

“The CSI Effect”: Exposing the Media Myth

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INTRODUCTION	430
I. CSI: CRIME SCENE INVESTIGATION AND “THE CSI EFFECT”.	432
A. <i>CREATING UNREASONABLE EXPECTATIONS AND INCREASING THE PROSECUTION’S BURDEN</i>	433
B. <i>INFALLIBILITY OF SCIENCE</i>	437
C. <i>INCREASING INTEREST IN FORENSIC SCIENCES</i>	442
II. THE INFLUENCE OF TELEVISION.....	443
A. <i>THEORY OF INFLUENCE</i>	447
III. CONSTRUCTING A “CSI EFFECT”	451
IV. INVESTIGATING THE CSI EFFECT	453
A. <i>OVERVIEW</i>	453
B. <i>INVESTIGATING CSI EPISODE CONTENT</i>	453
C. <i>INVESTIGATING INFLUENCE ON VIEWER VERDICTS</i>	454
1. Instruments.....	454
2. Criminal Law Scenario	455
3. Verdict sheet	455
D. <i>RESULTS</i>	457
1. Television Exposure Measures	457
E. <i>ANALYSIS OF VERDICTS</i>	458

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430	<i>FORDHAM INTELL. PROP. MEDIA & ENT. L.J.</i> [Vol. 16:429]	
	1. The Embedded “Not Guilty” Verdict	458
	2. <i>CSI</i> -Influenced NOT GUILTY Verdicts	459
	3. Guilty Verdicts.....	459
	4. <i>CSI</i> Impact Measures	459
	5. Statistical Analysis of NOT GUILTY verdicts and frequency of <i>CSI</i> viewing.....	459
	V. DISCUSSION: THE “CSI EFFECT” MYTH EXPOSED	461
	VI. EMPIRICAL CONCERNS.....	464
	CONCLUSION.....	465

INTRODUCTION

Almost since the advent of television, legal scholars and practitioners alike have contemplated the impact of law-oriented entertainment programming, such as *Perry Mason*, *LA Law*, and *The People’s Court*, on the public.¹ Even the Supreme Court² and the American Bar Association³ have acknowledged that television impacts the public’s perception of the legal system. Consequently, in the last decade, scholars have begun investigating the impact of

¹ See generally MICHAEL ASIMOW & SHANNON MADER, *LAW AND POPULAR CULTURE* (2004); *PRIME TIME LAW* (Robert M. Jarvis & Paul R. Joseph eds., 1998); Anthony Chase, *Lawyers and Popular Culture: A Review of Mass Media Portrayals of American Attorneys*, 1986 AM. B. FOUND. RES. J. 281 (1986); see Anthony Chase, *Toward a Legal Theory of Popular Culture*, 1986 WIS. L. REV. 527, 547-554 (1986) [hereinafter Chase, *Toward*]; David A. Harris, *The Appearance of Justice: Court TV, Conventional Television, and Public Understanding of the Criminal Justice System*, 35 ARIZ. L. REV. 785, 786 (1993); Kimberlianne Podlas, *The Monster in the Television: The Media’s Contribution to the Consumer Litigation Boogeyman*, 34 GOLDEN GATE U. L. REV. 239, 261 (2004) [hereinafter Podlas, *Monster*].

² See *Richmond Newspapers v. Virginia*, 448 U.S. 555, 575 (1980) (“educative effect” on public of televised proceedings); *Estes v. Texas*, 381 U.S. 532, 548-49, 589 (1965) (Harlan, J., concurring) (explaining that television performs educational function by acquainting public with judicial process); see also RICHARD L. FOX & ROBERT W. VAN SICKEL, *TABLOID CRIMINAL JUSTICE IN AN AGE OF MEDIA FRENZY* 5–8 (2001) (describing academic theories of impact of media coverage of trials on public attitudes).

³ *American Bar Association Report on Perceptions of the US Justice System*, 62 ALB. L. REV. 1307, 1315 (1999) (stating that “media can and does impact some people’s knowledge”).

pop cultural representations of law, such as dramatic and "reality" shows, on the public.⁴

CBS's top-rated drama *C.S.I.: Crime Scene Investigation*⁵ is the most recent television program to interest the public as well as the Bar. National popular press stories, beginning with a 2004 *USA Today* report⁶ and culminating with the *U.S. News & World Report*'s spring cover story, "The CSI Effect, How TV is Driving Jury Verdicts All Across America,"⁷ charge that the popular drama is causing a "CSI Effect." If these stories are to be believed, *CSI* is altering the way in which jurors assess criminal trial evidence, thus impacting the administration of justice. Although there is some surface appeal and anecdotal evidence to support such claims,⁸ there is, as of yet, no empirical evidence to substantiate them.⁹ Nevertheless, if *CSI* contributes to the pop cultural landscape that shapes perceptions of the legal process or if it impacts juror decision-making, "The CSI Effect" merits serious investigation.

Consequently, this study attempts to amass the first empirical evidence of whether a "CSI Effect" exists, what it is, and whether

⁴ See, e.g., ASIMOW & MADER, *supra* note 1; Kimberlianne Podlas, *As Seen on TV: The Normative Influence of Syndi-Court on Contemporary Litigiousness*, 11 VILL. SPORTS & ENT. L.J. 1, 1-2 (2004) [hereinafter Podlas, *As Seen on TV*]; Robert A. Clifford, *The Impact Of Popular Culture on the Perception of Lawyers*, 28 LITIG. 1 (Fall 2002); Lawrence M. Friedman & Issachar Rosen-Zvi, *Illegal Fictions: Mystery Novels and The Popular Culture Image of Crime*, 48 UCLA L. REV. 1411 (2001); RICHARD K. SHERWIN, *WHEN LAW GOES POP* (2000) [hereinafter Sherwin, *POP*]; PRIME TIME LAW, *supra* note 1; Richard K. Sherwin, *Introduction: Picturing Justice: Images of Law and Lawyers in the Visual Media*, 30 U.S.F.L. REV. 891, 898 (1996) [hereinafter Sherwin, *Introduction*]; David M. Spitz, *Notes And Comments: Heroes Or Villains? Moral Struggles vs. Ethical Dilemmas: An Examination Of Dramatic Portrayals Of Lawyers And The Legal Profession In Popular Culture*, 24 NOVA L. REV. 725, 729-30 (2000) (intended for public as whole).

⁵ See THE HOLLYWOOD REP., Apr. 20, 2005, at 13. *CSI: Crime Scene Investigation* averaged 26.4 million viewers for the 2004-05 television season. *Id.*

⁶ Richard Willing, "CSI Effect" Has Juries Wanting More Evidence, USA TODAY, Aug. 5, 2004, at 01A.

⁷ Kit R. Roane, *The CSI Effect, How TV is Driving Jury Verdicts All Across America*, U.S. NEWS & WORLD REP., Apr. 25, 2005, at 48.

⁸ Cf. Simon Cole and Rachel Dioso, Editorial Page; Taste Commentary, *Law And The Lab: Do TV Shows Really Affect How Juries Vote? Let's Look At The Evidence*, THE WALL STREET JOURNAL, May 13, 2005 ("finding only anecdotal evidence").

⁹ See Cole and Dioso, *supra* note 8, at 48 (stating that there is "not a shred of evidence" of CSI Effect).

it impacts the administration of criminal justice via juror deliberations. To that end, after detailing three conceptions of “The CSI Effect,” this paper advances a theory of media influence on lay understandings of law. It then extends that base to articulate the operation of a so-called “CSI Effect.” Next, the paper turns to empirical investigation, presenting a study of 254 jury eligible adults who responded to surveys of television and *CSI* viewing habits as well as to a criminal law scenario measuring the potential impact of *CSI* viewing. The results show that, despite numerous media stories and law enforcement warnings of a “CSI Effect” crippling our criminal justice system, no such effect exists—at least not any effect that harms, rather than helps, the prosecution.

I. CSI: CRIME SCENE INVESTIGATION AND “THE CSI EFFECT”

As noted, “The CSI Effect” refers to a supposed impact of the popular CBS crime drama *CSI: Crime Scene Investigation*.¹⁰ *CSI*, which debuted in October 2000,¹¹ is a top-rated drama on network television. Closing the 2004-05 season as the second highest watched program, it has an average audience of 26.4 million viewers.¹² As further testament to its popularity, the program has spawned a number of spin-offs,¹³ and can now be seen on cable and in syndication.¹⁴ Creator Anthony E. Zuiker explained that his show rests on “the notion that blood, hair, saliva, skin, et cetera are forensically designed to tell an investigator what has happened without having any witness to a crime.”¹⁵ He thus uses this intrinsic narrative to design a program where forensic evidence “speak[s] for those who cannot speak for themselves. . . .”¹⁶

¹⁰ See Willing, *supra* note 6.

¹¹ MIKE FLAHERTY & CORRINE MARRINAN, *CSI: CRIME SCENE INVESTIGATION COMPANION 9* (2004).

¹² ENT. WKLY., June 2005; THE HOLLYWOOD REP., *supra* note 5, at 13 (reporting Nielsen Media Research data).

¹³ These spin-offs include *CSI: Miami* and *CSI: NY*. VARIETY, Apr. 18-24, 2005, at 14 (reporting Nielsen Media Research).

¹⁴ The syndicated version of *CSI* can be seen on approximately 244 stations, and attracts an audience of 5 million viewers. *Id.*

¹⁵ *Id.* at 9.

¹⁶ *Id.* Elizabeth Devine, former crime lab technician, and supervising producer of *CSI: Miami*, explains that these are the first shows to make analysis interesting: “We . . .

"The CSI Effect" has been defined in three different ways. The best-known definition states that *CSI* creates unreasonable expectations on the part of jurors, making it more difficult for prosecutors to obtain convictions. The second definition, which runs contrary to the first, refers to the way that *CSI* raises the stature of scientific evidence to virtual infallibility, thus making scientific evidence impenetrable. The final definition focuses on *CSI*'s increasing lay interest in forensics and science. Thus, viewers who serve as jurors will be more interested in and able to follow scientific evidence. They may even become interested in academic training and careers in the forensics field. Each definition is addressed in greater detail below.

A. Creating Unreasonable Expectations and Increasing the Prosecution's Burden

The *CSI*-inspired effect receiving the lion's share of media attention¹⁷ refers to inflated jury expectations regarding evidentiary proof and a consequent increase in the prosecution's burden. In the typical *CSI* episode, each crime is solved with forensic tests, and these tests always discern the identity of the culprit. This narrative "romanticize[s] forensic science," creating unreasonable expectations in the minds of jurors.¹⁸ Jurors become conditioned that every crime can be solved through forensic evidence, and that forensic evidence of guilt exists in every crime. As applied to the assessment of criminal trial evidence, jurors will expect forensic evidence in every case,¹⁹ and require it before they will convict.²⁰

slow[ed] things down to say, "This is cool stuff" Stefan Lovgren, "*CSI Effect*" *Is Mixed Blessing For Real Crime Labs*, NATIONAL GEOGRAPHIC NEWS, Sept. 23, 2004, at 2. Indeed, Zuiker has described the show to be "educational," because "[p]eople know science now . . ." *Prosecutors Feel the 'CSI Effect'*, CBSNEWS, Feb. 10, 2005, <http://www.cbsnews.com/stories/2005/02/10/eveningnews/main673060.shtml?CMP=ILC-SearchStories> (quoting Zuiker) (last visited Dec. 20, 2005).

¹⁷ One version of the "CSI Effect," *i.e.*, inflated jury expectations crippling prosecutions, obtains the majority of the coverage. Cole and Dioso, *supra* note 8, at 48.

