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JUST HOW RELIABLE IS THE HUMAN MEMORY? THE ADMISSIBILITY OF RECOVERED REPRESSED MEMORIES IN CRIMINAL PROCEEDINGS

Shannon Lynn Malone*

I. INTRODUCTION

Whether the human mind is capable of locking away traumatic events as a coping mechanism to merely unravel the trauma in the years that follow is a phenomenon recognized as “repressed memories”¹ or “dissociative amnesia.”² The mystery of this phenomenon has long intrigued the psychiatric community and the debate has continued further to the judicial system. The extension of crucial statutes of limitations in cases involving allegations of criminal child sexual abuse, by several jurisdictions, may further the admission of testimony relating to recovered memories and dissociative amnesia in child sexual abuse cases.³ Notwithstanding the safeguards proclaimed to ensure that expert witness testimony is sufficiently reliable and relevant, otherwise reliable, relevant, and admissible testimony may still be suppressed on the ground that its potential for unfair prejudice substantially outweighs its probative value.⁴

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² The Diagnostic and Statistical Manual of Mental Disorders, 478 (4th ed. 1994).
Repressed memories of sexual abuse have been admitted into evidence supplemented by expert witness testimony in several civil trials throughout the country. Notably, in a 1995 federal case, *Isely v. Capuchin Province*, the district court allowed the plaintiff’s treating therapist to testify as an expert witness concerning repressed memories which were unearthed through extensive therapy. Though courts have been reluctant to admit such testimony in criminal proceedings, the court in *Isley* announced guidelines by which repressed memories may be admitted in a criminal trial. Thereafter, the United States District Court for the Northern District of California found expert witness testimony regarding recovered repressed memories properly admissible within the context of a first-degree murder trial later that year. Thus, the court in *Franklin v. Duncan* held:

...[R]eliance by a jury on “recovered memory” testimony does not, in and of itself, violate the Constitution. Then as now, such testimony is admitted into evidence

unfair prejudice to defendant’"); See also State v. Anderson, 322 N.C. 22, 26, 366 S.E.2d 459, 463 (1988) (holding that otherwise admissible evidence may be excluded “if its probative value is outweighed by the danger that it would confuse the issues before the court or mislead the jury”); State v. Penley, 318 N.C. 30, 41, 347 S.E.2d 783, 789 (1986) (citing the holding in State v. Mason, 315 N.C. 724, 731, 340 S.E.2d 430, 435 (1986) in which the court held the determination as to whether to allow or exclude evidence pursuant to Rule 403 is a determination left within “the sound discretion of the trial court.”). *Id.*


6 In *Isely v. Capuchin Province*, the court allowed the plaintiff’s treating therapist to testify; however, it limited the scope of the testimony to the expert’s opinion; Shahzade v. Gregory, 923 F. Supp. 286, 44 Fed. R. Evid. Serv. 646 (D. Mass. 1996) (citing *Isley* in holding that a witness may testify to an alleged sexual assault occurring fifty years prior); Doe v. Roe, 191 Ariz. 313 (1998) (upholding the admissibility of recovered repressed memories into evidence in a civil trial and allowed a tolling of the statute of limitations for tort claims: “Under the discovery rule, a cause of action does not accrue until the plaintiff knows or with reasonable diligence should know the facts underlying the cause. The rationale offered for the discovery rule is that it is unjust to deprive a plaintiff of a cause of action before the plaintiff has a reasonable basis for believing that a claim exists.”). *Id.* See also § 56:31. *Jurisdictions admitting testimony based on repressed-then-restored memory*, 7 Jones on Evidence § 56:31.

7 *Shanley*, 919 N.E.2d at 1259.

8 *Franklin v. Duncan*, 884 F. Supp. 1435, 1438 (N.D. Cal.), aff’d, 70 F.3d 75 (9th Cir. 1995).

9 *Id.*

10 In *Franklin v. Duncan*, the appellant petitioned for a writ of habeas corpus after being convicted of first-degree murder in relation to the murder of his daughter’s childhood friend nearly twenty-years following the slaying. *Id.* The conviction in this case was based largely on the defendant’s daughter recovering the repressed memory of witnessing her father murder her childhood friend. *Id.* Though the court upheld the admissibility of such testimony, it granted the appellant’s writ of habeas corpus, holding that the prosecuting attorney violated the appellant’s Fifth and Sixth Amendment rights on grounds unrelated to the analysis of dissociative amnesia. *Id.*
and is then tested as to credibility by the time-honored procedures of the adversary system. Admissibility of the memory is but the first step; it does not establish that the memory is worthy of belief. In this regard mental health experts will undoubtedly, as they must, continue their debate on whether or not the “recovered memory” phenomenon exists, but they can never establish whether or not the asserted memory is true. That must be a function of the trial process.11

The analytical process promulgated in Franklin was definitively applied by the Massachusetts Supreme Judicial Court in 2010, in Commonwealth v. Shanley,12 where the court held expert witness testimony supporting the validity of dissociative amnesia admissible under the two-prong Frye13 and Lanigan14 standard due to the nature of the debate among the relevant scientific community.15 The court in Shanley upheld the lower court’s finding that expert witness testimony on recovered repressed memories and dissociative amnesia was sufficiently reliable to support its admission in a criminal sexual abuse case brought nearly twenty years following the cause of action.16 The court

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11 Id. (holding further: “[b]y definition, trials are based on memories of the past. The recognition that memory grows dim with the passage of time is part and parcel of the trial system. Jurors are instructed that in assessing credibility they are to consider the ability of the witness to remember the event with the implicit assumption that asserted memories of events long past must be subject to rigorous scrutiny. From the common sense perspective of the trial process, then, a memory which does not even exist for a long passage of time and then is “recovered” must be at least subject to that same rigorous scrutiny. This case, then, may be described as a “recovered memory” case, but in reality it is a “memory” case like all others. After direct and cross examination, after consideration of extrinsic evidence that tends to corroborate or to contradict the memory, the focus must be on the credibility, the believability, the truth of the asserted memory. More specifically, from the perspective of this reviewing Court, the focus must be on the test of the credibility of the asserted memory which was conducted in the trial itself. Was it fair? Was it, or was it not, tainted by impermissible violation of Constitutional principles?”). Id.

12 Shanley, 919 N.E.2d at 1260.

13 Frye v. United States, 293 F. 1013 (D.C. Cir. 1923).


15 In Com. v. Lanigan, the court urged the significance of the standard established in Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993), where the Supreme Court held the standard for determining the validity of scientific testimony to be based on numerous factors, most notably, the changing opinions in the scientific community. Id.

16 Shanley, 919 N.E.2d at 1259.
justified its ruling based on the testimony’s general acceptance in the scientific community and supporting case studies.17

Interestingly, the Supreme Court of North Carolina recognized a means to introduce evidence arising from the recovery of a repressed memory without the introduction of expert witness testimony.18 In State v. King,19 the court discussed the conflicting opinions between two professors of psychiatry at Harvard Medical School, both qualified as experts in the subject of psychiatry, specializing in repressed memories.20 As the court noted, “they disagree about almost everything.”21

Although the court upheld the trial court’s suppression of expert testimony relating to dissociative amnesia or repressed memories, it established a method to introduce testimony concerning recovered repressed memories without the requisite expert witness testimony.22 Thus, the court in King held that lay witness testimony relating to alleged recovered memories could be properly admitted into evidence as long as it does not violate any other statute or applicable rule of evidence.23 This decision demonstrates the difficulties in evaluating the legitimacy of recovered repressed memories due to contradictory opinions among leading experts specializing in the phenomenon and the consequent uncertainty.24 Furthermore, this evidentiary loophole creates a problematic standard by which future courts may circumvent the necessity of expert witness testimony.25

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17 Id.
18 King, at 733 S.E.2d at 536.
19 Id.
20 Id.
21 The defendant offered the testimony of Harrison G. Pope, Jr., M.D. and the state offered the testimony of Dr. Chu; both experts discussed the nature and reliability of repressed memories while ultimately disagreeing as to whether these memories are sufficiently reliable as to be admissible in a criminal proceeding. Id. at 537.
22 King, 733 S.E.2d, at 535-36 (holding “. . .[a]lthough we affirm the holding of the Court of Appeals majority that the trial court properly granted defendant’s motion, we disavow the portion of the opinion that, relying on an earlier opinion of that court, requires expert testimony always to accompany the testimony of a lay witness in cases involving allegedly recovered memories.”). Id.
23 Id. at 542.
24 Id.
25 Id. at 541 (“. . . holding, we stress that we are reviewing the evidence presented and the order entered in this case only. We promulgate here no general rule regarding the admissibility or reliability of repressed memory evidence under either Rule 403 or Rule 702. As the trial judge himself noted, scientific progress is “rapid and fluid.” Advances in the area of repressed memory are possible, if not likely. . .”). Id.
Following this preliminary discussion of the relevant evidentiary standards, the third section of this Note will analyze the inherent fallibility of human memory, as it affects the reliability of courtroom testimony. The focus will be on determining whether an individual, most frequently a child, may repress traumatic events from his or her awareness and continue to discuss the possible manifestation of false memories and how an individual can wholeheartedly believe a deceptive memory of a traumatic experience. The discussion will then consider whether such memories should be admissible, as supported by expert witness testimony, in criminal proceedings. The fourth section of this Note will examine the notion of implanted memories and the questionable therapeutic methods implemented to solicit the phenomenon. Finally, this Note will conclude with an argument urging a careful and critical approach when considering the weight and sufficiency of relevant factors in determining the credibility of scientific evidence as promulgated in Daubert v. Merrell Dow Pharm., Inc.26

II. COMMON LAW & STATUTORY BACKGROUND REGARDING THE ADMISSIBILITY OF SCIENTIFIC EVIDENCE

In order to assess the admission of expert witness testimony supporting the validity of recovered memories and dissociative amnesia, it is important to understand the procedural history regarding the introduction of scientific evidence.

