

ARTICLES

IDEALIZED IMAGES OF SCIENCE IN LAW: THE EXPERT WITNESS IN TRIAL MOVIES

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I. APOLOGIA: LAW AND FILM

It is too early to say whether the law-and-cinema discourse will . . . succeed in creating modes of analysis that are capable of withstanding conceptual, empirical, and ethical critique. Ornamenting our jurisprudential analysis with a reference to such or such a film or attaching an analysis of a film to a legal or moral statement of one type or another are liable to ultimately be but a transient fashion. Yet the conclusion that the discourse of law and cinema is doomed to be just a fad is equally hasty.¹

Scholarly reflection on the portrayal of lawyers and legal processes in film is a growing practice. As to its status as a sub-discipline of law, it may be identified as Law and Film Studies (“there has been an explosion of study linking law and film from the late 1980s”²), as part of the law and literature movement³ (as

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¹ Amnon Reichman, *The Production of Law (and Cinema)* 45 (bepress Legal Series, Working Paper No. 1997, 2007), available at <http://law.bepress.com/expresso/eps/1997>.

² STEVE GREENFIELD, GUY OSBORN & PETER ROBSON, *FILM AND THE LAW* 11 (2001). For a list of works on this topic, see *id.* at 205–20 (Bibliography).

³ See *id.* at 11 (“There is a clear link . . . [between law and film studies and] work being carried out within the field of law and literature and a number of parallels can be drawn.”). But see Reichman, *supra* note 1, at 6–7 (“[O]ne is tempted to describe the relation between [the notion that law and cinema share the medium of culture and the idea that framework narratives organize law and cinema] as merely an extension of the relation between law and literature. . . . Much like in [the] law-and-literature domain, we . . . can talk about . . . the manner in which law

in “filmic literature”), as a primary focus of Law and Popular Culture Studies,⁴ or as existing—as do all of the foregoing—under the umbrella of Law, Culture, and the Humanities (as that sub-discipline is represented by the Association for the Study of Law, Culture, and the Humanities).⁵ The purposes of such reflection are varied,⁶ and include a sense that those in the discipline of law should pay attention to popular culture.⁷ There is general agreement that the images of law and lawyers in popular fiction and cinema reflect how people view and understand legal processes, although there is less agreement that such images create new views and understandings.⁸ In any event, we arguably should know how the general public feels about law because its members are potential clients or jurors with whom we will need to communicate, or potential law students and lawyers who need to have a realistic vision of the profession, both when deciding whether to study law, or after they enter law school.

is portrayed in various films. Conversely, we can discuss cinema in law, namely the manner in which cinema is integrated in legal texts and practices. We can also think about law as cinema, by referring to legal practices as a specific type of cinematic-dramatic practices. . . . Lastly, we can place law alongside cinema, thereby using the practices as arenas from which insights can be gained regarding human culture, or the human condition. Yet [this] should not lead to the erroneous conclusion that cinema is but a type of text. . . . Cinema has its own unique features.”). Reichman goes on to argue that cinema is more than narrative due to its “dramatic elements, among them sound, color and lighting.” *Id.* at 8.

⁴ See generally RICHARD K. SHERWIN, POPULAR CULTURE AND LAW 1 (2006).

⁵ See GREENFIELD ET AL., *supra* note 2, at 11 (“The entire area [of law and film] has yet to be defined, and no protocols as to what counts as effective scholarship in the area have emerged as yet.”); see also Reichman, *supra* note 1, at 16 (“[A]t this stage the law and cinema discourse is not developed enough to enable us to [decide] whether to focus on films screened in theaters or whether we should expand the focus to include related types of media [such as television] as well.”); *id.* at 45 (“[L]aw and cinema discourse is still in its infancy. . . .”).

⁶ Reichman’s analysis of law and film constitutes a survey of the various ways that films can be used in legal training, practice, and scholarship. See generally Reichman, *supra* note 1.

⁷ See, e.g., Lawrence M. Friedman, *Law, Lawyers, and Popular Culture*, 98 YALE L.J. 1579, 1606 (1989) (“[I]t seems patent that explorations of legal and popular culture, and the way they interact, should be high on the list of scholarly priorities.”).

⁸ See, e.g., MICHAEL ASIMOW & SHANNON MADER, LAW AND POPULAR CULTURE: A COURSE BOOK 7 (2004) (“Popular culture has effects on the people who consume it. . . . Most people learn most of what they think they know about law and lawyers from consuming popular legal culture.”); Richard A. Posner, *The Depiction of Law in The Bonfire of the Vanities*, 98 YALE L.J. 1653, 1660 (1989) (“Popular fiction is likely to reflect rather than to influence the popular understanding of law.”).