¹⁸ Craig M. Cooley, *Forensic Individualization Sciences and the Capital Jury: Are Witherspoon Jurors More Deferential to Suspect Science than Non-Witherspoon Jurors?*, 28 S. ILL. U. L.J. 273, 273 (2004) [hereinafter Cooley, *Forensic*].

¹⁹ Craig M. Cooley, *Reforming the Forensic Science Community to Avert the Ultimate Injustice*, 15 STAN. L. & POL'Y REV. 381, 386-87 (2004) [hereinafter Cooley, *Reforming*] (jurors increasingly looking for forensic evidence in every case due to *CSI*); Editorial,

Where forensic evidence does not exist, jurors may conclude that the evidence necessary to justify a guilty verdict does not exist, or interpret its absence as justifying acquittal.²¹

In addition, prosecutors complain that “The CSI Effect” creates unreasonable expectations about forensic evidence.²² First, jurors weaned on *CSI* will expect police investigators to follow the script of *CSI*.²³ When the collection of evidence deviates from this script, jurors will be more critical than would their predecessors. Second, jurors will expect scientific and quasi-scientific evidence to be conclusive.²⁴ This, however, is not always possible. As one investigator lamented, “On TV, it’s all slam-dunk evidence Now juries expect the same thing—and that’s a big problem.”²⁵ Third, *CSI* furthers flawed notion that “it is always possible to extract useful forensic evidence.”²⁶ Even when available, forensic evidence is often contaminated and thus cannot be used or

CSI Effect; Jurors Overestimate Usefulness Of DNA Evidence, TELEGRAM & GAZETTE (WORCESTER, MA), Jan. 8, 2005, at A.12 (jurors are “conditioned to expect forensic evidence” (quoting Suffolk County District Attorney Daniel Conley)).

²⁰ Enric Volante & Kim Smith, ‘*CSI Effect*’ Impacts Justice In Tucson, ARIZ. DAILY STAR, May 8, 2005 (ADA asserting that some cases turn on lack of “TV-inspired” evidence); Cole and Dioso, *supra* note 8, at 48 (noting claims of juries refusing to convict without “fancy forensic evidence”); *but see* Volante and Smith, *supra* note 20 (Superior Court Judge relates having not seen a case “won or lost” over lack of *CSI*-type evidence).

²¹ Roane, *supra* note 7, at 48. Peoria’s State Attorney asserts that when the prosecution offers less evidence than jurors are accustomed to seeing on TV, “it is viewed as reasonable doubt.” *Id.*

²² One prosecutor complained that jurors expect same-day DNA and toxicology tests. *Prosecutors Feel the ‘CSI Effect’*, *supra* note 16; *cf.* Willing, *supra* note 6 (CSI promotes notion that forensic science is fast). Of course, no trial ever takes place one day after arrest, but usually 10–14 months thereafter.

²³ Lovgren, *supra* note 16.

²⁴ *Id.*; Roane, *supra* note 7, at 50; Cooley, *Reforming*, *supra* note 19, at 386–87 (jurors looking for forensic evidence).

²⁵ Roane, *supra* note 7, at 49.

²⁶ *Panel Three: The Role of Scientific Evidence*, 80 IND. L.J. 69, 87 (2005) [hereinafter *Panel*] (*CSI* furthers notion that “it is always possible to extract useful forensic evidence,” but estimating that forensic evidence is available in only 20% of capitol-eligible cases); Volante and Smith, *supra* note 20 (tests do not always “produce results”); Renee A. Germaine, *Comment: You Have The Right To Remain Silent. You Have No Right To Your DNA*, 22 J. MARSHALL J. COMPUTER & INFO. L. 759, 792 (2004) (DNA not always available).

introduced at trial.²⁷ In other instances, although powerful forensic tools like DNA²⁸ evidence are available,²⁹ they are neither the only nor best method to prove guilt.

Notwithstanding *CSI's* evidentiary impact, some individuals extrapolate that "The CSI Effect" heightens the People's burden.³⁰ In a criminal case, the prosecution carries the burden of proving the defendant guilty³¹ "beyond a reasonable doubt."³² Courts have described "beyond a reasonable doubt" to mean that: (a) the evidence excludes to a moral certainty every hypothesis but guilt,³³ (b) the inference of guilt is the only one that can be drawn from the facts; or (c) the evidence excludes every hypothesis of innocence.³⁴ Where jurors refuse to convict without definitive forensic evidence, regardless of the strength of testimonial evidence, or unless the prosecution can exclude innocence via such scientific

²⁷ See Willing, *supra* note 6; Editorial, *CSI Effect; Jurors Overestimate Usefulness Of DNA Evidence*, *supra* note 19, at A12 (contamination and deterioration of DNA evidence).

²⁸ DNA is found in nucleated cells and its primary function is to encode and transmit heritable traits from parent to child. Veronica Valdivieso, *DNA Warrants: A Panacea for Old, Cold Rape Cases?*, 90 GEO. L.J. 1009, 1013 (2002). Ninety-Nine and nine tenths percent of DNA is identical from person to person, and the variable region can be used to identify individuals. *Id.* at 1013-14. In DNA testing, technicians compare the polymorphisms of four or five different loci of a suspect's DNA with those found at a crime scene. *Id.* at 1014. If the samples are identical, there is a match, and a scientist can calculate the probability that the samples came from the suspect (based on the frequency of the polymorphisms in the general population). *Id.*; see also Andrew C. Bernasconi, *Comment: Beyond Fingerprinting: Indicting DNA Threatens Criminal Defendants' Constitutional and Statutory Rights*, 50 AM. U. L. REV. 979, 986-88 (2001).

²⁹ See Willing, *supra* note 6 (DNA not always available). While DNA testing is among the more accurate forensic sciences, its results remain subject to human assessment, and, therefore, error. See Edward K. Cheng, *The Powers and Pitfalls of Technology: Reenvisioning the Law Through the DNA Lens*, 60 N.Y.U. ANN. SURV. AM. L. 649, 650 (2005); Roane, *supra* note 7.

³⁰ See Cole and Dioso, *supra* note 8, at 48 (recounting claims of jurors refusing to convict without forensic evidence); Roane, *supra* note 7, at 50 (quoting State Attorney, "The burden [*CSI*] places on us is overwhelming").

³¹ The defendant enjoys a presumption of innocence, until proven guilty. *Coffin v. U.S.*, 156 U.S. 432, 453 (1895).

³² *In Re Winship*, 397 U.S. 358, 364 (1970).

³³ *People v. Bennett*, 49 N.Y. 137, 144 (1872).

³⁴ See, e.g., *People v. Smith*, 162 N.Y. 520, 528-29 (App. Ct. 1900).

evidence, it increases the constitutional³⁵ burden from “beyond a reasonable doubt” to “beyond any and all doubt.”³⁶ In support of this proposition, prosecutors are relating anecdotes of jurors taking longer to deliberate³⁷ or asking more questions.³⁸ Indeed, one homicide investigator confessed, “[o]ur biggest fear is that what these shows will mainly do is that these people will start getting acquitted.”³⁹

While *CSI* may increase the practical (if not the legal) burden, empirical evidence suggests prosecutors typically obtain convictions on less than a reasonable doubt. Although legal commentators have estimated the mathematical level of guilt to mean more than ninety percent certainty, empirical studies show that jurors require as little as seventy percent certainty to meet this burden.⁴⁰ Nonetheless, if jurors are now more likely to abide by the constitutional standard or less inclined to convict,⁴¹ “The *CSI* Effect” effectively increases the prosecution’s burden.⁴²

³⁵ Although the “beyond a reasonable doubt” burden was first used in the United States during the 1770 Boston Massacre trials, Eric Lillquist, *Absolute Certainty and the Death Penalty*, 42 AM. CRIM. L. REV. 45, 48 (2005), it was not until 1970 that the Supreme Court declared it constitutionally required in criminal trials. *In Re Winship*, 397 U.S. at 364.

³⁶ Michael Mello, *Outlaw Executive: Crazy Joe, The Hypnotized Witness and the Mirage of Clemency in Florida*, 23 J. CONTEMP. L. 1, 42 (1997) (beyond any doubt is greater than “beyond a reasonable doubt . . .”).

³⁷ Volante & Smith, *supra* note 20.

³⁸ *Id.* Commentators have long debated whether jurors are capable of understanding complex evidence. See Lynne ForsterLee & Irwin A. Horowitz, *The Effects of Jury-Aid innovations on Juror Performance in Complex Civil Trials*, 86 JUDICATURE 184, 184 (Jan.-Feb. 2003) (discussing jurors in civil litigation).

³⁹ Volante & Smith, *supra* note 20 (quoting Pima County Sergeant and homicide investigation supervisor).

⁴⁰ Erik Lillquist, *Recasting Reasonable Doubt: Decision Theory and the Virtues of Variability*, 36 U.C. DAVIS L. REV. 85, 112 (2002).

⁴¹ See Cole and Dioso, *supra* note 8, at 48.

⁴² In other words, while the prosecution’s burden may increase, it may not increase beyond the Constitutional standard. Of course, from a prosecutorial perspective, this might be seen as an infection preventing both the prosecution and jury from doing its respective jobs.

B. Infallibility of Science

The second definition of "The CSI Effect" is the converse of the first. This definition focuses on the way that *CSI* elevates scientific evidence to an unsupported level of certainty thus bolstering the prosecution's case. Therefore, just as law enforcement fears that *CSI* will cause jurors to misinterpret the absence of forensic evidence, others fear that *CSI* will lead jurors to blindly believe forensic evidence.

Although the public is "perpetually inundated with distorted perceptions of forensic science capabilities,"⁴³ attorneys, legal researchers, and even "real" scientists have long criticized "expert" testimony and certain forensic conclusions as either not being very scientific or as portraying human judgments as infallible findings.⁴⁴ Courts, too, "have become increasingly uncomfortable with the ever-expanding area of scientific expertise."⁴⁵ Indeed, several courts have cautioned that scientific evidence, presented as proof, "can assume [the] posture of mystic infallibility in the eyes of [the] jury"⁴⁶ *CSI* may further this perception.

On its own, scientific evidence can be rather seductive. In conjunction with *CSI*, it becomes insurmountable. For example, *CSI* portrays scientific evidence as infallible.⁴⁷ It shows forensics

⁴³ Cooley, *Reforming*, *supra* note 19, at 388.

⁴⁴ *Id.* (much forensic testing based on human conclusions and judgments); Willing, *supra* note 6 (asserting that real scientists say the fault of *CSI* is that its science is beyond reproach); *id.* (stating that defense attorneys complain that crime scene testing is not always accurate).

⁴⁵ Cynthia Stevens Kent, *Daubert Readiness of the Texas Judiciary*, 6 TEX. WESLEYAN L. REV. 1, 4 (1999); *see generally* PETER H. HUBER, GALILEO'S REVENGE: JUNK SCIENCE IN THE COURTROOM (1991). Huber spoke of "junk science," *i.e.*, "the mirror image of real science . . . [with] none of the same substance." *Id.* at 2.

⁴⁶ *U.S. v. Addison*, 498 F.2d 741, 744 (D.C. Cir. 1974); *see also* John W. Strong, *Language and Logic in Expert Testimony: Limiting Expert Testimony By Restrictions of Function, Reliability, and Form*, 71 OR. L. REV. 349, 367 n.81 (1992) ("There is virtual unanimity among courts . . . that evidence perceived by jurors to be 'scientific' in nature will have particularly pervasive effect."); Edward J. Imwinkelried, *The Next Step After Daubert: Developing a Similarly Epistemological Approach to Ensuring the Reliability of Nonscientific Expert Testimony*, 15 CARDOZO L. REV. 2271, 2286 (1994) (courts fear that science projects "aura of infallibility") (citation omitted) and (evidence perceived to be scientific will have "particularly persuasive effect" on jury) (citation omitted).