A. Frye: The Strict “General Acceptance Rule”

Half a century prior to the enactment of the Federal Rules of Evidence, a strict standard for the admission of expert testimony accompanying scientific evidence was precedent.27 In Frye v. United States,28 the Court of Appeals for the District of Columbia upheld the

26 In Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993), the Court promulgated the numerous factors courts should consider when determining the admissibility of scientific evidence. These standards include: (1) whether the expert’s theory and methodology can be or have been tested; (2) whether the expert’s theory and methodology have been subjected to peer-reviewed or publication; (3) the known or potential error rates for a particular technique; (4) any standards and controls applicable to the science; and (5) the degree of acceptance in the relevant scientific or expert community. Id.


28 Frye v. United States, 293 F. 1013 (D.C. Cir. 1923).
lower court’s decision to deny the appellant’s offering of expert witness testimony concerning the outcome of a lie-detector test performed on the appellant.29 The court announced what is currently referred to as the strict “general acceptance” rule when determining the credibility and resulting admissibility of expert witness testimony relating to the introduction of scientific or otherwise technical or complex forms of evidence.30 Currently, the narrow standard is still applied in nine jurisdictions across the United States.31 This evidentiary standard may be found in an often-cited passage that previously served as precedent:

Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.32

Under Frye, expert witness testimony based on one or more scientific theories or methodologies is admissible only if it is generally accepted as credible in the applicable scientific community.33 This community encompasses individuals with the “special experience or knowledge” necessary for the formation of a meaningful opinion on the “science, art, or trade.”34 The general acceptance standard promulgated in Frye embeds a strict burden on the proponent of new or controversial scientific methodologies in the context of expert witness

29 Id. at 1013.
30 “Under the Frye ‘general acceptance’ test, scientific evidence is admissible at trial only if the methodology or scientific principle upon which the opinion is based is sufficiently established to have gained general acceptance in the particular field in which it belongs; “general acceptance” does not mean universal acceptance and it does not require that the methodology in question be accepted by unanimity, consensus, or even a majority of experts, but rather means that the underlying method used to generate an expert’s opinion is reasonably relied upon by experts in the relevant field.” See N. Tr. Co. v. Burandt & Armbrust, LLP, 403 Ill. App. 3d 260, 933 N.E.2d 432 (2010).
31 1 Expert Witness Checklists § 1:301 (3d ed.)
32 Frye 293 F. at 1014.
33 Id. at 1013.
34 Id.
Accordingly, under Frye, the admissibility of scientific testimony is based solely on the predominant opinion within the relevant specified scientific community, allowing for a uniform standard in permitting scientific-based expert testimony. Consequently, under Frye, the standard of review in permitting such testimony is strict. Nevertheless, such an unequivocal standard allows for certain application and predictable results. Therefore, the rule promulgated in Frye entrusts the relevant scientific community with the task of ruling on the merits of novel concepts, research, and diagnoses, further safeguarding the trustworthiness of such evidence when admitted by means of expert witness testimony.

Although once the prominent authority in the admission of expert witness testimony, currently, fewer than ten states apply the Frye standard when determining whether or not it should allow an expert witness to testify. This is because of the evolving nature of scientific testimony and the need to evaluate the merits of each novel scientific methodology or theory, individually, within the context of the specific case at bar. Though most jurisdictions have broadened their standards regarding expert witness testimony by employing a rule that mirrors the Federal Rules of Evidence, precisely nine states still apply some version of the standard established in Frye. These jurisdictions include:

(1) Florida, where Frye is only applicable when an expert’s testimony is related to a breaking or novel scientific theory or method.

35 The rule promulgated in Daubert henceforth made general acceptance within the relevant scientific community, merely, one of many factors in determining the admissibility of novel scientific or otherwise technical testimony. See Dwight A. Kern & Robert J. Kenney, Jr., Frye Meets Parker and the Effect on Toxic Exposure Cases, N.Y. St. B.J., March/April 2007, at 26-27. The more flexible Daubert test demoted the Frye “general acceptance” standard to just one of several admissibility components for expert testimony. Id.
36 1 Expert Witness Checklists § 1:301 (3d ed.)
37 Kern, supra note 35.
38 Standard for Excluding Expert Testimony: 50 State Survey, Practical Law Checklist w-017-6355. See also notes 36-44.
(2) Illinois, where Frye is applied in a uniform manner when determining the admissibility of expert witness testimony.41

(3) Iowa, which enforces its own codified rule in regard to expert witnesses, pursuant to Iowa Rule of Evidence 702 which governs expert testimony and requires:
(a) all evidence to be relevant to the case at issue,
(b) the expert’s knowledge to be based on scientific, specialized, or technique knowledge, for the purpose of assisting the trier of fact, and
(c) the expert must possess the required skills, knowledge, training, experience, or education to effectively assist the trier of fact; however, when testimony relates to any novel or complex scientific theories or methodologies, the state of Iowa requires the testimony to meet the stricter burden promulgated in Frye.42

(4) Maryland established a similar rule to Frye, the Frye-Reed standard, which allows expert testimony only when the expert is offered with the purpose of bridging “the analytical gap between accepted science and the expert’s ultimate conclusions.”43

(5) Minnesota explicitly rejected the standard established in Daubert, by conversely applying a variation of Frye, the Frye-Mack standard requiring all novel scientific evidence to be found generally acceptable within the scientific community before allowing such testimony.44

(6) New Jersey applies a broad and malleable standard, which mirrors the Federal Rules and Daubert, in all

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41 ILL. R. EVID. 702; see also In re Commitment of Simons, 213 Ill. 2d 523, 529-30 (2004); see also Standard for Excluding Expert Testimony: 50 State Survey, Practical Law Checklist w-017-6355.


44 Goeb v. Tharaldson, 614 N.W.2d 800, 814 (Minn. 2000); MINN. R. EVID. 702; see also Doe v. Archdiocese of St. Paul, 817 N.W.2d 150, 156 (Minn. 2012).
civil cases, and by contrast, applies the rigid Frye standard in all criminal proceedings.45

(7) New York remains a leader in the application of the Frye “general acceptance” rule, in which the court’s focus is on whether the novel methodologies, hypotheses, or theories are sufficiently accepted within the scientific community to be admissible in court.46

(8) In Pennsylvania, courts employ a Frye analysis whenever expert testimony is held to be novel or controversial, or when there is a genuine question as to whether the expert is applying the methodology, at issue, in a conventional manner.47

(9) Converse to the Iowa rule, Utah enacted Utah Rule of Evidence 702, which, unlike Iowa Rule of Evidence 702, does not mirror or adopt Federal Rule of Evidence 702, and does not require expert testimony to be reliable, based on sufficient quantifiable facts, research, or data, nor to have been applied to the specific facts of the case at issue; instead, Utah’s standard in permitting expert testimony embodies a Frye-like analysis by holding general acceptance within the relevant scientific community to be synonymous with the satisfaction of the three preceding considerations and their application to the specific facts of the case at issue.48

45 State v. Cassidy, 2018 WL 6002926, *6 (N.J. Nov. 13, 2018) (Although standards for expert testimony in civil cases are broadened under a Daubert analysis, the court held Frye to remain the standard for admissibility in all criminal proceedings); In re Accutane Litig., 234 N.J. 340, 397-98 (2018) (applying the factors enumerated in Daubert for civil proceedings but reiterating the court’s reluctance to broaden the standard to the context of criminal cases); N.J. R. EVID. 702.