It is also evident that films about law and lawyers can sometimes be used as effective teaching tools in law schools, whether to illustrate good or bad trial advocacy skills,⁹ to serve as hypotheticals for legal education ethics training,¹⁰ or to reflect on justice and fairness in contemporary or past society (including issues of gender, race, and power).¹¹ However, some argue that “to confine the use of film within teaching to the merely pedagogic would be a tragic waste of its full potential.”¹² We should also be interested in how the portrayal of “internal legal culture . . . affects the external legal culture,”¹³ including the “‘Perry Mason’ effect” (jurors expect confessions of guilt during a criminal trial), the “‘People’s Court’ phenomenon” (jurors find witnesses credible if judges do not shout skepticism), and the “‘CSI’ phenomenon” (jurors expect highly conclusive science in every criminal case).¹⁴ Films also may offer insights as to “how law operates in the larger culture.”¹⁵ Even when lawyers sometimes find the representations of law and lawyers in film unrealistic, the films “tend to be taken as credible representations of . . . reality”¹⁶ and therefore create a context with limitations and possibilities for law in society. Finally, popular cinema can be seen as a jurisprudential activity, offering insights into contemporary legal philosophy and revealing a “jurisprudence of popular culture.”¹⁷

On the other hand, some doubt that popular fiction, which clearly could include popular cinema in the age of electronic mass

⁹ See Reichman, *supra* note 1, at 30 (“If the world of cinema can teach us something about production, it can certainly teach us something about directing, scriptwriting, and staging.” (footnotes omitted)).

¹⁰ See *id.* at 34 (“It has become common place that contract theory, constitutional judicial review, tort law, and professional ethics—to name but a few examples—are approached by screening a certain film (in class, before lawyers, judges, legislators or any other professional audience).” (footnotes omitted)). Reichman states that “film . . . presents a hypothetical story.” *Id.*

¹¹ See *id.* at 32 (“The idea is to show that the provisions of a certain statute or a decision of a certain court do not realize their purpose and/or lead to injustice because they do not take into account certain elements of the reality of human life—elements about which one can learn through watching films.”).

¹² GREENFIELD ET AL., *supra* note 2, at 6.

¹³ *Id.* at 5.

¹⁴ SHERWIN, *supra* note 4, at 4.

¹⁵ John Denvir, *Introduction* to LEGAL REELISM: MOVIES AS LEGAL TEXTS xi, xii (John Denvir ed., 1996).

¹⁶ SHERWIN, *supra* note 4, at 7.

¹⁷ See generally WILLIAM P. MACNEIL, LEX POPULI: THE JURISPRUDENCE OF POPULAR CULTURE (2007).

media, is useful for “the permanent and fundamental issues of law that we call jurisprudence.”¹⁸ Judge Posner concedes that “we may be able to learn something about the popular understanding of law from popular fiction about law,” but he only looks to classic works of literature—“the body of writings that are somehow able to speak to people living under other skies, in other times, from those of the author and his original audience”—for insights about “law at the jurisprudential level.”¹⁹ And even as to great works of literature, Posner doubts that most novels about law are interesting in any “way that a lawyer might be able to elucidate”:

If I want to know about the system of chancery in nineteenth-century England I do not go to *Bleak House*. . . . There are better places to learn about law [I]n a culture that has non-literary records, those records generally provide more, and more accurate, information about the legal system than does literature.²⁰

Posner’s critique also suggests that great literature has little to offer legal historians, other than “insight into how law was perceived by non-lawyers.”²¹ However, Professor Little argues that literature can elucidate the atmosphere of a period better than non-fictional sources can, and therefore offers a supplementary “way of contextualising legal history and engaging with particular legal issues.”²² Moreover, the effect of great law-related literature on the public is likely greater than the effects of legal texts, such that “canonical literature . . . is of crucial significance in terms of shaping the development of the popular imagination of law, and that of lawyers themselves.”²³

¹⁸ Posner, *supra* note 8, at 1661.

¹⁹ *Id.* at 1654–55, 1660–61. Posner mentions Kafka’s *The Trial*, Shakespeare’s *The Merchant of Venice*, Melville’s *Billy Budd*, and Dickens’ *Bleak House*. See *id.* at 1654–55.

²⁰ Richard A. Posner, *Law and Literature: A Relation Reargued*, 72 VA. L. REV. 1351, 1356–57 (1986).

²¹ Gavin Little, *Literature and Legal History: Analysing Methodology*, ENT. & SPORTS L.J., Winter 2005, at 1, 19, <http://go.warwick.ac.uk/eslj/issues/volume3/number2/little> (citing Posner, *supra* note 20).