⁴⁷ *Panel*, *supra* note 26, at 82; *see also* Willing, *supra* note 6 (discussing the mistaken notion that criminal science always catches the culprit and is infallible); Cooley,

effortlessly identifying the culprit, but never shows it “just as easily” inculcating the wrong person.⁴⁸ This absolute certainty might lead jurors to believe that crime scene evidence is always accurate,⁴⁹ or, at least, more conclusive than it is.⁵⁰ Consequently, jurors will be unwilling to accept that forensic “proof” could be compromised by human error, or is merely an educated guess.⁵¹

On *CSI*, science leads to a singular, objective correct answer. Yet, in real life, forensic conclusions are only as good as the technicians who retrieve the evidence, test it, and draw conclusions from it.⁵² For example, unbeknownst to the average citizen, and not disclosed on *CSI*, DNA⁵³ can be interpreted differently by different technicians.⁵⁴

Reforming, *supra* note 19, at 390–91 (Forensics is fallible and the result of human judgment, hence, error); Andrew C. Bernasconi, *Beyond Fingerprinting: Indicting DNA Threatens Criminal Defendants’ Constitutional and Statutory Rights*, 50 AM. U. L. REV. 979, 988–89 (2001) (Jurors see DNA as absolutely conclusive).

⁴⁸ Cooley, *Reforming*, *supra* note 19, at 388.

⁴⁹ Willing, *supra* note 6 (discussing the notion that forensic evidence is infallible); *see also* Cooley, *Reforming*, *supra* note 19, at 393–94 (Forensic evidence claims it is foolproof when it is not.).

⁵⁰ Cole and Dioso, *supra* note 8, at 48 (quoting Lisa Steele, co-chair of the Forensic Evidence Committee for the National Association of Criminal Defense Lawyers, “*CSI* mak[es] folks less skeptical about the potential for forensic error or fraud.”); *see also* William C. Thompson, *Subjective Interpretation, Laboratory Error and the Value of Forensic DNA Evidence: Three Case Studies*, 96 GENETICA 153, 153 (1995) (claiming DNA determinations can have surprising problems).

⁵¹ Willing, *supra* note 6; *see also* Cooley, *Reforming*, *supra* note 19, at 388–89.

⁵² Cooley, *Reforming*, *supra* note 19, at 391 (Forensics are “subjective determinations by law enforcement.”); *see also* Cooley, *Forensic*, *supra* note 18, at 398; Roane, *supra* note 7.

⁵³ Valdivieso, *supra* note 28, at 1017–18; *see also* Cheng, *supra* note 29, at 649 (DNA transformed practice of criminal justice.).

⁵⁴ Roane, *supra* note 7, at 53 (showing DNA is subject to interpretation); *see also* William C. Thompson, *Accepting Lower Standards: The National Research Council’s Second Report On Forensic DNA Evidence*, 37 JURIMETRICS J. 405, 412 (1997) (DQa/Polymarker DNA tests are subject to human interpretation.); Cooley, *Reforming*, *supra* note 19, at 397 (discussing an increase of wrongful convictions since the advent of DNA testing). An independent proficiency testing report showed that some labs failed to properly match samples on DNA tests or transposed samples from one to another. Furthermore, these labs somehow announced the correct results after wrongly interpreting the static data. Roane, *supra* note 7, at 53.

This is troublesome since, in some instances, evidence portrayed as "scientific" hardly resembles science at all.⁵⁵ It clearly is not the mechanical, concrete indicia of certainty that jurors rely on it to be.⁵⁶ Many of the techniques used in police forensic testing have never been empirically proven by the greater scientific community.⁵⁷ In fact, a number of scholars have questioned whether courtroom science, such as dog sniff evidence, hair analysis,⁵⁸ bite-mark analysis,⁵⁹ earprints,⁶⁰ fingerprints,⁶¹ and

⁵⁵ Cooley, *Forensic*, *supra* note 18, at 285 (stating that legal scholars and forensic skeptics question whether forensics is supported by legitimate and scientific laws); *see also* Michael J. Saks, *Merlin and Solomon: Lessons from the Law's Formative Encounters with Forensic Identification Science*, 49 HASTINGS L.J. 1069, 1082 (1998) (finding that individualization prominent in forensics is contrary to conventional science); Lisa Arthur, *Forensics Experts Are No Fans of CSI*, WICHITA EAGLE, Dec. 25, 2002, at 2. Huber argues that forensics found its way into the courtroom because it could not survive the scrutiny of the scientific method, and thus, was shunned by the scientific community. HUBER, *supra* note 45, at 3.

⁵⁶ *See* Cooley, *Reforming*, *supra* note 19, at 395 (stating that jurors believe physical evidence cannot be wrong or perjured).

⁵⁷ *Id.* at 390–91 (“[V]ery little science actually encompasses the forensic sciences.”); *see also* Saks, *supra* note 55, at 1083 (“[P]robabilities employed by traditional [forensics] are subjective and intuitive.”); *id.* at 1091 (Forensics is driven by police process.).

⁵⁸ Roane, *supra* note 7, at 51 (Hair analysis is “discredited almost uniformly.”); *see also* Model Act: Model Prevention and Remedy of Erroneous Convictions Act, 33 ARIZ. ST. L.J. 665, 666–67 (2001) (discussing that previously accepted but now disputed); Paul C. Giannelli, *Scientific Evidence in Civil and Criminal Cases*, 33 ARIZ. ST. L.J. 103, 118–19 (2001) (stating that federal courts have re-examined and disallowed hair analysis).

⁵⁹ Roane, *supra* note 7, at 54 (Bite-mark analysis lacks certainty.); *see also* Sandy L. Zabell, *Fingerprint Evidence*, 13 J.L. & POL’Y 143, 143–44 (2005) (showing that subject to skepticism); Cooley, *Reforming*, *supra* note 19, at 396–97 (discussing misidentified bite marks); Saks, *supra* note 55, at 1081 (questioning bite mark analysis).

⁶⁰ Roane, *supra* note 7, at 54 (stating that no scientific studies support concept); *see also* State v. Kunze, 988 P.2d 977, 989–90 (Wash. Ct. App. 1999) (discussing that earprints are not generally accepted as science and, therefore, are inadmissible).

⁶¹ Model Act: Model Prevention and Remedy of Erroneous Convictions Act, 33 ARIZ. ST. L.J. 665, 666–67 (2001) (showing that expert opinions based on traditional methodologies are no longer considered nearly as reliable as they once were); *see also* Roane, *supra* note 7, at 53–54 (stating that under scrutiny, the fingerprint match is not considered unimpeachable); Cooley, *Reforming*, *supra* note 19, at 396–97 (discussing mistaken fingerprint “analysis”); *cf.* Nathan Benedict, *Fingerprints and the Daubert Standard For Admission of Scientific Evidence: Why Fingerprints Fail and a Proposed Remedy*, 46 ARIZ. L. REV. 519, 520–21 (2004) (Eighty five percent of jurors believe fingerprints to be most reliable form of identification.). For discussion of mistaken fingerprint analysis, *see* Simon A. Cole, *Grandfathering Evidence: Fingerprint*

handwriting identification,⁶² is supported by real science.⁶³ Yet, the fantastical world of science portrayed on *CSI* suggests otherwise. Thus, prosecutors who introduce such evidence may enjoy a *CSI* benefit during deliberations.⁶⁴ Additionally, regardless of whether evidence is sound or technically reliable, jurors may associate forensic evidence with the side of objectivity or truth.⁶⁵ When introduced,⁶⁶ it will add to the weight of the prosecution's case,⁶⁷ possibly tipping the scales of justice in the People's favor. Therefore, notwithstanding reasonable doubt,⁶⁸ a jury may be more inclined to convict.⁶⁹

Moreover, even where there is "hard science," the conclusions drawn can be suspect. Crime labs do not have to be accredited,⁷⁰ and forensic "experts" face no professional standards.⁷¹ Among the reported forensic gaffes, one lab matched a slug with the wrong

Admissibility Rulings From Jennings to Llera Plaza and Back Again, 41 AM. CRIM. L. REV. 1189, 1200–03 (2004).

⁶² For history and skepticism regarding handwriting identification, see Saks, *supra* note 55, at 1094–1100.

⁶³ Cooley, *Reforming*, *supra* note 19, at 390–92 (arguing that the objectivity, methodology, and error detection of science is lacking in police forensics). "[F]orensic identifications are not manifestations of science." *Id.* at 391.

⁶⁴ *Id.* at 393–94 (discussing the influence of scientific evidence on deliberations).

⁶⁵ Cheng, *supra* note 29, at 650–51 (showing the "lure" of truth); see also Cooley, *Reforming*, *supra* note 19, at 390–91, 386–87 (discussing the association of science with truth); see generally Scott E. Sundby, *The Jury As Critic: An Empirical Look at How Capital Juries Perceive Expert and Lay Testimony*, 83 VA. L. REV. 1109, 1123 (1997) (stating that juries respond to prosecution experts more favorably and defense experts more negatively).

⁶⁶ See generally Edward J. Imwinkelried, *The Next Step After Daubert: Developing a Similarly Epistemological Approach to Ensuring The Reliability of Nonscientific Expert Testimony*, 15 CARDOZO L. REV. 2271 (1994).

⁶⁷ Roane, *supra* note 7, at 51; see also Randolph N. Jonakait, *Stories, Forensic Science and Improved Verdicts*, 13 CARDOZO L. REV. 343, 345 (1991) (discussing the impact of forensic evidence on verdicts).

⁶⁸ Cooley, *Reforming*, *supra* note 19, at 387 (stating that death qualified jurors tend to view forensic evidence more favorably than non-death qualified jurors).

⁶⁹ See generally Neil Vidmar & Shari Seidman Diamond, *Juries and Expert Evidence*, 66 BROOK. L. REV. 1121, 1124–27 (2001) and cases cited therein.

⁷⁰ Roane, *supra* note 7, at 51; cf. Lauren Kearns, *Incorporating Tolling Provisions Into Sex Crimes Statutes of Limitations*, 13 TEMP. POL. & CIV. RTS. L. REV. 325, 355–56 (2003) (noting lack of consistent procedures). In fact, the famed FBI Crime Lab won accreditation only in 1998. Roane, *supra* note 7, at 52.

⁷¹ Roane, *supra* note 7, at 51–52, 53; Saks, *supra* note 55, at 1089–90 (proficiency testing of labs and technicians disclose varying rates of error).

test gun, another implicated a lawyer in the al Qaeda Madrid train bombings due to an incorrect read on a fingerprint, and another switched the DNA reference sample of a rape victim and the accused, leading it to conclude that the accused was responsible for the crime.⁷²

Furthermore, through its character portrayals, *CSI* quashes concerns of human error while heightening the expert status of crime scene technicians. The *CSI* team never possesses a personal motivation to engage in wrongdoing or to violate the (non-existent) standards of their profession. In the real world, however, forensic technicians have come under scrutiny. Numerous forensic technicians, crime scene investigators, and crime-reconstruction experts have lied under oath, faked their credentials, and fabricated evidence.⁷³ One forensic "star," who testified in hundreds of cases,⁷⁴ forged test results.⁷⁵ In one instance, he fabricated DNA results to testify on behalf of the prosecution and put a man behind bars—for 203 to 335 years.⁷⁶ Since this fraud emerged, nine other men have had their convictions overturned.⁷⁷ Another prosecution expert, who with her forensics dog had appeared on *Unsolved Mysteries* and headlined science seminars, also faked and planted evidence.⁷⁸ She is presently serving a 21-month sentence.⁷⁹

⁷² Roane, *supra* note 7, at 53. Contaminated DNA Evidence and "Bad Lab Work" resulted in this man's conviction and 25 year sentence for rape. Adam Liptak, *Houston DNA Review Clears Convicted Rapist, and Ripples in Texas Could Be Vast*, N.Y. TIMES, Mar. 11, 2003, at A14.