46 Cornell v. 360 W. 51st St. Realty, LLC, 22 N.Y.3d 762, 762 (2014) (holding “the particular procedure need not be unanimously indorsed by scientists rather than generally acceptable as reliable”).

47 Betz v. Pneumo Abex LLC, 44 A.3d 27, 53, 58 (Pa. 2012); Pa. R.E. 702; see also Grady v. Frito-Lay, Inc., 839 A.2d 1038, 1044 (Pa. 2003) (When Frye is inapplicable, a proponent is only required to demonstrate that the witness has “a reasonable pretension to specialized knowledge of the subject at issue.”) Id. at 52.

48 Utah R. EVID. 702 and Advisory Committee Notes; see also Eskelson ex rel. Eskelson v. Davis Hosp. and Med. Ctr., 242 P.3d 762, 766 (Utah 2010). See generally for a continuously updated state-by-state overview of the standards governing the admissibility of expert witness testimony at trial, and more specifically, whether a jurisdiction applies the Frye standard, Federal standard, Daubert standard, or its own unique ruling in allowing expert witness testimony,
B. The Federal Rules of Evidence 702: Easing the Burden that is “General Acceptance”

The strict standard established in *Frye* governed the admission of scientific, or otherwise specialized, expert witness testimony for fifty years following its promulgation, until the enactment of the Federal Rules of Evidence in 1975. Specifically, Federal Rule 702, Testimony by Expert Witnesses, superseded the previously applied *Frye* standard, replacing its authority within federal court. The unyielding and unequivocal “general acceptance” approach was replaced by a broadened, malleable standard, allowing for the introduction of novel or contested scientific methodologies and opinions. The federal rule outlines the necessary elements to be satisfied in order for an expert witness to testify in federal court. Federal Rule 702 reads as follows:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

In general, the purpose of the rule “... is simply to ensure that a fact-finder is presented with reliable and relevant evidence, not flawless evidence.” Accordingly, Rule 702(d) must be analyzed with

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see *Standard for Excluding Expert Testimony: 50 State Survey, Practical Law Checklist w-017-6355.*

49 *Standard for Excluding Expert Testimony: 50 State Survey, Practical Law Checklist w-017-6355.*

50 *Id.*

51 *Id. See also* Joseph A. Spadaro, *An Elusive Search for the Truth: The Admissibility of Repressed and Recovered Memories in Light of Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 30 *Conn. L. Rev.* 1147, 1153 (1998) (discussing Daubert’s replacement of the *Frye* standard in federal court, “[t]he opinion in *Daubert* was unanimous. The *Frye* test, as a standard for resolving federal admissibility questions, was held to be inappropriate. Because *Frye’s* general acceptance test could not be found in either the language or the legislative history of Federal Rule of Evidence 702, the Court held that this test does not survive Rule 702’s enactment.”).

52 FED. R. EVID. 702 (2019).

some degree of flexibility. This is necessary to encompass the multitude of circumstances and situations that may reasonably and foreseeably be presented, and to preserve the distinct relationship between the jury as the fact-finder and the judge as the “gatekeeper.” The judge holds the crucial obligation of safeguarding the validity and relevance of evidence offered to the jury. Inevitably, as scientific research evolved, the standards for its admission in court broadened, creating a shade of gray in an area that was once unambiguous and indisputable. This was first illustrated by the adoption of Federal Rule of Evidence 702, Testimony by Expert Witnesses, and further outlined by the United States Supreme Court in Daubert v. Merrell Dow Pharm., Inc. Daubert crafted numerous factors to aid the trial court in determining the validity of scientific testimony and established criteria by which the trial court may fulfill its role as a “gatekeeper” in the admission of expert testimony based on a novel scientific methodology or theory.

C. Daubert: Constructing Factors to Determine the Legitimacy of Expert Witness Testimony Based upon Controversial or Novel Scientific Evidence

While the legal system ordinarily does not assess the pace of evolving scientific standards in substance or practice, the holdings in Daubert make the admission of novel or controversial scientific theories more probable. The factors promulgated in the Daubert decision reflect a deliberate response to rapidly expanding scientific methods; however, the broadened parameters of the standard allow for a wide array of judicial discretion. The Supreme Court rejected the concept of a strict test for courts to apply in determining the admissibility of proffered expert witness testimony, under Federal Rule of Evidence

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54 Id.
56 Daubert, 509 U.S at 597 (holding that “general acceptance” is no longer a precondition to admission of scientific based expert testimony at trial and recognizing “. . . in practice, a gatekeeping role for the judge, no matter how flexible, inevitably on occasion will prevent the jury from learning of authentic insights and innovations. That, nevertheless, is the balance that is struck by Rules of Evidence designed not for the exhaustive search for cosmic understanding but for the particularized resolution of legal disputes.”) Id.
58 Id.
702, and instead established a flexible standard completely converse to the prior *Frye* “general acceptance” rule.\(^{59}\) The factors promulgated by the Supreme Court in *Daubert* include: (1) whether the expert has a theory and methodology that has the ability to be tested, and if it has in fact been tested; (2) whether the expert has a theory and methodology that has been the subject of research, peer-review, case study, and publication; (3) the recognized or prospective error rates for a specific technique; (4) any principles and controls appropriate to the science; and (5) the level of acceptance in the pertinent scientific community.\(^{60}\)

Though post-*Daubert* evidentiary standards have equated the case with the aforementioned factors,\(^{61}\) the Court expressed a reluctance to enumerate any indisputable standard in reviewing the validity of scientific-based expert witness testimony.\(^{62}\) In a majority decision delivered by Justice Blackmun, the Court urged against any strict standard of review when determining the admissibility of novel or controversial scientific evidence:

> Faced with a proffer of expert scientific testimony, then, the trial judge must determine at the outset, pursuant to Rule 104(a), whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue. This entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue. We are confident that federal judges possess the capacity to undertake this review. Many factors will bear on the inquiry, and we do not presume to set out a definitive checklist or test. But some general observations are appropriate.\(^{63}\)

\(^{59}\) *Id*.

\(^{60}\) *Daubert*, 509 U.S. at 593-95.

\(^{61}\) In determining whether a distinction between “scientific” and “technical” expert witness testimony is necessary in the application of *Daubert*, the Supreme Court of the United States, in *Kumho Tire Co., Ltd. v. Carmichael*, held that “*Daubert’s* general principles apply to the expert matters described in Rule 702. The Rule, in respect to all such matters, “establishes a standard of evidentiary reliability.” *Id.* at 149.

\(^{62}\) *Daubert*, 509 U.S. at 592-93.

\(^{63}\) *Id.* (citing Federal Rule of Evidence 104(a) for authority, “the court must decide any preliminary question about whether a witness is qualified, a privilege exists, or evidence is admissible. In so deciding, the court is not bound by evidence rules, except those on privilege.”).
The Court in *Daubert* articulated a trust that the trial court will ensure the relevance and reliability of scientific based expert witness testimony. Nonetheless, the inherent complexity at the foundation of novel scientific testimony results in a heightened probability of confusing the jury. Additionally, the flexibility of *Daubert* provides for extensive inconsistency in hired expert witnesses testifying to the validity of some novel scientific theory or methodology. The combination of *Daubert*’s malleability and the shifting nature of novel scientific-testimony constructs an environment where expert witness testimony can be founded upon pseudoscience lacking the sufficient level of support with the appropriate relevant scientific community or degree of quantifiable facts to be permissible in judicial proceedings.

The essence of this evidentiary standard, applied when deciding the admissibility of novel or controversial scientific evidence, reflects the necessity of peer-review among the relevant specified

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65 See Pullins v. Stihl Inc., No. 03-5343, 2006 WL 1390586, at *3, *5 (E.D. Pa. May 19, 2006) (involving a product liability case where the plaintiff alleged a deficiency in a machine to cut flooring failed to shut off accurately, which resulted in the plaintiff’s leg injury. *Id*, at *1*. The expert witness for the plaintiff constructed and videotaped two distinguishable examinations encompassing approximately twenty minutes that corroborated the plaintiff’s product liability allegations. *Id* at *3*. The first examination consisted of observing the machine “when strapped between two desk chairs in the plaintiff’s counsel’s conference room.” *Id*. The following examination consisted of “observing the machine when placed on a cord in the expert’s driveway.” *Id*. The expert, who constructed the entire project, testified that he could not recall the model (the machine was available in a variety of models) the plaintiff maneuvered and furthermore, caused the plaintiff’s alleged injury, or explain the various details of his expert testing and standards. *Id* at *3*. The court held that the expert’s methods and resulting conclusions “can only be described as exactly the kind of ‘junk science’ that *Daubert* sought to purge from the federal courts.” *Id*. The court, entrusted with the duty of being the “gatekeeper,” disallowed the expert’s aforementioned faulty testimony, as well as that of another expert who based his findings solely on the same unreliable tests. *Id* at *4-5*;

See also supra, note 21 (referring to the holding in *Watkins v. Telsmith, Inc.*, 121 F.3d 984 (5th Cir. 1997), “the Fifth Circuit reviewed other circuit opinions as to whether *Daubert* is limited to novel scientific techniques or mythologies, and agreeing with the rationale employed by the Seventh and Eighth Circuits, found the Daubert ‘criteria equally applicable to technical, or other specialized knowledge.’ According to the Fifth Circuit, ‘whether the expert would opine on economic valuation, advertising psychology, or engineering, application of the Daubert factors is germane to evaluating whether the expert is a hired gun or a person whose opinion in the courtroom will withstand the same scrutiny that it would among his professional peers.’”). *Id*.