²² *Id.* at 32. Little discusses the use of literature as a supplement to “orthodox” legal history in Holdsworth’s *Charles Dickens as a Legal Historian*, Meron’s *Henry’s Wars and Shakespeare’s Laws: Perspectives on the Law of War in the Later Middle Ages*, and Treitel’s *Jane Austen and the Law*. See *id.* at 27–34.

²³ *Id.* at 43 (discussing Ian Ward, *Literature and the Legal Imagination*, 49 N. IR. LEGAL Q. 167 (1998)).

Finally, when literary depictions are “combined with a range of non-fictional sources”—such as diaries, autobiographies, and private papers—they “can be used to build understanding of socio-cultural attitudes and perceptions, which can then inform the analysis of specific aspects of social and legal history.”²⁴

The debate over the utility of literature for legal historians illuminates several important aspects of the following study of images of expertise in trial movies. First, I will use trial movies as an indicator of popular beliefs about expert witnesses. While “[n]umerous empirical studies have shown that expert evidence influences jury decisions”—especially when (1) the link between the research relied upon by the expert and the facts of the case is clear, and (2) the expertise is presented early in the trial—studies also indicate that jurors likely have trouble discriminating between good and bad science.²⁵ This suggests that other factors are in play when jurors decide which expert to believe, and just as “[a]n immensely popular contemporary novel about law may . . . afford a better glimpse of how lay people regard law than a public opinion poll,”²⁶ popular trial movies that reflect public sentiments may help supplement empirical studies of how juries evaluate expertise. Second, to the extent that popular culture, including cinema, shapes the popular imagination concerning science in law, the representation of experts in trial movies becomes important for understanding new developments in the legal context and for framing a response. Finally, the inter-disciplinary methodology of legal historians—

²⁴ *Id.* at 44 (discussing MARGOT C. FINN, *THE CHARACTER OF CREDIT: PERSONAL DEBT IN ENGLISH CULTURE 1740–1914* (2003)).

²⁵ Edith Greene et al., *Jurors and Juries: A Review of the Field*, in *TAKING PSYCHOLOGY AND LAW INTO THE TWENTY-FIRST CENTURY* 225, 232–33 (James R. P. Ogloff ed., 2002) (explaining how research “demonstrated that expert testimony describing studies containing a confound, missing a control group, or having the potential for experimenter cueing effects is just as influential as valid research”). Long before such studies confirmed juror confusion about scientific issues, there were “calls . . . for the elimination of the jury. Charles H. Dana argued as early as 1853 that ‘in a process that had become highly professionalized, it was incongruous to entrust the evaluation of the experts’ arguments on technical points to uninformed laymen.’” Julie Johnson-McGrath, *Witness for the Prosecution: Science Versus Crime in Twentieth-Century America*, 22 *LEGAL STUD. F.* 183, 188 (1998) (quoting William E. Nelson, *The Changing Role of the Jury in the Nineteenth Century*, 74 *YALE L.J.* 170, 181 (1964)). Moreover, “[t]he legal and medical journals of the first half of the [twentieth] century are filled with lamentations of juries’ refusal to acknowledge scientific circumstantial evidence.” *Id.* at 191–92.

²⁶ Posner, *supra* note 8, at 1655.

who seek a broader understanding of culture to illuminate legal culture—is implicated in this study, which considers popular views of science and scientists in its analysis of trial movies. That is, popular conceptions of lawyers and legal processes combine with presuppositions about science in public responses to cinematic representations of expertise.

In Part II of this study, I acknowledge the existing discourse concerning the reputations of lawyers in films about law and of scientists in science-fiction films, and introduce the thesis that the representation of science and scientists in trial movies is consistent with the idealized image of science that persists in law. In Part III, I identify the study of the images of science in “lawyer movies” as a point of intersection between science-and-literature studies (or science and popular culture studies), which includes the analysis of images of science and scientists in science-fiction films, and the law-and-literature movement (or law and popular culture studies), which includes the study of images of law and lawyers in cinema.²⁷ The parallel between those two sub-disciplines of law and science is striking, such that a hybrid enterprise—the study of scientists in lawyer movies—is relatively easy to construct on the basis of existing theoretical frameworks and research. In Part IV, I use examples from recent trial movies to show that the image of the biased, bought-and-paid-for expert, as well as the image of the expert as the stabilizer of the contested context of a trial, both reflect the idealization of science in law. Lawyer movies often deliver a message that when science is appropriately disinterested and untainted by advocacy and rhetoric, it will solve the legal controversies concerning science that are brought on by advocacy and rhetoric in the courtroom. There are exceptions to these images, however, such that a third category of films can be identified in which science is represented more modestly. Finally, I conclude not only that most cinematic representations reflect the idealization of science in law generally, but also that there are adverse consequences for litigation involving experts.