⁷³ Roane, *supra* note 7, at 52; Kearns, *supra* note 70, at 354 (noting that opponents complain that DNA test results can incorrectly inculcate where DNA is mishandled or contaminated).

⁷⁴ Roane, *supra* note 7, at 52. Primarily, these trials occurred in West Virginia and Texas, and involved a number of capital cases.

⁷⁵ *Id.*

⁷⁶ *Id.* Later DNA analysis demonstrated that the defendant could not have committed the crimes in question. *Id.* For details of the case of state serologist Fred Zain and other related misconduct, see the opinion of the West Virginia Supreme Court, In The Matter of An Investigation of The West Virginia State Police Crime Laboratory, Serology Division, 190 W.Va. 321 (1993).

⁷⁷ Roane, *supra* note 7, at 52.

⁷⁸ *Id.* at 51. In one case, Sandra Anderson and her dog Eagle offered the critical testimony for a search warrant. Later, it was discovered that Anderson had planted the evidence that was found in that house. *Id.*

⁷⁹ *Id.*

C. Increasing Interest in Forensic Sciences

A third variation of “The CSI Effect” refers to the way that the program popularizes the field of criminal forensics. According to the head of LA County Science Services Bureau, *CSI* and its spawn have increased the public’s awareness of forensics⁸⁰ and, thereby, funding for forensic sciences.⁸¹

Not only has *CSI* increased awareness of the field, it has also increased lay interest in it. People now look forward to jury duty,⁸² and some commentators assert that *CSI* viewers, as jurors, may more intelligently assess forensic and expert testimony.⁸³ Now equipped with a better sense of what a crime scene technician does,⁸⁴ jurors may better understand and follow expert witness testimony.⁸⁵ As *CSI*’s creator explained, “There is a profound impact on in [sic] the country in terms of jurors because of the show.”⁸⁶ In this way, the show is educational.⁸⁷

In addition, the popularity of *CSI* has had a spillover effect to vocational and educational programs in investigatory sciences. Criminal forensics is now perceived to be a viable career.⁸⁸ Consequently, just as law schools experienced a surge in applications during the heyday of *LA Law*,⁸⁹ universities have experienced a “dramatic increase in applications to forensic

⁸⁰ The fascination with the science of crime is hardly new. Lovgren, *supra* note 16, at 1–2. In fact, in the 1990s, *Quincy*’s style of medical examiner investigation inspired defense attorneys at The Legal Aid Society’s Criminal Appeals Bureau to search for medical examiner notes—like Quincy used – and spawned a torrent of ancillary *Rosario* litigation. See *People v. Smith*, 618 N.Y.S.2d 649 (App. Div. 1994); *People v. Solomon*, 612 N.Y.S.2d 779 (N.Y. Sup. Ct. Kings County 1994).

⁸¹ Volante & Smith, *supra* note 20.

⁸² Willing, *supra* note 6.

⁸³ See generally BARRY SCHECK, PETER NEUFELD, & JIM DWYER, *ACTUAL INNOCENCE: FIVE DAYS TO EXECUTION AND OTHER DISPATCHES FROM THE WRONGLY CONVICTED* (2000).

⁸⁴ Willing, *supra* note 6.

⁸⁵ Volante & Smith, *supra* note 20.

⁸⁶ *Prosecutors Feel the ‘CSI Effect’*, *supra* note 16.

⁸⁷ Cole and Dioso, *supra* note 8, at 48.

⁸⁸ Willing, *supra* note 6 (noting that it gets people interested in careers in forensic science).

⁸⁹ Cole and Dioso, *supra* note 8, at 48. For a discussion of the influence of *LA Law* on perceptions and actions of the legal profession, see John Brigham, *L.A. Law*, in *PRIME TIME LAW*, *supra* note 1, at 21–24, 27–32.

science programs.”⁹⁰ In fact, as testament to this burgeoning interest, there are now ninety forensic science programs in colleges in the United States.⁹¹

II. THE INFLUENCE OF TELEVISION

Every “CSI Effect” is premised on the notion of media influence. Traditionally, legal scholars were slow to acknowledge mass media as a mediator of contemporary legal understandings.⁹² Yet, as society has shifted to visual literacy,⁹³ the study of law’s interpenetration of pop culture has obtained cachet,⁹⁴ and legal scholars have accepted that television imagery can influence the public’s assumptions and attitudes about law.⁹⁵

Since most people do not read statutory or scholarly legal resources,⁹⁶ they tend to learn about the law from secondary

⁹⁰ Lovgren, *supra* note 16, at 1.

⁹¹ *Id.* at 2. Evidencing this interest, in 2003, Michigan State University’s Masters program in forensics received 180 applications for twenty slots. *Id.*

⁹² See Richard K. Sherwin, *Law/Media/Culture, Legal Meaning in the Age of Images: Foreword*, 43 N.Y.L. SCH. L. REV. 653, 655 (2001) [hereinafter Sherwin, *Foreword*]; Friedman & Rosen-Zvi, *supra* note 4, at 1413-14.

⁹³ See Richard K. Sherwin, *Law and Popular Culture: Nomos and Cinema*, 48 U.C.L.A. L. REV. 1519, 1521 (2001) [hereinafter Sherwin, *Nomos*]; Richard Strickland, *The Cinematic Lawyer*, 22 OKLA. CITY U. L. REV. 13, 14 (1997).

⁹⁴ See Norman Rosenberg, *Looking For Law In All The Old Traces*, 48 U.C.L.A. L. REV. 1443, 1444 (2001); Friedman & Rosen-Zvi, *supra* note 4, at 1413-15; see generally Steve Greenfield, *Hero or Villain? Cinematic Lawyers and the Delivery of Justice*, 28 J. L. & SOCIETY 25 (2001); Gayle Mertz, *Law and Pop Culture: Teaching and Learning About Law Using Images From Popular Culture*, 64 SOC. EDUC. 206 (2000).

⁹⁵ See JONATHAN BIGNELL, AN INTRODUCTION TO TELEVISION STUDIES 23 (2004); see also TIMOTHY O. LENZ, CHANGING IMAGES OF LAW IN FILM AND TELEVISION CRIME STORIES 12-13 (2003) (explaining the importance of visual mass media in impacting public attitudes and behaviors); FOX & VAN SICKEL, *supra* note 2, at 5-6 (describing the impact of factual and fictional stories of law on public); Friedman & Rosen-Zvi, *supra* note 4, at 1413 (arguing that pop legal culture has finally, rightfully, entered the citadel of legal scholarship).

⁹⁶ Kimberlianne Podlas, *Please Adjust Your Signal: How Television’s Syndi-Courtrooms Bias Our Juror Citizenry*, 39 AM. BUS. L.J. 1, 3-4 (2001) [hereinafter Podlas, *Please Adjust*]; see also Valerie Hans, *Law and The Media: Overview and Introduction*, 14 L. & HUMAN BEHAV. 399, 399 (1990) (indicating that only small proportion of public has direct experience with justice system); Bruce M. Selya, *The Confidence Games: Public Perceptions of the Judiciary*, 30 NEW ENG. L. REV. 909, 913 (1996) (finding that “few individuals have direct experience with the justice system”).

sources.⁹⁷ Empirical evidence shows that most people learn about law from the media,⁹⁸ and specifically, television.⁹⁹ Ninety eight percent of Americans have at least one television set,¹⁰⁰ and watch at least twenty five hours of television programming per week.¹⁰¹ This amounts to approximately 1,500 hours per year.¹⁰² This positions television as an institutionalized story-teller,¹⁰³ telling us how things work and what to do.¹⁰⁴ Indeed, much of what we

⁹⁷ See Spitz, *supra* note 4, at 731 (indicating that public's information, or misinformation, comes second-hand); Friedman & Rosen-Zvi, *supra* note 4, at 1413 (stating that Americans learn about law indirectly); Kimberlianne Podlas, *Blame Judge Judy: The Effects of Syndicated Courtrooms on Jurors*, 25 AM. J. TRIAL ADVOC. 557 (2002). A growing body of literature contemplates the books, films, television programs, songs of pop culture as a mechanism through which people understand the law. See Harris, *supra* note 1, at 795; Lawrence M. Friedman, *Law, Lawyers, and Popular Culture*, 98 YALE L.J. 1579, 1579 (1989).

⁹⁸ See Spitz, *supra* note 4, at 727; Friedman & Rosen-Zvi, *supra* note 4, at 1413 (citizens learn what they know about the law from media); FOX & VAN SICKEL, *supra* note 2, at 125 (finding that the public obtains information, albeit sometimes incorrect, from media).

⁹⁹ See Sherwin, *Nomos*, *supra* note 93, at 1519–20; SHERWIN, POP, *supra* note 4, at 18 (indicating that the media is the primary if not exclusive source of stories about law); Podlas, *Please Adjust*, *supra* note 96, at 2; Spitz, *supra* note 4, at 727; see also Cary W. Horvath, *Measuring Television Addiction*, 48 J. BROAD. & ELEC. MEDIA 378, 380 (2004) (arguing that television is the central and most pervasive mass medium).

¹⁰⁰ See John L. Sherry, *Media Saturation and Entertainment-Education*, 12 COMM. THEORY 206, 207 (2002).

¹⁰¹ L.J. Shrum, Robert S. Wyler Jr., & Thomas O-Guinn, *The Effects of Television Consumption on Social Perceptions: The Use of Priming Procedures To Investigate Psychological Processes*, 24 J. CONSUMER RES. 447, 447 (1998) (finding that in 1995, Nielsen ratings showed that the average person watched more than four hours of television per day); TODD GITLIN, *MEDIA UNLIMITED* 15–16 (2003); see also Gary R. Edgerton & Michael T. Marsden, *The Teacher-Scholar in Film and Television, Introduction: Media Literacy and Education*. J. POPULAR FILM AND TELEVISION 2, 3 (2002).

¹⁰² See Michael L. Wood, et al., *Tonight's Top Story: Commercial Content in Television News*, 81 JOURNALISM & MASS COMM. Q. 807, 807 (2004).

¹⁰³ See Nancy Signorielli, *Aging on Television: Messages Relating to Gender, Race, and Occupation in Prime Time*, 48 J. BROAD. & ELEC. MEDIA 279, 279–80 (2004) (describing the importance of TV as storyteller); JILL MARSHALL & ANGELA WERNDLY, *THE LANGUAGE OF TELEVISION* 9 (2002); see also TELEVISION STUDIES 4 (TOBY MILLER ed., 2001) (discussing the cultural role of television).