66 King, 733 S.E.2d at 536 (arguing against the broadened standard of admissibility under *Daubert*, “*Daubert* was ostensibly to assist with the ongoing controversy over “junk science,” “hired gun experts,” etc. The opinion, however, arguably contains few bright line tests that most experts pass. On the other hand, it does include plenty of quotable language to support almost any position.).
scientific community when analyzing complex scientific theories and methodologies.67 However, it is crucial to note that scientific-based testimony is not the only evidentiary category that should be subject to rigorous standards of review to ensure reliability, relevance, and credibility.68 Even the most simple human perceptions can be deceptive and complexed.

III. THE INHERENT FAULTS OF THE HUMAN MIND’S ABILITY TO PROCESS EVENTS & THE RESULTING EFFECT ON THE RELIABILITY OF PERCEPTION, CONSTRUCTION & FALLACIES

Dr. Elizabeth Loftus is considered an expert in the study of human memories and famous for her research in the 1970s and 1980s, which analyzed the reliability of eyewitness testimony.69 The research Dr. Loftus conducted on human memory and its distortion assessed the reliability of eyewitness testimony in response to a constructed simulation of a crime scene or accident by exposing the participants to misinformation. The studies included leading questions or accounts of the event by media outlets to determine whether the additional stimulus affected the participants’ ability to accurately recall the fabricated event.70 Dr. Loftus described the process of the human memory as:

Involving the construction or reconstruction of experiences where a person may blend later occurring details

67 Daubert, 509 U.S. at 593 (holding peer review to be a “pertinent consideration,” stating that some theories are “too particular, too new, or of too limited interest to be published. But submission to the scrutiny of the scientific community is a component of ‘good science,’ in part because it increases the likelihood that substantive flaws in methodology will be detected.”)

68 Kern, supra note 35.

69 Dr. Elizabeth Loftus is a distinguished professor specializing in cognitive psychology, human memory, psychology and law. She received her Ph.D. from Stanford University, and currently teaches at UC Irvine. Anne March & Greta Lorge, How the Truth Gets Twisted: Psychologist Elizabeth Loftus Has Devoted Her Career to Proving that Memories Don’t Just Fade, They Can Also Change. STANFORD MAGAZINE. (2012), https://webfiles.uci.edu/eloftus/Marsh_TwistedTruth_Loftus_StanfordMagNov-Dec2012.PDF?uniq=jd430q.

70 Shanley, 919 N.E.2d at 1262 (discussing the continued research conducted by Dr. Loftus in the 1990s: “She further elaborated that her research in the 1990’s expanded the theories of misinformation to see whether people could be implanted with entirely false memories, for example, by making a person think that he or she had been lost in a shopping mall as a child. She explained that one quarter of the persons involved in this experiment believed in the false memory of being lost.”).
into the memory of an event. She explained that many things could affect the accuracy of a memory, including factors related to the perception of an event as it occurs, such as lighting and distance and the exposure to post event information such as leading questions or media coverage, which can distort or supplement a memory. Dr. Loftus also explained that the passage of time made memories weaker and thus more vulnerable to post event contamination. She explained that a false memory is a false belief accompanied by sensory detail.\(^{71}\)

Additionally, Dr. Loftus has testified that it is “virtually impossible without independent corroboration” to distinguish an accurate memory from a false memory.\(^{72}\) This illustrates two predominant concerns in allowing expert testimony supporting the validity of false memories. First, the inability to definitively, or even presumptively, determine whether or not a memory is truthful or deceptive and second, how an individual can sincerely believe that a false memory is an accurate recollection to a perceived event.\(^{73}\)

In order to properly analyze the faults innate to the human mind’s process of perceiving and constructing memories, it is essential to recognize that the human memory can be broken down into four distinct stages: encoding, consolidation, storage, and retrieval.\(^{74}\) Memory repression or dissociative amnesia is a wholly distinct cognitive process, completely removed from the mind’s habitual cognitive process.\(^{75}\) The process of repressing a once conscious memory allegedly involves “the forcing of ideas, perceptions or memories associated

\(^{71}\) Id.

\(^{72}\) Id.

\(^{73}\) Id.


\(^{75}\) See Linda M. Williams, *What Does it Mean to Forget Child Sexual Abuse? A Reply to Loftus, Garry, and Feldman,* 62 J. OF CONSULTING AND CLINICAL PSYCHOL. 1182, 1183 (1994) (“Memories of sexual abuse may be encoded, stored, and retrieved differently from other memories, especially when the abuse occurs under circumstances of high arousal, terror, extreme ambivalence, where escape is impossible, or when the meaning of the abuse could be devastating if confronted.”).
with psychic trauma from conscious awareness into the uncon
scious.”

A. Understanding the Phenomenon Known as Repressed Memory Syndrome or Dissociative Amnesia

Given the nature of the evidence often derived from a repressed memory, it is fitting that Sigmund Freud proposed the first documented theory attempting to rationalize the enigmatic cognitive process that is dissociative amnesia. Freud theorized that an individual represses the memory of an event as a “defense mechanism that serves to repudiate or suppress emotions, needs, feelings or intentions in order to prevent psychic pain.” Moreover, Freud argued that the human mind’s process of repressing a traumatic event from the individual’s apparent consciousness is comparable to a “layer by layer excavation of a buried city, that should proceed slowly.” The American Psychiatric Association (hereinafter “APA”) first recognized the cognitive process underlying repressed memory syndrome by the medical term,

76 Stan Abrams, False Memory Syndrome v. Total Repression, 23 J. PSYCHIATRY & L. 283, 283 (1995); See also Doe v. Roe, 955 F.2d, See Shanley, 919 N.E.2d at 957 (defining repressed memory or dissociative amnesia as “a psychological defense mechanism that protects the individual from being confronted with the memory of an event that is too traumatic to cope with”); Bremner et al., at 71-72 (“In dissociative amnesia, which can be associated with exposure to psychological trauma, information is not available to conscious awareness for an extended period of time, although it may have an influence on behavior.”). See also Laura Johnson, Litigating Nightmares: Repressed Memories of Childhood Sexual Abuse, 51 S.C.L. REV. 939, 942 (2000).

77 R. Joseph, The Neurology of Traumatic “Dissociative” Amnesia: Commentary and Literature Review, 23 CHILD ABUSE & NEGLECT 715, 721 (1999) (While Joseph noted that most cases of dissociative amnesia occur in cases involving child sexual abuse, he nevertheless emphasized the importance in acknowledging that “[t]raumatic dissociative amnesia, however, is not limited to children, but includes, “hardened soldiers,” as well as, presumably, normal adults.”).


79 Id. at 51. However, Freud later rejected this detailed theory about repression, instead, arguing that dissociative amnesia involved “sexual fantasies that engaged adult hysteria” and other scientists and researchers produced studies that “support Freud’s originally hypothesized connection between child sexual abuse, no recall of the abuse, and high levels of psychological symptoms in adulthood, at least in clinical samples.” See Linda M. Williams, Recall of Childhood Trauma: A Prospective Study of Women’s Memories of Child Sexual Abuse, 62 J. OF CONSULTING AND CLINICAL PSYCHOL. 1167, 1168 (1994).
dissociative amnesia in the fourth edition of The Diagnostic and Statistical Manual of Mental Disorders, published in 1994:

The essential feature of Dissociate Amnesia is an inability to recall important personal information, usually of a traumatic or stressful nature, that is too extensive to be explained by normal forgetfulness. . . This disorder involves a reversible memory impairment in which memories of personal experience cannot be retrieved in a verbal form (or, if temporarily retrieved, cannot be wholly retained in consciousness. . .)⁸¹

The controversy surrounding dissociative amnesia mostly involves cases concerning memories of later recalled childhood sexual abuse.⁸² Although experts in the field of psychiatry have agreed that the trauma inflicted by childhood sexual abuse may relate to the human mind’s ability to repress the memory of this traumatic event, these same experts debate the reliability of such memories in the context of legal proceedings.⁸³