²⁷ Another point of intersection, not relevant to the present study, is the study of images of law in science fiction—for example, see Colloquy, *Galactic Jurisprudence*, 3 L. CULTURE & HUMAN. 357 (2007) (including studies of law in *Star Trek*, *Blade Runner*, *The Matrix*, and Isaac Asimov’s robot novels), and the essays on law in *Star Trek* that appear in *Star Trek Visions of Law and Justice*. See generally STAR TREK VISIONS OF LAW AND JUSTICE (Robert H. Chaires & Bradley Stewart Chilton eds., 2003).

II. REPUTATIONAL CONTOURS IN TRIAL MOVIES

*Within the last two decades, lawyers have gone over the cliff as far as public esteem for the profession is concerned. Legal popular culture reflects this dismal phenomenon quite accurately, presenting most lawyers in a strongly negative manner.*²⁸

*U.S. adults who consume popular culture frequently (habitual viewers) are more likely than infrequent viewers to hold negative opinions about science, to believe that science is dangerous, [and] to consider scientists odd and peculiar people . . .*²⁹

Given that lawyers have such a bad reputation in popular culture, and that scientists are contemporaneously viewed as strange if not dangerous, it would seem that the combination of these two professions in a trial movie—e.g., a lawyer presenting the testimony of a scientific expert—would be a public relations disaster for both law and science. Of course, the negative image of lawyers could hardly get worse, and their teaming up with scientists is not likely to help their public reputation for trying to win at any cost, for manipulating the system and the truth, and for corruption.³⁰ It is more likely that their procurement and use of expert witnesses would be viewed as just another questionable tactic. As to scientists, as portrayed in science-fiction movies, their traditional popular culture image as arrogant, godless, inhuman, mad, dangerous, impersonal, and amoral³¹ would seem

²⁸ Michael Asimow, *Bad Lawyers in the Movies*, 24 NOVA L. REV. 533, 582 (2000); see also LEO J. SHAPIRO & ASSOCS., AM. BAR ASS'N, PUBLIC PERCEPTIONS OF LAWYERS: CONSUMER RESEARCH FINDINGS 7 (2002) ("The American public says that lawyers are greedy; lawyers are manipulative; lawyers are corrupt; and that the legal profession does a poor job of policing itself.").

²⁹ David A. Kirby, *The New Eugenics in Cinema: Genetic Determinism and Gene Therapy in Gattaca*, 27 SCI. FICTION STUD. 193, 208 (2000), available at <http://www.depauw.edu/sfs/essays/gattaca.htm> (citing George Gerbner, *Science on Television: How It Affects Public Conceptions*, ISSUES SCI. & TECH., Spring 1987, 109–15).

³⁰ See SHAPIRO & ASSOCS., AM. BAR ASS'N, *supra* note 28, at 7–9 (noting that seventy-four percent of survey participants agree that lawyers are more interested in winning than justice, that lawyers "are believed to manipulate both the system and the truth," and that some say lawyers' tactics "border on the unethical, and even illegal").

³¹ See generally ROSLYNN D. HAYNES, FROM FAUST TO STRANGELOVE: REPRESENTATIONS OF THE SCIENTIST IN WESTERN LITERATURE (1994). Many of the literary works discussed have been made into movies. See also Walter Hirsch, *The*

likely to accompany them when slumming in the cinematic courtroom—but again, how much worse could their reputation become? Oddly, however, science and scientists do not seem to suffer reputational losses in trial movies. This phenomenon can best be explained by the twin, oscillating images of scientific experts in law: (1) when the expert is negatively portrayed, it is often because lawyers and the legal process have tainted science; and (2) when the expert is positively portrayed, it is often because science is represented as better than law—a curative to law's rhetorical and institutional instabilities. Both images reflect the shift in popular culture toward more positive images of science, which corresponds to the growing cultural authority of science. Both images, however, also reflect the actual idealization of science in law, and both images immunize the scientist from reputational harm. Put simply, cinematic lawyers continue to look bad, but scientists fare quite well when they team up with lawyers in trial movies.