¹⁰⁴ See Signorielli, *supra* note 103, at 279; see also George Gebner, *Foreword to JAMES SHANAHAN & MICHAEL MORGAN, TELEVISION AND ITS VIEWERS, CULTIVATION THEORY AND RESEARCH* ix-xiii (1999) (recounting the cultural influence of television); Yan Bing Zhang & Jake Howard, *Television Viewing and Perceptions of Traditional Chinese Values Among Chinese College Students*, 46 J. BROAD. & ELEC. MEDIA 245, 245 (arguing

know comes from the stories told in our culture, and television is our "primary story-teller, telling most of the stories to most of the people, most of the time."¹⁰⁵

Television is also our principal source of popular legal culture.¹⁰⁶ Although only few people have ever entered a courtroom, millions have seen one on TV.¹⁰⁷ Long before one becomes a litigant or is empanelled as a juror, *Perry Mason* has shown that the true culprit always confesses at trial,¹⁰⁸ *The People's Court* has demonstrated that judges actively remonstrate immoral defendants,¹⁰⁹ and *Law & Order* has proven that prosecutors never act with less than certainty of guilt.¹¹⁰ Moreover, because individuals have little personal experience to draw upon, these pop cultural representations obtain an enhanced authority.¹¹¹ As these stories of law take root in our psyches, they help construct our understandings of law and justice.¹¹²

that television is not simply entertainment but communicates rules); Patricia Moy, et al., *Communication and Citizenship: Mapping the Political Effects of Infotainment*, 8 MASS. COMMUN. & SOC'Y 111, 115 (2005) (pointing out that television is a primary source of information).

¹⁰⁵ Signorielli, *supra* note 103, at 279.

¹⁰⁶ Sherwin, *Nomos*, *supra* note 93, at 1519-20; SHERWIN, *POP*, *supra* note 4, at 18 (arguing that the media is the primary if not exclusive source of stories about law); Podlas, *As Seen on TV*, *supra* note 4, at 1-2; Friedman & Rosen-Zvi, *supra* note 4, at 1414.

¹⁰⁷ Sherwin, *Introduction*, *supra* note 4, at 896; *see also* Chase, *Toward*, *supra* note 1, at 547-54 (reviewing fiction and nonfiction television offerings); PRIME TIME LAW, *supra* note 1, at vii, ix-xii; Lawrence M. Friedman, *Law, Lawyers, and Popular Culture*, 98 YALE L.J. 1579, 1580 (1989) (explaining that popular legal culture and pop culture are fundamentally important in constructing social theories of law).

¹⁰⁸ *See* Lawrence M. Friedman, *Lexitainment: Legal Process As Theatre*, 50 DEPAUL L. REV. 539, 549-50 (2000) (describing the impact of *Perry Mason* on the public's view of crime-solving and trials); Norman Rosenberg, *Perry Mason*, in PRIME TIME LAW, *supra* note 1, at 115-28 (portraying *Perry Mason* as a legal text).

¹⁰⁹ *See* Podlas, *As Seen on TV*, *supra* note 4, at 1-2; *see generally* Kimberlianne Podlas, *Should We Blame Judge Judy*, 86 JUDICATURE 38 (July-Aug. 2002). [hereinafter Podlas, *Should We Blame*].

¹¹⁰ Recognizing the influence of pop culture on legal understandings, Sherwin has argued that the line between law and pop culture has vanished. SHERWIN, *POP*, *supra* note 4, at 8-11. Similarly, media scholars have noted the blurring of information programming with entertainment content. *See* Moy, *supra* note 104, at 113.

¹¹¹ *See* Sherry, *supra* note 100, at 212. According to media dependency theory, the media will have the greatest influence on a person's conception of reality where a person

For example, as people attempt to make sense of their experiences, they may reference these as templates, superimposing their narrative,¹¹³ or using them as schema or heuristics, i.e. mental short cuts for legal decision-making.¹¹⁴ These schema then impact the way that individuals expect trial evidence to unfold¹¹⁵ or make judgments about truth or guilt.¹¹⁶ This remains true whether the law on TV is fictitious or real,¹¹⁷ for research shows that even

has little experience. See Sandra Ball-Rokeach & Melvin DeFleur, *A Dependency Model of Mass Media Effects*, 3 COMM. RES. 3–21 (1976).

¹¹² See Sherwin, *Introduction*, *supra* note 4, at 898-99; see also Friedman & Rosen-Zvi, *supra* note 4, at 1414 (explaining that pop legal culture's images teach people what to expect of criminal justice); cf. Timothy E. Lin, *Social Norms and Judicial Decision-Making: Examining the Role of Narratives in Same Sex Adoption Cases*, 99 COLUM. L. REV. 739, 758–59 (1999) (explaining that it is important to discern the way in which narratives shape process of legal judging); *id.* at 761 (arguing that society's narratives shape beliefs about law).

¹¹³ See Steven L. Winter, *Legal Storytelling: The Cognitive Dimension of the Agony Between Legal Power and Narrative Meaning*, 87 MICH. L. REV. 2225, 2230 (1989) (explaining that the process of human coherence-seeking rituals superimpose narrative structure of life events). Whereas, sometimes, a story explains law, other times, it constrains our understanding of law. See *id.* at 2272. For instance, placing an account within a culturally known storyline prompts one to consider the issues common to and consistent with that storyline. A narrative that follows the traditional course of discrimination leads one to consider the issues attendant to and draw conclusions regarding discrimination. Because one can only reference the stories of which one is already aware, the narrative process is constrained by one's pre-existing understandings.

¹¹⁴ See Russel Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability*, 70 U. CHI. L. REV. 1203, 1223 (2003); Russell B. Korobkin & Thomas S. Ullen, *Law And Behavioral Science: Removing The Rationality Assumption From Law And Economics*, 88 CAL L. REV. 1051, 1055, 1085 (2000); see also J. RICHARD EISER, *SOCIAL JUDGMENT* 103–04 (1991) (referencing contribution of Tversky and Kahneman); NEAL FEIGENSON, *LEGAL BLAME: HOW JURORS THINK AND TALK ABOUT ACCIDENTS* 11 (2000).

¹¹⁵ See generally Kimberlianne Podlas, *Blame Judge Judy: The Effects of Syndicated Courtrooms on Jurors*, 25 AM. J. TRIAL ADVOC. 557 (2002); Sherwin, *Foreword*, *supra* note 92, at 654.

¹¹⁶ Sherwin, *Foreword*, *supra* note 92, at 654.

¹¹⁷ See Spitz, *supra* note 4, at 727 (asserting that most Americans take what they see on TV about law as true). Of course, the degree to which televised programs or events are perceived to be realistic positively influences mental processing. Hence, events, true or not, that are perceived to be false, will have less of an influence on mental processing. Cf. Michael A. Shapiro & T. Makana Chock, *Media Dependency and Perceived Reality of Fiction and News*, 48 J. BROADCASTING & ELEC. MEDIA 675, 675 (2004) (perceived reality important in mental processing); R. Lance Holbert, et al., *Fear, Authority, and Justice: Crime-Related TV Viewing and Endorsements of Capital Punishment and Gun Ownership*, 81 JOURNALISM & MASS COMMUN. Q. 343, 345 (2004) (perceived credibility

misinformation about the legal system and crime investigation can impact the way in which citizens make legal judgments.¹¹⁸

A. Theory of Influence

Although several theories of media influence posit a relationship between exposure to television content and viewer beliefs, attitudes, and behaviors,¹¹⁹ the most popular is cultivation theory.¹²⁰

According to cultivation theory, the overall pattern of television programming to which viewers are exposed cultivates in them common perceptions of reality.¹²¹ This "reality" tends to mirror what viewers see on the TV screen. Therefore, people who

of crime dramas influences effect); David A. Harris, *supra* note 1, at 786 (1993) (much televised information about criminal justice system is misleading).

¹¹⁸ See Harris, *supra* note 1, at 786 (misleading information about criminal justice may affect what occurs in justice system); *id.* at 797 (erroneous material of entertainment programming makes difference in person's perception of legal system).

¹¹⁹ See Deborah Fisher, et al., *Sex On American Television: An Analysis Across Program Genres And Network Types*, 48 J. BROADCASTING & ELECT. MEDIA 529, 530 (2004); Barbara J. Wilson, et al., *Content Analysis of Entertainment Television* 13, 18–23, in TELEVISION, VIOLENCE, AND PUBLIC POLICY (JAMES HAMILTON, ed. 1998). Among those theories are Albert Bandura's social learning or cognitive theory, ALBERT BANDURA, SOCIAL LEARNING THEORY 64–68 (Prentice Hall 1977); Fisher, *supra* note 119, at 530; Neal R. Feigenson & Daniel S. Bailis, *Air Bag Safety: Media Coverage, Popular Conceptions, and Public Policy*, 7 PSYCHOL., PUB. POL'Y & L. 444, 446 (2001), priming, Stacy L. Smith, et al., *Brandishing Guns in American Media: Two Studies Examining How Often and in What Context Firearms Appear on Television and in Popular Video Games*, 48 J. BROADCASTING & ELECTRONIC MEDIA 584, 585 (2004), and mental processing models such as heuristic processing model of cultivation effects, L.J. Shrum, *Media Consumption and Perceptions of Reality: Effects and Underlying Processes*, in MEDIA EFFECTS, ADVANCES IN THEORY AND RESEARCH 43, 78 (JENNINGS BRYANT & DOLF ZILLMAN ed., 2002); Hyung-Jin Woo & Joseph R. Dominick, *Acculturation, Cultivation, and Daytime TV Talk Shows*, 80 JOURNALISM & MASS COMM. Q., 109, 112 (2003).

¹²⁰ See Steven Eggermont, *Television Viewing, Perceived Similarity, and Adolescents' Expectations of a Romantic Partner*, 48 J. BROADCASTING & ELECTRONIC MEDIA 244, 248 (2004) (cultivation is most prominent theory on relationship between TV content and viewer's notion of reality); Jonathan Cohen & Gabriel Weimann, *Cultivation Revisited: Some Genres Have Some Effects On Some Viewers*, 13 COMM. REPS. 99, 99 (2000); George Gerbner, *Growing Up With Television: The Cultivation Perspective*, in MEDIA EFFECTS: ADVANCES IN THEORY AND RESEARCH, *supra* note 119, at 49–50.

¹²¹ See Woo & Dominick, *supra* note 119, at 110; BALL-ROKEACH & DEFLEUR, *supra* note 111, at 16–17; Patrick Rossler & Hans-Bernd Brosius, *Do Talk Shows Cultivate Adolescents' Views of the World? A Prolonged-Exposure Experiment*, 51 J. COMM. 143, 146 (2001).

watch a great deal of television will come both to perceive the real world to match the one on TV and adopt attitudes conforming to that visage.¹²² Notably, cultivation is not an incremental influence, but a presumed effect of significant viewing. Consequently, cultivation divides the world into “heavy” and “light viewers,”¹²³ and investigates the influence of media messages on society as a whole.¹²⁴

Researchers, however, have noted that our contemporary television environment differs significantly from that which inspired cultivation theory. In general, when Gerbner began collecting data, in general, viewers could watch only three network affiliates, and, in larger markets, a few independent stations. Therefore, a heavy viewer of television watched a homogenous, finite universe of options. This led Gerbner to argue that the themes and conventions of storytelling cut across all programming.¹²⁵

Since that time, television offerings have increased manifold. A heavy viewer can watch both a highly varied and highly specialized array of options. Consequently, many researchers assert that measuring the raw totality of TV viewing is no longer accurate. Instead, they suggest that cultivation theory be

¹²² See Maurice Vergeer, et al., *Exposure To Newspapers and Attitudes Toward Ethnic Minorities: A Longitudinal Analysis*, 11 HOWARD J. OF COMM. 127, 130 (2000); Thomas C. O’Guinn & C.J. Shrun, *The Role Of Television In The Construction Of Consumer Reality*, 23 J. CONSUMER RES. 278, 280 (1996) (association between television viewing and beliefs consistent with those images). Typically, this helps to construct a set of stereotypic images. Signorielli, *supra* note 103, at 281.