B. Child Sexual Abuse Syndrome or Child Sexual Abuse Accommodation Syndrome

Repressed memories are most frequently the products of sexual abuse occurring at a young age.⁸⁴ Child Sexual Abuse Syndrome or Child Sexual Abuse Accommodation Syndrome was developed in the mid-1980s to explain the behaviors of child sexual abuse victims.⁸⁵ Initially introduced as a “theoretical model” in 1982, Child Sexual Abuse Syndrome consisted of five behavioral phases observed in children who have been the victim of sexual abuse: (1) non-sexual engagement by the offender; (2) sexual activity occurs; (3) the offender uses rewards or threats to keep the child quiet; (4) disclosure by the

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⁸¹ The Diagnostic and Statistical Manual of Mental Disorders, 478 (4th ed. 1994).
⁸² Gary M. Ernsdorff & Elizabeth F. Loftus, Let Sleeping Memories Lie? Words of Caution About Tolling the Statute of Limitations in Cases of Memory Repression, 84 J. CRIM. L. & CRIMINOLOGY 129, 135 (1993) (In acknowledging the correlation between childhood sexual abuse and dissociative amnesia, Loftus and Ernsdorff concluded that: “it is widely accepted by clinicians that the particulars of the trauma are especially conducive to repression of memory of the incident.”).
⁸³ Id.
⁸⁴ Id.
child; and (5) suppression by the child. The following year, Child Sexual Abuse Accommodation Syndrome was introduced to detail the same behavioral patterns in abused children. This also consisted of five phases: “(1) secrecy; (2) helplessness; (3) entrapment and accommodation; (4) delayed, conflicted, and unconvincing disclosure; and (5) retraction.” Critically, the psychiatrists who developed these behavioral concepts cautioned that they are not to be used as “diagnostic tools.” Moreover, both theoretical models are not to be used as uniform determinates as to whether a child was the victim of sexual abuse. Converse to the abovementioned warnings, the factors enunciated by both psychological theories were broadly applied leading to erroneous and troubling allegations of child sexual abuse.

The application and prominence of Child Sexual Abuse Syndrome (hereinafter “CSAS”) or Child Sexual Abuse Accommodation Syndrome (hereinafter “CSAAS”) reached its peak in the late 1980s through the early 1990s, amidst what is presently considered “the satanic panic:” a period of sensationalized nationwide hysteria that dominated American news and media outlets. In 1988, New Jersey children’s daycare teacher, Margaret Kelly Michaels, was falsely convicted of 115 counts of sexual abuse committed against a child on twenty of her students, none of which she committed. Michaels was sentenced to forty-seven years in prison.

86 Dr. Suzanne Sgroi introduced this concept in 1982 in her book, Handbook of Clinical Intervention in Child Sexual Abuse. Id.
87 Dr. Rowland Summit introduced this analogous theory in 1983 in his article The Child Sexual Abuse Accommodation Syndrome, 7 CHILD ABUSE & NEGLECT 177, 181 (1983). Id.
88 See Avi Springer & Patrick Clark, Challenging Validation Testimony Through Frye Hearings (2015) (detailing how Dr. Summit and Dr. Sgroi “qualified their theories in important ways”); Suzanne M. Sgroi, Handbook of Clinical Intervention in Child Sexual Abuse 12-36, at 78 (1982) (“Behavioral indicators of child sexual abuse may be helpful but are rarely conclusive.”); Mary Meinig, Profile on Roland Summit, 1 VIOLENCE UPDATE 6, 6 (1991) (“The accommodation syndrome is neither an illness or a diagnosis, and it can’t be used to measure whether or not a child has been sexually abused.”).
89 Selver, supra note 85.
91 Selver, supra note 85.
92 Id.
An in-depth article about the trial in Harper’s Magazine explained that “[p]erhaps the most important witness for the prosecution” was a psychologist, acting as validator, who testified that each of the twenty children suffered from CSAAS. This testimony was offered as proof that Ms. Kelly Michaels sexually abused them. According to the psychologist, children who repeatedly denied abuse were in Dr. Sgroi’s “suppression phase,” and children who showed affection toward Ms. Kelly Michaels were in Dr. Sgroi’s “engagement phase.”

The malleability of the five phases indicative of CAAS or CSAAS constructs a broad application with the ability to conform to the behavior of nearly any child. The supporting expert witness testimony convicting Michaels illustrates this flexibility. More importantly, it demonstrates the overall weight and power of expert witness testimony in a trial concerning child sexual abuse. Specifically, the supporting expert testimony worked to verify accusations that can only be described as extraordinary, including allegations that Michaels: “raped [the] children with silverware, wooden spoons, Legos and light bulbs, that she played ‘Jingle Bells’ on the piano while naked, taken [sic] their temperature rectally and forced them to eat excrement off the floor.”

Margaret Kelly Michaels’ conviction was overruled in 1992 by a New Jersey State appellate court. The court justified its ruling by the state’s improper use of expert testimony as validation and substantive evidence against Michaels to prove that the children involved were, in fact, victims of sexual abuse. The children’s disturbing claims, described earlier as “extraordinary,” were falsely verified by...
the use of expert testimony.\textsuperscript{100} Unfortunately, this case was not unique and was merely one of the many cases that involved improper convictions based on false claims of child sexual abuse, further demonstrating the “satanic panic” hysteria which characterized the late eighties proceeding into the early nineties.\textsuperscript{101} Notably, this included an “investigation in Wenatchee, Washington, in which forty-three adults were arrested on more than twenty-nine thousand charges of sex abuse involving sixty-eight children” and the unsettling number of wrongful convictions, later overturned, which laid in the wake of the national media craze.\textsuperscript{102}

\textsuperscript{100} The Court in \textit{State v. Michaels}, discussed the troubles facing the scientific community, specifically in regard to professionals within the psychiatric community asked to testify in criminal child sexual abuse cases. \textit{Id.} at 500. The court notes opinions within the psychiatric community that convey the belief that therapists, psychologists, and other mental health professionals should not disclose their belief as to whether the alleged abuse in fact occurred, arguing that absolute determinations of guilt are out of the realm of psychological opinion. \textit{Id.}; Marian D. Hall, \textit{The Role of Psychologists As Experts in Cases Involving Allegations of Child Sexual Abuse}, 23 Fam. L.Q. 451, 462 (1989) (explaining the troubles facing the scientific community with regards to expert testimony in cases involving allegations of child sexual abuse:

“[i]t would appear that the prospect of designing checklists, inventories, and rating-scales to provide objective measures of abusive behavior, its antecedents, correlates, and consequences, holds promise of yielding information that may be useful both in individual and epidemiological data gathering. Designing and validating such measures, however, depends on theory and research that is currently the focus of much study and controversy. Nowhere is that more evident than in the scientific and legal arguments about whether behaviors exist that are unique to sexually abused children and whether such behaviors fall into patterns that suggest a typical ‘profile’” or ‘syndrome’ for the child sexual abuse victim. Children’s reactions to sexual abuse vary dramatically and, to date, the methodological problems involved in compiling results of the scores of diverse studies have led only to lists of very general symptoms, which occur to some extent in all children, and are especially prevalent in children who suffer from various forms of emotional trauma, separation, or loss of security.”). \textit{Id.}


“The constant media attention was crucial to how the cases were perceived by the public and professionals. These highly publicized cases raised public awareness about child sex-abuse and, more generally, the child care industry. In response to the wave of reported child abuse incidents, numerous nonprofit organizations stepped up child abuse education and prevention programs and national attention was focused on the need for quality, affordable child care. But raising public awareness through unrelenting news coverage of notorious crimes also alarms viewers and raises irrational fears. Projecting fears onto parents was done in an overt fashion at times. For example, a 1984 article in the Washington Post warned that “[t]he California child-molesting story has got to chill the heart of every parent who has left a child with a babysitter or put a child in a day-care center.” \textit{Id.}