By the term “idealization” of science in law, I refer to the expectation that science is a stable body of relatively objective knowledge on which the law can draw to settle legal controversies.³² That expectation may seem benign, except that

Image of the Scientist in Science Fiction: A Content Analysis, 63 AM. J. SOC. 506, 506, 509 (1958) (presenting an early empirical study of science fiction stories published between 1926 and 1950). Hirsch found that “scientists occupy the most frequent occupational category of villain,” but scientists were even more often the hero. *Id.* at 509. In the latter years of the period 1926–1950, however, scientists were “no longer either supermen or stereotyped villains but real human beings . . . who recognize[d] that science alone is an inadequate guide,” thereby indicating that the post-war public did not “view science as the obvious means for the solution of social problems.” *Id.* at 511–12. Andrew Tudor similarly found alternating images of the scientist as dangerous to and as a savior of society in horror movies produced between 1951 and 1964, but in more recent horror films, found that the scientist is unable to eliminate threats to humanity. See ANDREW TUDOR, MONSTERS AND MAD SCIENTISTS: A CULTURAL HISTORY OF THE HORROR MOVIE 141–57 (1989).

³² Historically, this can be explained in part by advances in forensic science:

Throughout the twentieth century, politicians, prosecutors, and forensic scientists sought to ensure juries' appreciation of and belief in scientific evidence through a widespread public relations campaign The campaign was carried out through magazine articles, World's Fair exhibits, short stories, books, and Hollywood movies: the propaganda had supporters ranging from Harvard University and Erle Stanley Gardner to local police departments eager to convince taxpayers of the need to fund a municipal or state forensics lab. The message was simple: disinterested, “objective” science was the best weapon against crime.

Johnson-McGrath, *supra* note 25, at 192. In “the construction of science's cultural authority as pure, unbiased, and objective,” the “forensic scientist's testimony is

it often corresponds to a romantic notion of the scientific enterprise and thereby eclipses not only the instabilities and controversies within science itself, but also the social and rhetorical aspects of even the best science. We see the idealization of science in law whenever there is a presumption that if two scientific experts disagree, one of them must be a “junk scientist.” This presumption ignores the theoretical presuppositions and limitations of data that lead to genuine scientific disputes. We also see the idealization of science in law whenever we associate “bias, interest, and motivation” with unreliable expertise. This association misses the practical advances made by scientists who have strong theoretical biases, institutional interests, and financial motivations. Finally, we see the idealization of science in law whenever a legislator, administrator, or judge demands certainty from science, not recognizing its probabilistic nature and dynamic history. It is neither a critique of scientific progress nor an exaggeration to acknowledge scientific debates, the conventional aspects of scientific methodology, the importance of networking and “social capital” with respect to publications and grants, and the persuasive elements in scientific discourse. To think that these features are somehow markers of bad science is to idealize science.

In our recent study of post-*Daubert v. Merrell Dow Pharmaceuticals, Inc.*³³ admissibility opinions, entitled *No Magic Wand: The Idealization of Science in Law*, Professor Lewis LaRue and I identified two different conceptions of the scientific enterprise among the federal judiciary.³⁴ The first, a romantic view, was associated with those trial judges who expected more from science than can reasonably be delivered. We argued that such judges tend to make two types of errors: (1) these judges sometimes ruled too strictly, and disallowed good science because the expert witness did not live up to their idealistic image of science;³⁵ and (2) these judges sometimes were, paradoxically, too lenient, and allowed bad science on the basis of its social

unaffected by his or her own background, beliefs, and social and intellectual biases.” *Id.* at 193.

³³ 509 U.S. 579 (1993). In *Daubert*, the Court set new standards for admissibility of expert opinions in federal courts. *See id.* at 597.

³⁴ *See* DAVID S. CAUDILL & LEWIS H. LARUE, *NO MAGIC WAND: THE IDEALIZATION OF SCIENCE IN LAW* xiv–xv (2006).

³⁵ *See id.* at 15–28.

authority alone.³⁶ Examples of the first error include cases in which the testimony of a scientist was not admitted because it was based on less than perfect or incomplete information, or because it involved alternative explanations or a probabilistic conclusion. Examples of the second error include cases in which testimony of a scientist was admitted solely because the expert had impressive credentials, notwithstanding an unreliable opinion. In both cases, judicial failure to understand the practical goals and limitations of science resulted in admissibility decisions that were out of sync with the realities of scientific practice and explanation. We also identified, however, a modest, non-idealized vision of science among some members of the federal judiciary. Such judges tended to recognize that science is a cultural enterprise, with its own controversies, that relies not only on logic and methodology but also on social conventions, rhetorical moves, and institutional credentializing. And such judges were not surprised by experts who disagreed with each other, by credentialed experts with weak methodologies, or by qualified scientists who were not willing to testify with absolute certainty.³⁷ We concluded that judges who hold a more modest view of science tended to make better admissibility decisions.