¹²³ Gerbner, *supra* note 120, 50–51. This is akin to contrasting groups injected with a lethal dose of a drug, say alcohol or cyanide with a group of individuals who range from slight exposure (one drink per month) to moderate exposure (one drink per night). Everyone has exposure to the same chemical, but that exposure becomes relevant only once a certain threshold is reached.

¹²⁴ See Vergeer, *supra* note 122, at 130; Signorielli, *supra* note 103, at 281 (considers the effect of television viewing on attitudes from a cumulative, long-term perspective).

¹²⁵ See Chris Segrin & Robin Nabi, *Does Television Viewing Cultivate Unrealistic Expectations About Marriage?* 52 J. COMM. 247, 259 (outlining debate regarding universal and genre-specific cultivation effects); see generally George Gerbner & Larry Gross, *Living With Television: The Violence Profile*, 26 J. COMM. 178 (1976); George Gerbner, et al., *Charting The Mainstream: Television’s Contributions to Political Orientations*, 32 J. COMM. 100 (1982).

modified¹²⁶ to acknowledge genre-specific effects.¹²⁷ In fact, Vergeer, in his research on stereotyping of ethnic minorities, amassed evidence that exposure to specific types of television programming rather than general television programming, is dispositive of attitudinal set. Specifically, Vergeer's studies advance the proposition that exposure to fictional and entertainment programming, rather than general programming, cultivates attitudes consistent with that programming.¹²⁸ This is particularly apt to the study of *CSI* and any effect on viewers that it might have.

In fact, evidence suggests a genre-specific cultivation effect with regard to law. One of the most popular icons of law is the judge.¹²⁹ This paradigm of "judge" is most prominently displayed on syndi-court, i.e., syndicated courtroom shows such as *The People's Court* and *Judge Judy*.¹³⁰ Yet, as shown through content analysis, the behaviors of the syndi-court bench do not resemble those of the real bench. Rather, whereas real judges are to be neutral, measured of tone, and uninvolved in the legal gymnastics attendant to the issues in the case, syndi-court judges are active, loud, moralistic interrogators. Consistent with this portrayal, Podlas has found that heavy viewers of syndi-court expect real judges to act like those seen on TV, i.e., to be active, ask questions during the proceedings, hold opinions regarding the outcome, and make their opinions known.¹³¹ A related study suggests that the docket and litigants of the syndi-court genre function as a

¹²⁶ For a history of cultivation theory and its maturation, see Sherry, *supra* note 100, at 211.

¹²⁷ See, e.g., Fisher, *supra* note 119, at 549; Jonathan Cohen & Gabriel Weimann, *Cultivation Revisited: Some Genres Have Some Effects On Some Viewers*, 13 COMM. REP. 99, 101-02, 107-08 (2000); Vergeer, *supra* note 122, at 130 (programming now differs greatly); Eggermont, *supra* note 120, at 248-49 (modified to content-specific effects); THE TELEVISION GENRE BOOK 3-5 (Glen Creeber ed., British Film Institute 2001).

¹²⁸ See Vergeer, *supra* note 122, at 130.

¹²⁹ See Podlas, *Please Adjust*, *supra* note 96 at 6-7; Podlas, *Should We Blame*, *supra* note 109.

¹³⁰ See Podlas, *Should We Blame*, *supra* note 129, at 39.

¹³¹ See Podlas, *supra* notes 1, 96, 109.

normative guide, influencing heavy viewers in their assessment of potentially litigious events.¹³²

Other researchers have found a similar link between the normative characteristics of TV representations of law and attitudes about law. For instance, Menkel-Meadow found that significant exposure to certain scripted lawyer dramas such as *The Practice* can impact law student perceptions of and learning about legal ethics.¹³³ Pfau found that heavy viewers of *LA Law* held more positive attitudes about lawyers than did non-viewers.¹³⁴ Similarly, Asimow has documented connections between cinematic portrayals of lawyers and public attitudes thereof.¹³⁵

Although these studies have suggested attitudinal or normative influences, with slight exception, none has shown a learning effect of peculiar episode-specific facts. For example, although research on juror perceptions of judges suggested that heavy viewers of syndi-court anticipated the demeanor of real judges to resemble those seen on TV, further investigations indicated that this was thematically, rather than factually, based. Hence, the viewers drew on syndi-court depictions to construct a model of “normal” judicial behavior. Critically, later research was unable to confirm that heavy viewers learned facts or remembered legal rules most commonly expressed on syndi-courts.¹³⁶

¹³² See Podlas, *Monster*, supra note 1.

¹³³ See generally Carrie Menkel-Meadow, *Can They Do That? Legal Ethics In Popular Culture: Of Characters And Acts*, 48 U.C.L.A. L. REV. 1305 (2001); *The Sense and Sensibilities of Lawyers: Lawyering and Litigation, Narratives, Film and Television, and Ethical Choices Regarding Career and Craft*, 31 MCGEORGE L. REV. 1 (1999); see also Carrie Menkel-Meadow, *Telling Stories in School: Using Case Studies and Stories to Teach Legal Ethics*, 69 FORDHAM L. REV. 787, 815 (2000).

¹³⁴ See Michael Pfau, *Television Viewing and Public Perceptions of Attorneys*, 21 HUM. COMM. RESEARCH 307, 312-13 (1995).

¹³⁵ See ASIMOW & MADER, supra note 1; see generally Michael Asimow, *Bad Lawyers in the Movies*, 24 NOVA L. REV. 533 (2000); Michael Asimow, *Embodiment of Evil: Law Firms in the Movies*, 48 U.C.L.A. L. REV. 1339 (2001).

¹³⁶ See Kimberlianne Podlas, *The Tales That Television Tells*, presented at *Power of Stories in Law* conference, Gloucester, England, July 24, 2005. Paper on file with the author.

III. CONSTRUCTING A "CSI EFFECT"

Contemplating "The CSI Effect" through the lens of cultivation, *CSI* combined with its spin-offs constitutes a genre of criminal forensic or prosecutorial investigation programming. Presumably, where viewers watched a significant amount of *CSI*, its programmatic content of "typical" crime scene investigations might flood the minds of viewers with the template of forensics presented on *CSI*.¹³⁷ Heavy viewers of the genre would, then, follow these stereotypic views of crime scene investigation, and apply them as they assess evidence at trial. Moreover, because most viewers have no actual knowledge of this field to displace what they see on TV, the messages of *CSI* may exert an enhanced impact.

Additionally, the popularity of *CSI* makes it more accessible to viewers.¹³⁸ This increased exemplary accessibility, in turn, makes it easier for viewers to draw conclusions.¹³⁹ This reflects the story model of juror decision-making.¹⁴⁰ The story model holds that jurors do not come to trial *tabulae rasae*, but, instead contemplate trial evidence to create a story that is more or less consistent with their pre-existing understandings.¹⁴¹ Also, alternative stories are weighed against each other.¹⁴² Thus, there exists a synergy between the potential influence of TV and the way that jurors assess and make sense of evidence and ultimately, reach a verdict.¹⁴³ Stories set forth by television, sit among the stories against which jurors judge and into which jurors integrate trial evidence.¹⁴⁴

¹³⁷ See Sherry, *supra* note 100, at 219–20 for a discussion of the operationalizing of message saturation on perception of social reality.

¹³⁸ For an explanation of the connection between the prerequisite of media exposure for attention, comprehension, and retention of a message, see William J. McGuire, *Theoretical Foundations of Campaigns*, in PUBLIC COMMUNICATION CAMPAIGNS (Ronald E. Rice & Charles K. Atkin eds., 2d ed. 1989).

¹³⁹ Typically, viewers construct the answer consistent with that exemplified/ broadcast/ shown on television. L.J. Shrum & Valerie Darmanin Bischak, *Mainstreaming, Resonance, and Impersonal Impact*, 27 HUM. COMM. RES. 187, 187 (2001).

¹⁴⁰ Vidmar, *supra* note 69, at 1137–38.

¹⁴¹ *Id.* at 1137–38.

¹⁴² *Id.* at 1138.

¹⁴³ *Id.*

¹⁴⁴ *Id.*

Yet, the “The CSI Effect” does not end with viewers adopting some generalized set of beliefs, but presumes: (1) specific factual beliefs that; (2) result in attitudinally-driven decision-making models; and then (3) transfer this to the crucible of the courtroom. Hence, those in law enforcement and the media, extrapolate that many viewers of *CSI* will eventually become jurors. When assessing evidence at trial, these *CSI*-primed jurors will apply its lessons regarding forensic or reference its investigatory model. As previously noted,¹⁴⁵ prosecutors and police believe that those lessons are anti-prosecution and jurors will expect and require more forensic evidence before they will convict. This effectively increases the prosecution’s burden of proof to “beyond any and all doubt.” Accordingly, such cognitive errors could distort the decision-making of jurors when assessing trial evidence,¹⁴⁶ and cause them to wrongfully acquit.

Despite this interpretation of the “text” of *CSI*,¹⁴⁷ the crime-drama stories are polysemic, or, capable of many meanings—and audiences are active interpreters of these stories.¹⁴⁸ Regardless of any *intended* communicative function of a given story, we must consider how it is understood.¹⁴⁹ *CSI* is no different. The show can be understood in many different ways and impact its audience in many different ways. If its stories influence the attitudes and decision-making of viewers/jurors, it may bias them against the prosecution by unreasonably insisting on forensic evidence for a conviction or it might enhance the value of any quasi-scientific testimony to unmitigated certainty. Or, it may simply make people

¹⁴⁵ See *supra* note 19 and accompanying text.

¹⁴⁶ See Jeffrey J. Rachlinski, *Empirical Legal Realism: A New Social Scientific Assessment of Law and Human Behavior*, 97 NW. U. L. REV. 1165, 1192 (2003).

¹⁴⁷ Alice Hall, *Reading Realism: Audiences’ Evaluations of the Reality of Media Texts*, 53 J. COMM. 624, 625 (2003). COLE AND DIOSO *supra* note 8; ASIMOW & MADER, *supra* note 1, at 11 (visual meanings are polysemic). Narrative analysis studies the way in which we construct, deconstruct, and make sense of these narratives and apply them. Jennifer K. Wood, *Justice As Therapy*, 51 COMM. Q. 296, 297–99 (2003); SHANAHAN & MORGAN, *supra* note 104, at 192, 195.

¹⁴⁸ SHANAHAN & MORGAN, *supra* note 104, at 159; DAVID BORDWELL, *NARRATION IN FILM*, (1985) at 33 (viewers receive the story, ruminate on it, and make it into an intelligible story).

¹⁴⁹ ASIMOW & MADER, *supra* note 1, at 9, 11–12 (process of meaning production critical to narrative theory).

more interested in the field, without exacting any impact on criminal verdicts. If *CSI* has an influence or "effect" on its audience and how it considers jury verdicts, it is unclear what that effect might be.

IV. INVESTIGATING THE CSI EFFECT

A. Overview

The claims of a "CSI Effect" notwithstanding, it is unknown what impact these shows have on viewers who serve as jurors.¹⁵⁰ The following study investigates the anti-prosecution "CSI Effect." This variant was chosen because it dominates the headlines and contemporary understandings of "The CSI Effect" and because it has the greatest potential to impact the policies and legal implementation of trial. Hence, hereinafter, this paper defines "The CSI Effect" as the anti-prosecution/enhanced burden effect described above.