\textsuperscript{102} See Lynn Sweet, \textit{On a Quest for Vindication}, Chi. Sun-Times, June 6, 1999, at 30 (detailing the false sexual molestation allegations made against the owner of Kids Stop and Mother Goose day care center located in the suburbs of Chicago by four young girls under her care in 1997). An analogous situation occurred in Maryland where thirteen children falsely
More recently, in 2011, the Court of Appeals of New York, in *People v. Spicola*, upheld a licensed clinical social worker’s testimony relating to CSAAS being offered to “rehabilitate the complainant’s credibility” who did not report the abuse until several years following the alleged acts. Nonetheless, the social worker emphasized that CSAAS, in spite of its name, was not a diagnosis; instead, “it describes a range of behaviors observed in cases of validated child sexual abuse.” The expert stressed that the existence or nonexistence of a particular behavior is not substantive evidence that the complainant was the victim of sexual abuse. Furthermore, the social worker was not apprised of any of the facts of the case and testified objectively to the characteristics accompanying CSAAS. Notably, the court in *Spicola* sustained the scientific validity of CSAAS, at least for the purpose for which it was offered and the defense failed to question “the empirical basis for delayed reporting.” Instead, the defense criticized the frequency of denial and recantation in cases involving CSAAS, aspects the Court of Appeals of New York held to be not at issue in the present case. However, denial, recantation and changes or fabrications in recollections are common in cases involving any early memory, especially those involving traumatic events.
The reappearance and validation of CSAAS illustrate the dangers ignited by the “satanic panic” period of media hysteria in the United States, foreshadowing the possible consequences in permitting expert witness testimony to validate criminal accusations not grounded within a proper scientific method. Furthermore, the cases which encompass this phase of media-induced fear and paranoia demonstrate the often-inconsistent nature of scientific opinions and the harmful consequences which follow the hasty application of contested psychiatric theories.110

C. Wavering Opinions Regarding the Validity of Recovered Repressed Memories Within the Relevant Scientific Community

The debate relating to recovered repressed memories or dissociative amnesia has enthralled the psychiatric community for decades.111 In 1997, two professionals in the field of memory research noted that “the recovered memories debate is the most passionately contested battle [ever] waged about the nature of human memory,” and psychiatric professionals involved in the debate found “their competence, motives, and even integrity called into question.”112 The discussion has consistently been characterized by “strong emotions and often by outright acrimony” even among professionals.113 These strong emotions were first made apparent by the inability of six experts in the field of psychiatry (three clinicians and three researchers) to agree on the validity of the phenomenon.114 The American Psychological

110 See Gerstein v. Senkowski, 426 F.3d 588, 600 (2d Cir. 2005) (quoting a leading psychologist for the conclusion that “the child sexual abuse accommodation syndrome . . . has no validity and is not regularly accepted in the scientific community”); See also Jill Birnbaum, NAT’L CTR. ON WOMEN AND FAMILY LAW, INC., Expert Testimony in Custody and Visitation Cases Involving Child Sexual Abuse 699 (1990) (“Unlike some other syndromes, such as battered women’s syndrome or rape victim’s syndrome, the child sexual abuse accommodation syndrome was not created as a diagnostic tool, and children who display signs of the syndrome may not have been abused.”).
111 Id.
113 Id.
114 This group included experts across the field of psychiatry who continued to publish differing opinions regarding the phenomenon known as dissociative amnesia or recovered
Association assembled the group in 1993 with the task of reviewing “the scientific literature on adults’ previously unrecalled memories of childhood sex abuse, and to make recommendations to the Association to inform future discourse.” Unfortunately, this task proved to be quite difficult, and the group of professionals was unable to reach a uniform consensus, failing to publish the report for which it was employed. Instead, the clinicians published their findings, as the researchers too published their differing conclusions, and each even published specific replies to the other’s publications. Seven leading scientific journals further illustrate the skepticism surrounding repressed memories and dissociative amnesia:

The American Medical Association considers recovered memories of childhood sexual abuse to be of uncertain authenticity, which should be subject to external verification. The use of recovered memories is fraught with problems of potential misapplication (American Medical Association Council on Scientific Affairs, 1995, p. 117). If memories of events have not been revisited and cognitively rehearsed in the interval between occurrence of the events and attention being paid to them some years later, it is not clear that such memories can endure, be accessible, or be reliable (Canadian Psychiatric Association, 1996, p. 305). Existing scientific evidence does not allow global statements to be made about a definite relationship between trauma and memory. The available scientific and clinical evidence does not allow accurate, inaccurate, and fabricated memories to be distinguished [from one another] in the


115 Piper, supra note 112.
116 Id.
117 Id.
118 These journals include: the American Psychiatric Association, the American Medical Association, the Canadian Psychiatric Association, the Australian Psychological Society, and the (British) Royal College of Psychiatrists. Id. at 230-31.

By the late 1990s, merely a quarter of psychiatrists polled stated they believed dissociative amnesia is supported by strong scientific evidence. Currently, skepticism surrounding the phenomenon remains high among the psychiatric community; moreover, the current emphasis of the debate focuses on the danger of false and sometimes implanted memories, leading to false allegations which the accuser wholeheartedly believes to be authentic. Notably, current experts in the field of psychiatry emphasize the human memory’s inability to flawlessly recall past events, recognizing memories to be reconstructive as opposed to reproductive. The reconstructive nature of the human memory suggests that most individuals have constructed false memories, devoid of any conscious intention, as observed by William James, more than a century ago:

> False memories are by no means rare occurrences in most of us . . . Most people probably are in doubt about certain matters ascribed to their past. They may have seen them, may have said them, done them, or they may only have dreamed or imagined they did so.

Misconceptions as to the human mind’s ability to accurately recall previously perceived events have consequently led to the implementation of retrieval methods that may be harmful or suggestive. In general, detailed and vivid memories that are emotional in nature are easier to recall and more likely to be held with the utmost confidence regardless of the recollection’s accuracy. However, memories naturally become distorted over time as an individual perceives

119 Id. at 230-31.
120 Id.
122 Id.
123 William James (1842-1910) was a psychologist and philosopher who was instrumental to the inception of the psychology department at Harvard University. For more information about William James see https://psychology.fas.harvard.edu/people/william-james.
124 Lynn, supra note 121. (citing William James, The Principles of Psychology, vol. 1 (1890)).
125 Lynn, supra note 121.
126 Id.
and stores new events into his or her mind’s limited storage space for memories:

Even in cases of emotionally compelling, so-called flashbulb memories—memories marked by a seemingly photographic quality—recollections often change substantially over time, as documented by studies of the catastrophic breakup of the space shuttle Challenger, the trial verdict of football star O J Simpson, the death of Princess Diana, and the September 11, 2001, attacks. Dekel and Bonanno conducted repeated memory assessments of survivors of the September 11th attacks who had witnessed them directly, and found considerable variation in memory reports at 7, compared with 18, months.127

Experts in the field of psychiatry note that individuals who were “resilient in the face of trauma” construct a more neutral, “benign,” recollection of the event over time, while individuals who report suffering from posttraumatic stress disorder have more stable and consistent memories.128 Though psychiatric professionals are unsure of the reasoning behind this finding, it is apparent that recollections of past events are malleable and memories become distorted as they pass through the encoding process129 on to the consolidation and storage

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128 Lynn, *supra* note 121.

stages before a memory is retrieved. A study involving U.S. veterans of the Gulf War, Operation Desert Storm observed that nearly ninety-percent of the veterans recalled different memories when questioned about the same traumatic experience after merely two years from the perceived event. As indicated by laboratory research, an individual may correspondingly recall an event to be more traumatic, bearing more emotion and disturbance with the passage of time. A study performed by experts from John Jay College of Criminal Justice reported that its participants mistakenly claimed to have witnessed twenty-six percent of the brief clips omitted from an unsettling film depicting a gruesome car accident that displayed the deaths of five adults and an infant. The study’s participants were particularly prone to falsely recall, with the sincerest confidence, the most traumatic and gruesome portions of the film.

The malleability and impressionable nature of a memory is illustrated by the unreliability of eyewitness testimony, even when the witness testifies with certainty and confidence. Moreover, suggestive techniques used during psychotherapy can falsely implant memories of complex occurrences. Consequently, individuals have falsely recalled events involving being the victim of one or more bullies, committing one or more criminal acts, riding a hot-air balloon, and being the victim of a serious animal attack. An individual’s specificity in recalling an event and the emotion he or she attaches to the memory has no bearing on its validity. Fallacies can occur during any of the mind’s numerous processes in creating, storing, and retrieving

130 The consolidation and storages stages are the brain’s process of maintaining the abovementioned “memory code” over time. Id.
131 The retrieval stage is the process of recovering stored memories. Id.
132 Lynn, supra note 121. The group of veterans were questioned about the same traumatic experience, one month after its occurrence. Id. The same group of veterans were then questioned about the same occurrence two years later. Id. It was then observed that 88% of the veterans recalled the same event differently. Id.
134 Id.
135 Id.
136 Johnson, supra note 129.
memories. During the encoding stage, an imagined occurrence may be constructed as a perceived event, thus creating a false memory. Moreover, studies demonstrate that a lack of sleep may negatively affect memory consolidation and storage. Finally, at the retrieval stage, memories may be falsely recalled when produced by certain tasks or prompts; thus, the retrieval process is especially vulnerable to the tactics employed by psychotherapists.