The present study is not concerned with the judiciary, but with the public and potential jurors in our adversary system. Nevertheless, judges, most of whom are not scientists, seem to be on the side of the general public and share in the public understandings of science in our culture.³⁸ To the extent that cinema about law reflects public understandings, both the idealization of science in popular culture and the more modest views of science in popular culture represent the same perspectives that were identified in judicial opinions involving expert admissibility decisions. While the focus of this Article is on trial movies as the producer of images of scientists in their interactions with legal processes, an idealized image of science in popular culture can have effects both on judges and juries who are called upon to evaluate scientific expertise in the courtroom. Moreover, the lawyers who present expert testimony, and their clients, will have to deal with the effects of popular-culture

³⁶ See *id.* at 31–44.

³⁷ See *id.* at xv–xvi.

³⁸ See David S. Caudill, *Ibsen's An Enemy of the People and the Public Understanding of Science in Law*, 16 GEO. INT'L ENVTL. L. REV. 1, 10–15 (2003).

images of science and scientists. The significance, therefore, of trial movies far exceeds their entertainment value.

III. PARALLEL ENTERPRISES

*Scientific theses[, “the scientist advised the lawyer,”] can only be fought with facts or scientific induction. If you’d . . . [armed yourself] from the inexhaustible arsenal of paleontological, zoological, embryological, and physiological facts, you couldn’t have helped but win. There one finds weapons for all arguments and tastes, to fit the most contradictory theories.*³⁹

Those who study the images of law and lawyers in popular culture have a lot in common with those who study cultural images of science and scientists. Both enterprises are worrisome, since the images they identify over the last several decades are overwhelmingly negative. At least lawyers enjoyed a golden age in cinema in the decades prior to 1970, wherein the “prototypical . . . lawyer was skillful, devoted to his clients, and ethical.”⁴⁰ “But negative lawyer portraits began to appear in the 1970s. . . . During the [80s and 90s], a great many attorneys on the big screen have been . . . rude, crass, selfish, . . . greedy[,] . . . unethical, disloyal, or incompetent.”⁴¹ Scientists, on the other hand, have most often been portrayed through cinematic history as frightening, from the “Nazi-like scientists creating ‘supermen’ through scientific manipulation” in *Man Made Monster*⁴² and *The Boogie Man Will Get You*,⁴³ to the science-bashing 1997 film, *Gattaca*,⁴⁴ which warns of a discriminatory “world dominated by genes.”⁴⁵ Because lawyers

³⁹ Santiago Ramón y Cajal, *The Natural Man and the Artificial Man*, in VACATION STORIES: FIVE SCIENCE FICTION TALES 169, 183 (Laura Otis trans., 2001) [hereinafter VACATION STORIES]. Cajal (1852–1934) was a successful scientist and artist who won the 1906 Nobel Prize for medicine. See Laura Otis, *Introduction to VACATION STORIES*, *supra*, at vii, vii.

⁴⁰ Asimow, *supra* note 28, at 575.

⁴¹ *Id.* at 576–77.

⁴² MAN MADE MONSTER (Universal Pictures 1941).

⁴³ THE BOOGIE MAN WILL GET YOU (Columbia Pictures 1942).

⁴⁴ GATTACA (Columbia Pictures 1997).

⁴⁵ See Kirby, *supra* note 29, at 198. Kirby notes that the geneticist in *Gattaca* who can engineer “the qualities that society finds desirable” is different from the earlier Doctor “Moreau stereotype, since here the figure of the scientist, rather than tyrannically enforcing his vision, merely plays upon existing popular beliefs and attitudes.” *Id.* at 200; see also TUDOR, *supra* note 31, at 20 (explaining that “mad scientists” appear as antagonists in horror movies more often than zombies,

and scientists were both the subject of negative portrayals in film, both professions could worry about the impact of public misconceptions. Indeed, Michael Asimow “speculates that negative filmed images can lead public opinion as well as follow it,” therefore “such portrayals are [not only] an important social datum” reflecting the public’s law esteem of lawyers, but “they [also] have real world consequences.”⁴⁶ In a similar fashion, Theodore Roszak urges scientists to “face up to the warning” in the persistent folklore of “Dr. Faustus, Dr. Frankenstein, Dr. Moreau, Dr. Jekyll, Dr. Cyclops, Dr. Caligari, Dr. Strangelove”—for in “these images of our popular culture resides a legitimate public fear of the scientist’s stripped-down depersonalized conception of knowledge.”⁴⁷

Both professions likewise worry about the career effects of negative popular culture images. Michael Asimow points out that the public demonization of the legal profession “lowers self esteem” of law students, “causes lawyers to devalue the work they do,” leads to “career dissatisfaction and stress,” and contributes to distrust of lawyers on the part of clients and jurors.⁴⁸ Scientists are similarly concerned that negative film depictions have made viewers “feel that a career in science is undesirable,” and even that “decreasing federal funding of the sciences is due in some part to negative portrayals in popular-culture sources.”⁴⁹ Moreover, it does not seem to matter, with respect to the cultural power of negative images, that those images are unrealistic. Even if

law professors, lawyers, law students, film theorists, or . . . filmmakers . . . are apt to discount the strongly negative portrayals of lawyers . . . because [such images] contradict[] . . . their own experience . . . [or because] the films [are] poorly written, implausible, or just absurd. . . .