B. Investigating CSI Episode Content

Although most individuals likely know that *CSI* highlights forensic evidentiary issues, rationalizing the study of the genre's potential impact on the public requires a systematic review and decoding of its episodes. Therefore, to discover which forensic issues were most prominent on *CSI*, the author conducted a content analysis of the first two seasons of *CSI*. The Season one DVD,¹⁵¹ re-runs of Season two as broadcast in syndication, and the *CSI Companion/Script Book*¹⁵² were used in the study. A review of the first two seasons' episodes disclosed the following frequency/breakdown of forensic issues:

¹⁵⁰ There is little known about the causal link between media representations of law and the public's attitudes and behaviors. Cf. Greenfield, *supra* note 94, at 27 (addressing outstanding issue in study of cinematic portrayals of law and lawyers). Unfortunately, little attention has been paid to the effects of television crime dramas. R. Lance Holbert, et al., *Fear, Authority, and Justice: Crime-Related TV Viewing and Endorsements of Capital Punishment and Gun Ownership*, 81 JOURNALISM & MASS COMMUN. Q. 343, 343, 345 (2004) (study of crime rates has been sporadic and does not form coherent whole).

¹⁵¹ *CSI: Crime Scene Investigation. Season 1*, Paramount Home Video (2004)

¹⁵² FLAHERTY, *supra* note 11.

FORENSIC CONTENT OF *CSI*

FORENSIC TEST	EVIDENCE/ EPISODE APPEARANCES
Print (fingerprint, shoeprint)	16
Blood	12
Fiber/ hair	9
Rape kit/semen	8
Gun/ballistics	6
Drug	5
DNA	4

At least one of each of the above forensic issues occurred in thirty nine of the forty six episodes studied. Among the other types of forensic evidence or tests were metal fragments, glass fragments, and paint or paint chips. Additionally, the most common crimes were murders and rapes.

C. Investigating Influence on Viewer Verdicts

The empirical portion of this study sought to uncover any connection between *CSI* viewing and issue-oriented influences on “not guilty” verdicts. This “CSI Effect” presumes that regularly watching *CSI* is: (1) associated with a tendency to hold specific beliefs consistent with the images and values seen on that program; (2) that those beliefs will pertain to the presence of forensic evidence in every case and its necessity for conviction; and (3) that this will lead *CSI* viewers, when jurors, to wrongfully render “not guilty” verdicts on these grounds. Consequently, this study investigated whether the “not guilty” verdicts of frequent viewers of *CSI* rested on *CSI*-oriented reasons. It hypothesized that frequent viewers of *CSI* would rely on *CSI*-oriented reasons in reaching “not guilty” verdicts to a greater degree than would non-viewers.

1. Instruments

Guided by the content analysis of *CSI* forensic issues, the author constructed a two-part instrument. The first portion surveyed general television viewing and law-related television

viewing habits (including legal dramas, reality courtrooms, and *CSI*) using two axes of self-report data. Respondents quantified their viewing on a forced choice scale of hours per month and then described their viewing habits using a Likert-type scale.¹⁵³

The second portion of the survey instrument consisted of a one-page criminal law scenario and a one-page verdict sheet on which respondents recorded their individual verdicts and ticked "reasons" impacting their respective verdicts. Each is described immediately below.

2. Criminal Law Scenario

The criminal law scenario recounted an alleged rape, a crime common to *CSI*. Because the study investigated whether forensic or "*CSI* reasons" improperly influenced the verdict decision-making process, the scenario presented no critical issues pertaining to or that could be ascertained with reference to forensics. Instead, it presented only issues of witness credibility. In other words, the case was not a "whodunit" but a "what happened." The alleged victim claimed that she was forced to have non-consensual sex, whereas the defendant claimed that the sexual encounter was wholly consensual. Because there was no question of whether the defendant and alleged victim had engaged in sexual intercourse—but, rather, whether the intercourse was consensual—forensic evidence could not shed light on the critical issue of consent.¹⁵⁴ This rendered any forensic evidence utterly irrelevant to a conclusion of "not guilty."

3. Verdict sheet

The verdict sheet asked respondents to: (i) tick a verdict of "guilty" or "not guilty" and then, (ii) tick any listed reasons

¹⁵³ A Likert scale is an intensity measure, such as a 5 point range, where 1 represents "strongly agree" and 5 represents "strongly disagree."

¹⁵⁴ See Cooley, *Reforming*, *supra* note 19, 413 (citing an instance when the defendant's semen, hair and clothing fibers and his fingerprints were found in the apartment where the act took place, but when the evidence was presented by an expert, it had the effect of "confounding and confusing" the jury).

impacting their verdict.¹⁵⁵ Specifically respondents who found the hypothetical defendant “not guilty” were asked whether any of the following impacted their decision:

1. victim had reason to lie;
2. evidence not tested for fingerprints;
3. defendant may have committed offense BUT prosecution did not prove beyond a reasonable doubt;
4. prosecution did not perform forensic tests that could have shown defendant was innocent;
5. no DNA evidence or no DNA test completed;
6. defendant’s story seemed more believable;
7. prosecution did not perform forensic tests to prove defendant was in apt./bedroom; or
8. other.

4. Participants

Participants were 306 undergraduate and graduate students enrolled in summer academic and review courses at a large state university in the Northeast.

5. Procedure

A survey area was staged in the common area adjacent to three large lecture halls¹⁵⁶ where the students were attending class. As students exited the lecture halls, they were asked to complete a survey in exchange for a packet that included a T-shirt, a bottled beverage, and a highlighter.

Consenting respondents read the scenario,¹⁵⁷ and then recorded their respective verdicts of “guilty” or “not guilty” on their verdict sheets. Next, they checked-off relevant reasons (as listed above) impacting their verdict.

¹⁵⁵ Both an “A” survey form and a “B” survey form were used in which the guilty/not guilty options were reversed.

¹⁵⁶ The lecture halls ranged from 280-360 seats.

¹⁵⁷ After the scenario was drafted, it was reviewed for balance by one defense attorney and one prosecutor.

D. Results

1. Television Exposure Measures

To isolate any connection between syndi-court viewing and certain factors contemplated by the questionnaire, respondents were identified as either frequent viewers of *CSI* [hereinafter "frequent viewer" or FV] or non-frequent viewers [hereinafter "non-frequent viewer" or NFV] of *CSI*. (The term "frequent viewer" was used, as opposed to "heavy viewer," to denote the genre-specific nature of the study, and has been used in previously-published law genre research).¹⁵⁸ As noted, *CSI* viewing was measured both quantitatively (hours per month) and qualitatively on dual axes of self-report data. These measures were then denominated into the FV and NFV categories.

Of the 306 survey/verdicts completed, fifteen were excluded due to incompleteness or internal inconsistency. The remaining 291 (ninety five percent) were reviewed for the verdict. Forty-one respondents (fourteen percent) reached a "guilty" verdict; 250 (eighty six percent) reached a "not guilty" verdict.

The "not guilty" verdicts were the focus of all further analysis. Because measuring any "CSI Effect" required considering the impact of *CSI* on "not guilty" verdicts, that a respondent reached a "guilty" verdict was either irrelevant or demonstrated the opposite effect.

Of the 250 respondent reaching "not guilty" verdicts, 187 (seventy five percent) were frequent viewers of *CSI*, sixty three (twenty five percent) were non-frequent viewers. In addition, eighty eight percent (n = 164) of the frequent viewers of *CSI* were frequent viewers of television, whereas sixty three percent (n = 40) of the non-frequent viewers of *CSI* were frequent viewers of television. Further, seventy nine percent (n = 148) of the frequent viewers of *CSI* were frequent viewers of law genre television (including dramas, such as *Law and Order*, and reality courtrooms, such as *Judge Judy*), generally, whereas only 57 percent (n = 36)

¹⁵⁸ See Podlas, *Monster*, *supra* note 1; Podlas, *As Seen on TV*, *supra* note 4; Podlas, *Please Adjust*, *supra* note 96.

of the non-frequent viewers of *CSI* were frequent viewers of law genre programming.

VIEWING PROFILES

(of respondents reaching NOT GUILTY verdicts)

Analyzed responses n=250	FREQUENT VIEWERS OF <i>CSI</i>		NON-FREQUENT VIEWERS OF <i>CSI</i>	
	n=187	75%	n=63	25%
Frequent viewers of television	n=164	88%	n=40	63%
Frequent viewers of law genre	n=148	79%	n=36	57%

E. Analysis of Verdicts

1. The Embedded “Not Guilty” Verdict

As noted, because the scenario did not rest on an issue on which forensics could shed light, but solely on weighing the credibility of the alleged victim against that of the accused, the only “legally correct” verdict was “not guilty.” The only way to overcome the presumption of innocence or, conversely, to meet the burden of proof beyond a reasonable doubt, would be to adjudge the accuser/victim as credible and the accused not credible. This, however, required seeing and hearing those respective witnesses. Because study respondents could not do so, it was not possible to assess either witness as more credible than the other. Therefore, it was not possible—if relying solely on the words of the scenario—for guilt to be proven beyond a reasonable doubt.¹⁵⁹ Thus, all respondents should have rendered a verdict of “not guilty.” Any

¹⁵⁹ Thus, the scales could not shift from presumptive innocence to certainty of guilt.

other answer disclosed some pre-existing bias (pro-prosecution, pro-victim, personal experience with rape) or other variable.

2. *CSI*-Influenced NOT GUILTY Verdicts

If *CSI* were an independent variable impacting the verdict, *CSI*-mediated reasons would enter into respondent decision-making. Presumably, viewers operating under a "CSI Effect" would mistakenly be influenced by visions of forensics, to wit: the issues noted in answers two, four, five, and seven.

3. Guilty Verdicts

Individuals who found the defendant GUILTY, while legally incorrect, were evidently uninfluenced by the lack of forensic evidence, not to mention the absence of proof beyond a reasonable doubt. Consequently, these verdicts are not relevant to investigating the influence of the "CSI Effect" as investigated here.

4. *CSI* Impact Measures

To determine whether "not guilty" verdicts of the frequent viewers of *CSI* were in any way potentially influenced by *CSI* factors, the listed reasons were coded as "CSI-marked" or not. Of the seven reasons, questions two, four, five, and seven were denominated CSI-marked. In data analysis, these CSI-marked answers were coded as 1, and non-CSI-marked answers, i.e., one, three, six, and eight, were coded as 0. (Although the "guilty" verdicts were, legally incorrect or legally unsupportable, a verdict of guilt could not suggest the negative, anti-prosecution "CSI Effect." Consequently, they were irrelevant to the instant analysis).¹⁶⁰

5. Statistical Analysis of NOT GUILTY verdicts and frequency of *CSI* viewing

Of the "not guilty" verdicts, only fifteen (15/187) or twelve percent of frequent viewers of *CSI* ticked any CSI-marked reason

¹⁶⁰ The guilty verdicts were relevant to assessing an anti-defense/pro-prosecution "CSI Effect" and/or the propensity to reduced or disregard the Constitutional burden of proof.

whereas ten (10/63) or sixteen percent of non-frequent viewers did. Between both groups, the most frequently-cited reason was number five, “no DNA evidence/ no DNA test completed.” These results are shown below.