The recent scientific observation finding the human memory to be constructive bears strong implications for the admission of recovered repressed memories during criminal proceedings; conversely, the human mind’s incapacity to subconsciously preserve our memories flawlessly, while remaining accessible through therapeutic recovery methods, should bear equal consequence. The notion of a repressed memory found its inception with Sigmund Freud.

However, modern psychotherapeutic methods that aim to recover memories repressed from the holder’s own conscious awareness lack the necessary support among the psychiatric community to be properly admitted into evidence during a criminal proceeding, even when analyzed under the more flexible Daubert standard.

D. The Vague, Elusive, and Constructive Nature of Memory as Illustrated During Brett Kavanaugh’s Confirmation to the United States Supreme Court

Memories are not impeccable because the mind does not function as a video camera, recording each detail of an event and searing it into an accurate and detailed memory of an event. Generally, humans as a whole are “best adapted for accumulating knowledge for

139 Johnson, supra note 129.
140 Id.
141 Id.
142 Id.
143 Lynn, supra note 121.
144 March, supra note 69.
145 As discussed, the standards for the admission of expert witness testimony into evidence, during a criminal proceeding, are as follows: (1) whether the expert has a theory and methodology that has the ability to be tested, and if it has in fact been tested; (2) whether the expert has a theory and methodology that has been the subject of research, peer-review, case study, and publication; (3) the recognized or prospective error rates for a specific technique; (4) any principles and controls appropriate to the science; and (5) the level of acceptance in the pertinent scientific community. See Daubert, 509 U.S. at 593-94.
146 Tom Singer, To Tell The Truth, Memory Isn’t That Good, 63 MONT. L. REV. 337, 359 (2002).
inference, approximation, concept formation, and classification not for the literal retention of the individual exemplars that lead to and support general knowledge.”

Consequently, unflawed detailed recall of an event in the years that follow is virtually unachievable. This inherent fault was exemplified during Justice Brett Kavanaugh’s confirmation to the United States Supreme Court in 2018 when Dr. Christine Blasey Ford accused Justice Kavanaugh of sexually assaulting her at a party when they both were in high school. This Note will not attempt to substantiate or repudiate Dr. Ford’s allegations; instead, this is an opportunity to shed some light on how the memory process functions within the context of a relevant national discussion.

Dr. Ford contended that she was always conscious of the assault, though only beginning to speak openly about it during a couple’s therapy session with her husband in 2012. In the time that followed, Dr. Ford stated that she did her best to “suppress memories of the assault” because recalling the event caused her a great deal of trauma and anxiety. This is distinguishable from cases involving alleged repressed memories, a form of suppression where an individual subconsciously blocks the memory of an event from his or her conscious recall. Dr. Ford affirmed that after her initial disclosure in couple’s therapy she recalled the event further during individual therapy sessions on a few occasions. Dr. Ford publicly disclosed the details of this event in July of 2018 following Justice Kavanaugh’s imminent appointment to the Supreme Court by President Donald Trump.

This ignited a parochial uproar in the court of public opinion in which the U.S. twenty-four-hour news media cycle divided on partisan lines to either unabashedly support or discredit Dr. Ford’s claims. Thus, parties on one end of the political spectrum emphasized Dr. Ford’s lack of detail in recalling the assault, citing her inability to

147. Id.
149. Id. at 4.
150. Id.
151. The Diagnostic and Statistical Manual of Mental Disorders, supra note 81.
153. Id. at 4-5.
recollect the location or owner of the house where the party and subsequent assault transpired\textsuperscript{155} while those in opposition supported the accuracy of Dr. Ford’s accounts on their face.\textsuperscript{156}

To this end, most fail to note that memories relating to events that occurred more than thirty-years prior are ambiguous and shaded gray; this does not allow for black and white inferences as to their accuracy. Distortion in recollection is unavoidable, “memory is distortion since memory is invariably and inevitably selective. A way of seeing is a way of not seeing, a way of remembering is a way of forgetting, too.”\textsuperscript{157} If memory were merely a system of recording, “a ‘true’ memory might be possible. But memory is a process of encoding information, storing information, and strategically retrieving information, and there are social, psychological, and historical influences at each point.”\textsuperscript{158} Any genuine allegation pertaining to an event that arose more than thirty-years prior conveys a degree of ambiguity; furthermore, an elaborately detailed recollection of dated events illustrates the reconstructive nature of memory. The truth is, there is no way to validate an allegation of sexual assault dating more than thirty-years absent objective corroborating evidence which unfortunately is lost with the passage of time. Nonetheless, the conscious suppression of a memory must be distinguished from the unintentional repression of a memory and its consequent retrieval through problematic therapeutic methods.

\textbf{E. Contemporary Psychiatric Intervention Techniques Employed with the Goal of Retrieving Repressed Traumatic Memories}

In order to sufficiently allocate the appropriate degree of credibility to recovered repressed memories of traumatic events in the context of a criminal proceeding, it is crucial to be aware of the numerous techniques employed by psychiatric professionals across the field to

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\textsuperscript{157} Michael Schudson, \textit{Dynamics of Distortion in Collective Memory, in Memory Distortion: How Minds, Brains, and Societies Reconstruct the Past} 346, 348 (Schacter ed. 1995).

\textsuperscript{158} Id.
\end{footnotes}
retrieve these so-called memories from an individual’s subconscious to his or her conscious awareness. These methods include titles such as alien abduction therapy, somatic experiencing therapy, reenactment protocol, neuro-linguistic programming, sensorimotor psychotherapy, experiential integration, energy approaches, and internal family systems therapy, “the last of which involves interaction and work with putatively dissociated parts of the personality.”

Most, if not all, of the abovementioned therapies, may be more accurately characterized as pseudoscientific because they draw nearly all of their support from anecdotal claims, as opposed to the more conventional use of controlled trial studies. Furthermore, these therapeutic methods are often founded upon the false principle that memories are permanent and preserved perfectly, and moreover, that memory retrieval is necessary for positive therapeutic outcomes. None of the abovementioned principles presently hold any notable support within the scientific community.

F. Memory Implantation: How a Third Party or External Factors May Construct a False Memory

Research on the development of a false memory commonly combines “suggestive techniques with social pressure” to cause participants to recall memories that did not, in reality, occur. Adult research participants are led to believe that the researchers are primarily interested in how individuals recall childhood events. Participants are presented with sets of childhood events containing one false event created by the study’s researchers. Over the course of approximately one week, participants are encouraged to recall childhood events by employing several memory recovery techniques used in

159 Lynn, supra note 121.
160 Id.
161 Id.
162 Id.
164 These notable studies include: the “lost-in-the-mall” study (Loftus & Pickrell, 1995), the “memory implantation methodology” (Wade, Garry, Read, & Lindsay, 2002), and “familial-informant false narrative” (Lindsay, Hagen, Read, Wade, & Garry, 2004). Id.
165 Id. at 5.
“trauma-memory-oriented therapy (e.g., guided visualization).”\footnote{166} Researchers then determine the extent to which they were able to implant a false memory in the subject during the final interview process.\footnote{167} This method remains the most consistent in the psychiatric study of memory implantation and retrieval.\footnote{168} Sadly, many cases involving purported recovered repressed memories of childhood sexual abuse involve a member or multiple members of the complainant’s family in some capacity. Simultaneously, researchers have found that telling subjects that a family member provided the information relating to the supposed events increased the likeliness that the subject would accept the false event as a genuine memory.\footnote{169}

In 2017, researchers compiled studies on false memory implantation from New Zealand, the United Kingdom, Canada, and the United States to determine the ability to implant a false memory in a subject, and additionally, the frequency to which the individual acknowledges the false event as an authentic childhood memory.\footnote{170} When the findings were analyzed without considering the variations in study techniques, it was found that more than thirty percent\footnote{171} of research participants were categorized as having constructed a false memory and more than half\footnote{172} of the participants were considered to have accepted the false suggested event as an authentic childhood memory, to some extent.\footnote{173} Furthermore, when the findings were analyzed considering the specific research study conditions and psychiatric techniques employed, including “[t]he presence of idiosyncratic self-related information, an imagination procedure during the suggestion, and to a lesser extent presenting the suggestion without a photo depicting the specific event, were each associated with high memory formation rates.”\footnote{174} Researchers found that when all three of the abovementioned conditions were present, the false memory rate

\footnote{166} Researchers commonly verify the occurrence of specific events during the participants’ childhood to ensure the integrity of the study. \textit{Id.}
\footnote{167} \textit{Id.}
\footnote{168} \textit{Id.}
\footnote{169} \textit{Id.} at 12.
\footnote{170} \textit{Id.} at 16.
\footnote{171} 30.4\% of participants were categorized as having formed a false memory. \textit{Id.} at 28.
\footnote{172} 53.3\% of the participants were considered to have accepted the false suggested event as an authentic childhood memory, to some extent. \textit{Id.}
\footnote{173} \textit{Id.}
\footnote{174} \textit{Id.}
increased to more than forty-six percent of participants\textsuperscript{175} and the acceptance rate increased to nearly seventy percent.\textsuperscript{176}