. . . [T]he relevant introspective community [consists of] . . . people who have only fragmentary, mostly erroneous, knowledge of what . . . lawyers are like and what they

were wolves, and mummies combined).

⁴⁶ Asimow, *supra* note 28, at 535.

⁴⁷ Theodore Roszak, *The Monster and the Titan: Science, Knowledge, and Gnosis*, DAEDALUS, Summer 1974, at 17, 31.

⁴⁸ Asimow, *supra* note 28, at 541–42.

⁴⁹ Kirby, *supra* note 29, at 208.

do These are people who are prepared to accept radically negative statements about law and lawyers⁵⁰

Likewise, because “much of the public’s exposure to science is through fictional representations,”⁵¹ movie

audiences make judgments about what is “plausible” within the film’s diegesis, not necessarily [about] what is “real.” . . . [I]n the end, . . . “a picture is not only worth a thousand words; however inaccurate, it may be worth a wealth of documented evidence to the contrary.”⁵²

Just as those who have limited contact with law and lawyers are taught, through fictional films or television, “what lawyers do, what kind of people they are, . . . and how the legal system actually functions,”⁵³ science fiction can go beyond “a genre of fiction per se, and become instead a mode of awareness about the world.”⁵⁴

This is not to say that the problem with lawyer movies and science-fiction films, respectively for the legal profession or for scientists, is that they are not accurate in their legal-procedural or scientific theoretical aspects. James R. Elkins, for example, bristles at the notion that lawyer movies should be viewed as “failed documentaries,” or that we should demand that they “be legally realistic about law and lawyers before they can be taken seriously.”⁵⁵ Likewise, John Denvir sees public and pedagogical value in lawyer movies, as their “very quantity . . . demonstrates . . . the human appetite for justice”—

⁵⁰ Asimow, *supra* note 28, at 553.

⁵¹ Kirby, *supra* note 29, at 200.

⁵² David A. Kirby, *Science Advisors, Representation, and Hollywood Films*, 3 MOLECULAR INTERVENTIONS 54, 56 (2003) (quoting Kevin Padian, *The Case of the Bat-Winged Pterosaur: Typological Taxonomy and the Influence of Pictorial Representation on Scientific Perception*, in 2 DINOSAURS PAST AND PRESENT 65, 65–81 (Sylvia J. Czerkas & Everett C. Olson eds., 1987)).

⁵³ Asimow, *supra* note 28, at 552; *see also id.* at 553 n.102 (arguing that the background details about law, in a clearly fictional story, can be accepted as truthful representations).

⁵⁴ David Banash, Book Review, 30 SCI. FICTION STUD. 123, 124 (2003), *available at* <http://www.depauw.edu/sfs/birs/bir89.htm> (quoting Elisabeth Kraus & Carolin Auer, *Introduction* to SIMULACRUM AMERICA: THE USA AND THE POPULAR MEDIA 5 (Elisabeth Kraus & Carolin Auer eds., 2000) (citing Istvan Csicsery-Ronay, Jr., *The SF of Theory: Baudrillard and Haraway*, in SIMULACRUM AMERICA)).

⁵⁵ James R. Elkins, *The Legal Mind and the Lawyer Film*, PICTURING JUSTICE: ON-LINE J. L. & POPULAR CULTURE, <http://www.usfca.edu/pj/mytake.htm> (recommending that law students remember that a film tells a story, that stories introduce us to conflict and resolution, that we care for character, and that a film is an education).

notwithstanding their lack of “verisimilitude,” the artistic license taken, and oversimplification of “messy reality in their pursuit of a clear battle between good . . . and evil.”⁵⁶ While a focus on procedural inaccuracies in a lawyer movie may have some limited use in a law school evidence classroom, the exercise does not begin to exhaust the significance of lawyer movies for the public relations problem of the legal profession. The same is true of movies about science and scientists, which are frequently followed by “*The Real Science of* [books and articles] in which a scientist critiques the ‘scientific accuracy’ of a fictional film.”⁵⁷ For example, Mark Glassy’s *The Biology of Science Fiction Cinema* summarizes seventy-five films and “systematically provides an overview of the plot, of what science worked and what did not, and of what science in the film could actually happen.”⁵⁸ David Kirby observes that science fiction

scholars will question whether such intense scrutiny of scientific accuracy is a worthwhile exercise. Obviously, the science in . . . *The Ape Man* (1943) will be out of date when compared to the current state of scientific knowledge Such extensive analysis of scientific verisimilitude does not add anything to our comprehension of . . . the cultural significance of these films . . . or American attitudes toward science In the end, the only audience well served by this book is biology teachers who use science fiction films . . . as a teaching aid.⁵⁹