DENOMINATION OF *CSI* VIEWING

<i>CSI</i>-marked Reasons	FREQ. <i>CSI</i> VIEWERS	NON-FREQ. <i>CSI</i> VIEWERS
Answer #2 Evidence not tested for fingerprints	n=3	n=3
Answer #4 Prosecution did not perform forensic tests that could have shown defendant was innocent	n=5	n=3
Answer #5 no DNA evidence/ no DNA test completed	n=8	n=6
Answer #7 Prosecution did not perform forensic tests to prove defendant was in apt./ bedroom	n=7	n=5

DENOMINATION OF *CSI* VIEWING

<i>Number of CSI Reasons Ticked</i>	FREQ. <i>CSI</i> VIEWERS	NON-FREQ. <i>CSI</i> VIEWERS
1 reason	n=8 (4%)	n=5 (8%)
2 reasons	n=5 (3%)	n=4 (6%)
3 reasons	n=2 (1%)	n=1 (2%)
4 reasons	n=0 (0%)	n=0 (0%)

Statistical analysis looked at the relationship between *CSI* viewing and reasons for rendering “not guilty” verdicts, i.e., being influenced by *CSI*-marked reasons. A one-way ANOVA tested for any statistically significant difference between the reasons given for a NOT GUILTY verdict by frequent viewers of *CSI* viewers

and those given by infrequent/non-viewers of *CSI*. Specifically, ANOVA considered whether frequent viewers of *CSI* were influenced by *CSI*-marked reasons more than were infrequent/non-viewers of *CSI*. This was tested at $p > 0.05$ level of significance. No significant difference between the frequent viewers and infrequent/non-viewer groups was found. Consequently, the results do not support the hypothesis that *CSI* viewers are influenced by *CSI*-marked reasons any more than non-viewers may be.

V. DISCUSSION: THE "CSI EFFECT" MYTH EXPOSED

Despite fears that, when legal and forensic investigations are filtered through the lens of *CSI* it will enhance the prosecution's burden and necessitate forensic proof for a conviction, the study data suggests otherwise. In the broadest sense possible, the purpose of this study was to test for an anti-prosecution "CSI Effect." The results, however, show no anti-prosecution effect on guilty verdicts.

Instead, the data shows that, in rendering "not guilty" verdicts, frequent viewers of *CSI* are no more influenced by *CSI* factors than are non-frequent viewers. In fact, considering the small minority of *CSI* viewers who considered *CSI* factors in their verdicts, the data suggests that they are not influenced by such factors, or consider and are influenced by the very same factors as are non-frequent viewers. Consequently, the empirical evidence does not support any anti-prosecution "CSI Effect."

Although not the focus of the instant study, the data hints at an opposite, pro-prosecution effect. Interestingly, in some instances, a lower proportion of *CSI* viewers rendered "not guilty" verdicts relying on *CSI* reasons. Consequently, *CSI* viewers might be more stringent in assessing evidence, more educated in concepts of proof, or better prepared for jury duty. Furthermore, an astounding numbers of respondents, generally, rendered "guilty" verdicts. Based on the criminal law scenario, however, such "guilty" verdicts were completely unfounded. Because more than a fraction of respondents rendered such verdicts might indicate the very pro-prosecution/pro-conviction bias of which defense attorneys often

complain. Consequently, further study investigating any existence of an anti-defense/pro-prosecution “CSI Effect” is warranted.

A conclusion disabusing prosecution notions of a “CSI Effect” is reasonable. First, notwithstanding that a “CSI Effect” exists, most of its support comes from a handful of self-referential newspaper articles quoting the anecdotes of prosecutors and police investigators. (By contrast, the support of a pro-prosecution or anti-defense “CSI Effect” comes from not only defense attorneys but also from scientists, courts, and peer-reviewed sources).¹⁶¹ Although it is hardly surprising that law enforcement, having brought and prosecuted a case, would believe any “not guilty” verdict mistaken, belief of guilt does not equal proof beyond a reasonable doubt. Further, the resulting anecdotes of juries-gone-wrong equal proof of a “CSI Effect.” Moreover, in cases cited where when jurors did not convict, there may well have been reasonable doubt unrelated to “fancy” *CSI*-styled forensic evidence. To believe that every prosecution should yield a conviction fundamentally alters the nature of the American system of criminal law, where innocence is presumed until proven otherwise.

Further, the data is not unexpected in light of the process necessary to render a “CSI Effect.” A majority of research regarding cultivation and television’s role in heuristic decision-making is premised on attitudinal formation rather than multi-level extrapolation of issue-specific content to broader applications, such as the courtroom.¹⁶² The “CSI Effect,” however, rests on a multi-step process, is highly sophisticated and confounds many variables, not to mention tenuous and untestable. The specific concerns include: (1) viewers will be influenced by the messages of *CSI*; (2) they will latch onto a particular piece of the content narrative; (3) that viewers will interpret this narrative piece in a very specific way (i.e., that forensic evidence exists in every case and that its absence denotes “reasonable doubt”).¹⁶³

¹⁶¹ See discussion *supra*, Part I. 2.

¹⁶² See discussion *supra*, Part II.

¹⁶³ See discussion *supra*, Part III.

Yet, assuming that *CSI* influences audiences, its narrative need not be understood in this way. Rather, audiences might focus on the more dominant theme of the expertise, rigor, and perfection of the *CSI* forensic team—they always catch “the bad guy.” This would, then, lead to an opposite effect, possibly one benefiting the prosecution. Additionally, even if audiences focus on this singular narrative and interpret it to underscore the critical importance of forensic evidence, they might apply this lesson against the defense. Thus, expecting the defense to come forth with forensic proof of innocence. Further, even if viewers make these multiple logical leaps, it is not clear that they would do so when, at some future time, those viewers are later jurors, assessing real proof in a real case, following the instructions of the court, and recognizing that someone’s life hangs in the balance. The ultimate effect demanded seems quite far removed.

Moreover, those fearful that *CSI* may appropriately find its way into courtroom deliberations can suggest appropriate instructions or appropriate voir dire to combat such a perceived effect. Shrum, for instance, has found that individuals can be persuaded to avoid heuristic methods of judgment, such as over-estimation of frequency, such as those attendant to a perceived “CSI Effect,”¹⁶⁴ by simply calling attention to one’s viewing habits.¹⁶⁵

Third, ironically, case law demonstrates that the few times a “CSI Effect” has found its way into a criminal trial, it was not the defense who has attempted to parlay a “CSI Effect” into an unjustified acquittal, but the prosecution who has attempted to exploit its mythology to obtain a conviction.

Using LEXIS, all state databases were searched for any reported cases referencing *CSI* in any way. The search covered all appellate, state high court, and reported trial decisions from May 2000-May 2005. Of those thousands of cases, only five total mentioned *CSI*.¹⁶⁶ One case referenced the show only as an

¹⁶⁴ L.J. Shrum, *Processing Strategy Moderates The Cultivation Effect*, 27 HUMAN COMMUN. RESEARCH 94, 115 (2001).

¹⁶⁵ *Id.*

¹⁶⁶ *People v. Howton*, No. 02-87545, 2004 Cal. App. LEXIS 5708, at *26 (Cal. Ct. App. June 16, 2004); *People v. Henderson*, Nos. SC049726A, SC051312A, 2004 Cal. App. LEXIS 10191, at *13–14 (Cal. Ct. App. Nov. 9, 2004); *Ohio v. Carson*, No. B-0305996,

inspiration for the crime¹⁶⁷—clearly not the effect at issue here. In the four remaining cases, one case each from California, Ohio, Delaware, and Missouri, the prosecution brought up *CSI* or the “CSI Effect.” Generally, this was done in closing argument to shore up arguments about the strength of their forensic evidence or to unconstitutionally diminish the burden of proof. In another, a prosecutor mentioned *CSI* during voir dire, using it as a reason to exclude a juror and combat a *Batson* claim.¹⁶⁸

In *Carson* the prosecutor relied on *CSI* to improperly recast the state’s burden of proof.¹⁶⁹ In *Boatswain*, the prosecutor made a classic straw man attack, using *CSI* as a focus. The prosecutor also proposed a “television test,” which the court held demeaned the defense and reduced the burden of proof below that of beyond a reasonable doubt.¹⁷⁰ Although these cases speak to a prosecution/anti-defense “CSI Effect,” neither resembles the effect complained of in the media.

VI. EMPIRICAL CONCERNS

It is not clear whether *CSI* viewers are not influenced by *CSI*-marked reasons or whether they are not influenced by them any more than non-viewers. Whereas the former suggests either no “CSI Effect” at all or no “CSI Effect” based on frequency of viewing, the latter leaves open the possibility that there still might be a “CSI Effect” across the population. Thus, it might impact frequent viewers and non-viewers alike.

2005 Ohio App. LEXIS 922, at *P43–P46 (Ohio Ct. App. Mar. 4, 2005); *Boatswain v. Delaware*, No. 0304003074, 2005 LEXIS 168, at *5–7 (Sup. Ct. Del. Apr. 27, 2005); *State v. Strong*, 142 S.W.3d 702, 724–25 (Sup. Ct. Mo. 2004).

¹⁶⁷ *People v. Howton*, No. 02-87545, 2004 Cal. App. LEXIS 5708, at *26 (Cal. Ct. App. June 16, 2004).

¹⁶⁸ *People v. Henderson*, Nos. SC049726A, SC051312A, 2004 Cal. App. LEXIS 10191, at *13–14 (Cal. Ct. App. Nov. 9, 2004); *see also* *Ohio v. Carson*, No. B-0305996, 2005 Ohio App. LEXIS 922, at *P43–P46 (Ohio Ct. App. Mar. 4, 2005) (defense counsel made *CSI* reference during voir dire, resulting in prosecution making peremptory challenge to dismiss juror who was familiar with the show’s dynamics).

¹⁶⁹ *Carson*, No. B-0305996, 2005 Ohio App. LEXIS 922, at *43–*46

¹⁷⁰ *Boatswain v. Delaware*, No. 0304003074, 2005 LEXIS 168, at *5–7 (Sup. Ct. Del. Apr. 27, 2005).

Alternatively, from law enforcement's point of view, the data may not directly speak to its dual concerns that their burden of proof has increased—even if properly—and that convictions will become more difficult to obtain. Indeed, the proportion of respondents rendering "guilty" verdicts despite the evidentiary and constitutional impossibility of such strongly suggests that the prosecution continues to enjoy a significant and unfounded bias in favor of criminal conviction. (While it may be that jurors more correctly apply the beyond a reasonable doubt standard, making prosecutions more difficult than to what prosecutor have become accustomed, this is not the "CSI Effect" decried in the media and by prosecutors nationwide). This underscores the need for further investigation of a pro-prosecution or anti-defense "CSI Effect" or of a societal pro-prosecution/anti-defense bias. Future publications will consider these possibilities.

CONCLUSION

Although the media warns that a "CSI Effect" is seducing jurors into legally-unjustifiable "not guilty" verdicts and unwarranted demands for proof of guilt beyond any and all doubt, the empirical results here suggest otherwise. Indeed, the data strongly denies the existence of any negative effect of *CSI* on "not guilty" verdicts, provided that "negative" is defined as improper. If anything, the data hints that, if there is any effect of *CSI*, it is to exalt the infallibility of forensic evidence, favor the prosecution, or pre-dispose jurors toward findings of guilt.

Unfortunately, notwithstanding the evidence disputing a "CSI Effect," if the public, the media, and the legal system do not accept or learn of this "proof," accusations of the "CSI Effect" will continue. Ultimately, much like the unfounded tort crisis, *CSI* horror stories of justice denied may drive legal "reforms" when no reforms are needed or cause the issue to improperly enter trial arguments. Consequently, before the "CSI Effect" has time and media repetition to embed itself into the psyche of the public and members of the justice system, it should be exposed for what it is: nothing more than fiction.