹ The Commission's report and associated documents, translated by I. M. L. Donaldson, are available at:

https://www.rcpe.ac.uk/sites/default/files/files/the_royal_commission_on_animal_-_translated_by_iml_donaldson_1.pdf. The quoted passage appears on 33-34.

² See <https://www.jameslindlibrary.org/articles/antoine-de-lavoisiers-role-in-designing-a-single-blind-trial-to-assess-whether-animal-magnetism-exists/>.

³ Ted Kaptchuk, "Placebo Controls, Exorcisms, and the Devil," *The Lancet* 374 (2009): 1234-35.

⁴ *Discours veritable sur le faicte de Marthe Brossier* (Paris, 1599).

⁵ The witches were also accused of somehow causing the death of Lady Cromwell, a friend of the Throckmortons.

⁶ Paul Boyer and Stephen Nissenbaum, *The Salem Witchcraft Papers: Verbatim Transcripts of the Legal Documents of the Salem Witchcraft Outbreak of 1692* (New York: Da Capo, 1977), 356; 8-9.

⁷ *Ibid.*, 185.

⁸ Letter of Thomas Brattle to unknown correspondent, reproduced in George Lincoln Burr, *Narratives of Witchcraft Cases, 1648-1706* (New York: Scribner's, 1914), p. 188.

⁹ Increase Mather, *Cases of Conscience* (Boston: Benjamin Harris, 1693), 43-44; Cotton Mather, *The Wonders of the Invisible World* (1693; reprinted London: John Russell Smith, 1862), 111f.

¹⁰ Samuel Harsnett, *A Discovery of the Fraudulent Practices of John Darrel* (London: John Wolfe, 1599), 252.

¹¹ James Sharpe, *The Bewitching of Anne Gunter* (New York: Routledge, 1999), 7.

¹² *The Most Strange and Admirable Discovery of the Three Witches of Warboys Arraigned, Convicted and Executed at the Last Assises at Huntington, for the Bewitching of the Five Daughters of Robert Throckmorton Esquire, and Diverse Other Persons* (London: Man and

Winnington 1593), 9; spelling modernized. In Philip Almond, *Demonic Possession and Exorcism in Early Modern England* (Cambridge: Cambridge UP, 2004), 83-84.

¹³ Sharpe, *Bewitching of Anne Gunter*, 7-8.

¹⁴ Michael MacDonald, *Witchcraft and Hysteria in Elizabethan London* (London: Tavistock/Routledge, 1991), xiii; Stephen Bradwell, *Mary Glovers Late Woeful Case* in the same volume, 20.

¹⁵ MacDonald, *Witchcraft and Hysteria*, xxxvii.

¹⁶ Bradwell, *Mary Glovers Late Woeful Case* (1603); reprinted in MacDonald, *Witchcraft and Hysteria*, 21.

¹⁷ MacDonald, *Witchcraft and Hysteria*, xiv.

¹⁸ Sharpe, *Bewitching of Anne Gunter*, 3.

¹⁹ Unpaginated Preface by Thomas Guidott to Edward Jorden, *A Discourse of Natural Baths, and Mineral Waters* (London, 1669; orig. pub. 1631).

²⁰ Guidott, Preface, unpaginated.

²¹ *The Boy of Bilson* (1622) in Almond, *Demonic Possession and Exorcism*, 344.

²² D. P. Walker, *Unclean Spirits: Possession and Exorcism in France and England in the Late Sixteenth and Early Seventeenth Centuries* (Philadelphia: U Pennsylvania Press, 1981), 103.

²³ *The Boy of Bilson* in Almond, *Demonic Possession and Exorcism*, 346.

²⁴ Guidott, Preface; Sharpe, *Bewitching of Anne Gunter*, 185.

²⁵ *A Trial of Witches* (1682) in Gilbert Geis and Ivan Bunn, *A Trial of Witches: A Seventeenth Century Witchcraft Prosecution* (London: Routledge, 1997), 165.

²⁶ *Ibid.*, 170.

²⁷ *Ibid.*, 170.

²⁸ *Ibid.*, 171. For a similar improvised test in a contemporary trial in Ireland, see Andrew Sneddon, "Select Document: Florence Newton's Trial for Witchcraft, Cork, 1661: Sir William Aston's Transcript," *Irish Hist Stud* 43 (164): 298-319. In this case, however, the accuser passes.

²⁹ Barbara Shapiro, *Probability and Certainty in Seventeenth-Century England: A Study of the Relationships Between Natural Science, History, Law, and Literature* (Princeton: Princeton UP, 1983), 207-08.

³⁰ Mary Beth Norton, *In the Devil's Snare: The Salem Witchcraft Crisis of 1692* (New York: Knopf, 2003), 38.

³¹ *A Trial of Witches*, 171

³² Wendel Craker, "Spectral Evidence, Non-Spectral Acts of Witchcraft, and Confession at Salem in 1692," *Historical J* 40 (1997): 331-58.

³³ Cotton Mather, *Wonders of the Invisible World*, 30.

³⁴ Boyer and Nissenbaum, Boyer and Nissenbaum, *The Salem Witchcraft Papers*, 971.

³⁵ Norton, *In the Devil's Snare*, 133. Cf. Boyer and Nissenbaum, *The Salem Witchcraft Papers*, 419.

³⁶ Norton, *In the Devil's Snare*, 364. On Mercy Lewis' knowledge of Deliverance Hobbs, see 134.

³⁷ Boyer and Nissenbaum, *Salem Witchcraft Papers*, 422.

³⁸ David Hall, *Witch-Hunting in Seventeenth-Century New England: A Documentary History, 1638-1693*, second edition (Boston: Northeastern UP, 1999), 318. On a "clothing test" in the Salem prosecutions see Bernard Rosenthal, *Salem Story: Reading the Witch Trials of 1692* (Cambridge: Cambridge UP, 1993), p. 160. Precisely because an accuser could not identify the accused by her clothing, she claimed that the accused had "blinded" her. Cf. Norton, *In the Devil's Snare*, 45-46.

³⁹ *Ibid.*, 340.

⁴⁰ Bailly's report in the Donaldson documents, 79.

⁴¹ John Haygarth, *Of the Imagination as a Cause and as a Cure of Disorders of the Body* (Bath: R. Cruttwell, 1800).