Overall, the research demonstrates that if a false event is implied, or otherwise suggested, and evidence is afforded that the incident occurred, if opposition to contemplating the probability that the event occurred can be overcome, and “if imagination is employed, then false autobiographical memories often arise.”\textsuperscript{177} Many individuals who report having recovered a repressed memory have done so with the intent to uncover some underlying trauma that may be at the root of their present-day struggles.\textsuperscript{178} The human mind’s ability to accept a suggested event, and construct a false memory, is terrifying for the obvious effects on an individual’s mental health because the subject sincerely believes the false event to be an authentic memory; this is a clear and disturbing invasion of privacy because an implanted memory is an infiltration into the parts of the mind held most sacred to an individual. Furthermore, false-constructed memories become even more dangerous when they have the ability to incarcerate innocent people, and this dangerous consequence becomes increasingly more likely in jurisdictions that have extended the statute of limitations for their criminal prosecution in cases involving allegations of sexual abuse that occurred when the complainant was a minor.\textsuperscript{179}

\textsuperscript{175} 46.1\% of participants constructed a false memory “when idiosyncratic self-related information, an imagination procedure during the suggestion, and to a lesser extent presenting the suggestion without a photo depicting the specific event” were present study conditions. \textit{Id.}

\textsuperscript{176} 69.7\% of participants accepted the false event, to some degree, as an authentic memory, given the abovementioned study conditions. \textit{Id.}

\textsuperscript{177} \textit{Id.} at 29.

\textsuperscript{178} Consider licensed therapist Barbara Snow, who voluntarily placed herself on vocational probation with Utah’s state Division of Occupational and Professional Licensing, in 2008, following allegations of professional misconduct which included implanting false memories in her family members. Lisa Rosetta, \textit{Embattled Therapist Agrees to Probation}, The Salt Lake Tribune (January 22, 2008, 1:49am), https://archive.sltrib.com/story.php?ref=\%2Fnews\%2Fcel_8332832 “Snow was involved in the prosecutions of a string of child sex abuse cases in the 1980s. One man she testified against was granted a new hearing after the Utah Supreme Court questioned her credibility. Another man’s conviction was upheld.” \textit{Id.}

\textsuperscript{179} 33A CARMODY-WAIT 2d § 186:12. (2019).
IV. **New York’s Child Victims Act**

New York is a leader in the movement to extend the statute of limitations in cases involving childhood sexual abuse.\(^{180}\) In early 2019, both the New York State Senate and the Assembly approved modifications to the Child Victims Act which allows the victims of childhood sexual abuse to file criminal charges until the time they turn fifty-five years old. Prior to this legislation, the ability to file a criminal complaint was restricted to victims under the age of twenty-three years old.\(^{181}\) This change in legislation will certainly increase the number of criminal complaints stemming from an alleged recovered repressed memory.\(^{182}\) Furthermore, the changes in New York’s Child Victim’s Act inevitably lead to complainants and witnesses testifying to an event that occurred more than twenty or even thirty years prior to the formal commencement of criminal proceedings.

Furthermore, the legislation provides a “look back” period to restore claims previously barred by the statute of limitations.\(^{183}\) The law creates a window of time, extending one year, which shall commence six-months from the act’s effective date, allowing previously time-barred claims to be filed in both civil and criminal court.\(^{184}\) This presents a flagrant constitutional issue. The Court in *Stogner v. California*,\(^{185}\) held the retroactive use of newly enacted statutes of limitations to restore criminal claims formerly time-barred violates the 10th amendment’s Ex-Post Facto Clause of the U.S Constitution.\(^{186}\)

\(^{180}\) *[Id.]*

\(^{181}\) *[Id.]*

\(^{182}\) *[Id.]*


\(^{184}\) *[Id.]*


\(^{186}\) U.S. CONST. art. I, § 10, cl. 1.; See also *Stogner*, 539 U.S. at 612 (citing Justice Chase more than two-hundred years prior in *Calder v. Bull*, supra:)

I will state what laws I consider ex post facto laws, within the words and the intent of the prohibition. 1st. Every law that makes an action done before the passing of the law, and which was innocent when done, criminal; and punishes such action. 2d. Every law that aggravates a crime, or makes it greater than it was, when committed. 3d. Every law that changes the punishment, and inflicts a greater punishment, than the law annexed to the crime, when committed. 4th. Every law that alters the legal rules of evidence, and receives less, or different, testimony, than the law required at the time of the commission of the offence, in order to convict the
Stogner v. California involved a California state law that was remarkably analogous New York Child Victim’s Act. In 1993, the California state legislature enacted a statute permitting:

Prosecution for those crimes where “[t]he limitation period specified in [prior statutes of limitations] has expired”—provided that (1) a victim has reported an allegation of abuse to the police, (2) “there is independent evidence that clearly and convincingly corroborates the victim’s allegation,” and (3) the prosecution is begun within one year of the victim’s report. A related provision, added to the statute in 1996, makes clear that a prosecution satisfying these three conditions “shall revive any cause of action barred by [prior statutes of limitations].”

In Stogner, the defendant was charged with sex-related child abuse in 1998 for acts that allegedly occurred between 1955 and 1973. At this time, the statute of limitations for this crime was three-years and that period expired at least twenty-two years prior to the state’s petition. The Court found the statute to be “unfairly retroactive” as applied to the case at bar and further held that “a law enacted after expiration of a previously applicable limitations period violates the Ex Post Facto Clause when it is applied to revive a previously time-barred prosecution.”

Although this constitutional prohibition may bar future criminal allegations filed pursuant to New York’s “look back” period, it does not extend to civil suits filed during this window. Furthermore, the New York State Court of Appeals held that the legislature “may constitutionally revive a personal cause of action” under the reasonable determination that “the circumstances are exceptional and are such as to satisfy the court that serious injustice would result to plaintiffs not guilty of any fault if the intention of the legislature were not

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187 Stogner, 539 U.S. at 609.
188 Id.
189 Id. at 609-10.
190 Id. at 610.
191 Id. at 633.
192 Napoli, supra note 183.
effectuated." These exceptional circumstances were found to exist in the case of latent effects resulting from exposure to toxic substances,” though time will determine whether child sexual abuse will be considered an analogous exceptional circumstance.

V. CONCLUSION

The human memory involves “the construction or reconstruction of experiences where a person may blend later occurring details into the memory of an event.” The passage of time weakens the mind’s memory of an event and, the memory is more susceptible to contamination following the event. Moreover, the American Medical Association categorizes recovered repressed memories of childhood abuse “to be of uncertain authenticity.” Additionally, the association cautioned that: “[t]he use of recovered memories is fraught with problems of potential misapplication,” and existing clinical and scientific evidence cannot distinguish accurate memories from those that are fabricated and inaccurate absent independent information corroborating the event’s occurrence. The memory is inherently fallible, consisting of merely two functions, construction and reconstruction, and in spite of true crime novels, there is no scientific evidence supporting the belief that the mind can flawlessly preserve a memory, and further, conceal a memory from an individual’s conscious recollection.

Therefore, criminal allegations based solely upon recently recovered repressed memories should not be admissible within the context of formal criminal proceedings because the notion of recovering a preserved memory holds no scientific credibility. The unconscionability of the criminal allegation cannot hinder the accused’s right to

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194 See, e.g., Hymowitz v. Eli Lilly & Co., 73 N.Y.2d 487 (1989) (upholding the New York State legislature’s discovery rule for “latent effects of exposure to any substance” and simultaneous one-year revival of lapsed actions because operation of “the exposure rule prevented the bringing of timely actions,” and “an injustice has been rectified.”).
195 March, supra note 69.
196 Id. (citing testimony from Dr. Elizabeth Loftus in which she explained that “a false memory is a false belief accompanied by sensory detail.”).
198 Id.
199 Id.
200 Lynn, supra note 121, at 541–54.
201 March, supra note 69.
due process under the law. President John F. Kennedy, while delivering the 1962 Yale University Commencement Address, poignantly stated that “[f]or the great enemy of truth is very often not the lie—deliberate, contrived and dishonest—but the myth—persistent, persuasive, and unrealistic.”\textsuperscript{202} The myth that the mind has the ability to suppress, persevere, and furthermore, recover a repressed memory of a traumatic event may be sympathetic, persistent and persuasive; it is nonetheless, unrealistic and materially, it is inconsistent with the standard promulgated, by the Supreme Court in \textit{Daubert} and the rule codified by the Federal Rules of Evidence.