On the other hand, “the role that fictional films can play in the formation of consensus and closure in scientific disputes”⁶⁰ is worthy of attention: “Film not only has the ability to act as a virtual witnessing technology, but also forces consensus on the public by presenting a single vision of nature in a perceptually realistic structure.”⁶¹ Thus, it is not the fact that film directors exercise license and cut corners to develop a plot-line that worries scientists, but rather that the public is persuaded to

⁵⁶ John Denvir, *What Movies Teach Law Students*, PICTURING JUSTICE: ONLINE J. L. & POPULAR CULTURE, Aug. 25, 2003, http://www.usfca.edu/pj/teach_denvir.htm (“[T]he typical lawyer movie highlights the human desire for a ‘just’ result with little interest in procedural niceties . . .”).

⁵⁷ Kirby, *supra* note 52, at 58.

⁵⁸ David A. Kirby, *New Studies in Science Fiction Cinema*, 30 SCI. FICTION STUD. 134, 135 (2003) (reviewing MARK C. GLASSY, *THE BIOLOGY OF SCIENCE FICTION CINEMA* (2001)).

⁵⁹ *Id.* at 135–36.

⁶⁰ Kirby, *supra* note 52, at 59.

⁶¹ *Id.* at 55.

accept contested representations as settled. Likewise, lawyers are worried that even though most lawyers are “decent, socially responsible people who work hard for their clients, successfully check government overreaching, . . . are pretty ethical most of the time, and do not earn inordinate amounts of money,”⁶² lawyer movie audiences experience negative portrayals of the legal profession as real.

Amidst all this worry, there are some positive signs and activist efforts with respect to the public perception of lawyers and scientists. In response to its consumer research on negative public perceptions of lawyers generally, the A.B.A. Section on Litigation has proposed that bar associations do three things: (1) do more to educate consumers about law and lawyers, (2) do more to educate lawyers about maintaining good client relationships, and (3) become more active in disciplining lawyers and in encouraging pro bono work.⁶³ Michael Asimow observes that television—as opposed to film—creates more favorable opinions of law and lawyers, and concludes that “[i]t seems likely that the negative impact of film on the public perception of lawyers is more than cancelled out by the positive portrayals of lawyers on television.”⁶⁴ There are, of course, numerous examples of lawyer movies that represent the legal profession in a positive light; somewhere over one-third of lawyer movies in the last several decades are categorized as “positive” in Asimow’s survey.⁶⁵

On the scientific side of cinema, there is even more optimism and activism concerning positive portrayals of scientists. In the past, Hollywood “chew[ed] scientists up and spit them out” as arrogant, aloof, creators of monsters:

Then along comes Jodie Foster in *Contact*, playing an impassioned . . . astronomer trying to get in touch with her inner extraterrestrial. Or Sean Connery, in *Medicine Man*, playing a crusading botanist trying to cure cancer and save tropical forests.

⁶² Asimow, *supra* note 28, at 540 (footnote omitted).

⁶³ See SHAPIRO & ASSOCS., AM. BAR ASS’N, *supra* note 28, at 37–38.

⁶⁴ Asimow, *supra* note 28, at 558.

⁶⁵ See *id.* at 568–69 (presenting a survey of eighty-one “lawyer” films from 1990 to 1999, and forty films from 1980 to 1989).

. . . [And] Russell Crowe [in *A Beautiful Mind*] as John Nash, a cranky and crazed, but curiously empathetic, mathematician. . . .

. . . .

. . . [E]ach movie showed the scientist in a positive light—as an impassioned seeker of truth⁶⁶

Spielberg's *War of the Worlds*⁶⁷ and *Minority Report*⁶⁸ similarly “portray science in a positive light—they portray science as the answer to . . . disaster problems.”⁶⁹ The use of science advisors, notwithstanding the risk that an advisor might promote his or her own view in the case of disputed science, makes contemporary science-fiction films more realistic—“science advisors can utilize fictional films to . . . disseminate their concepts among the general public.”⁷⁰ And “popularization is akin to promotion, especially with regard to obtaining funding or other support for scientific research”:⁷¹

The more realistically things are portrayed, the better it is for everyone—producers and public alike. . . . The fact that the movie [*Deep Impact*] made an effort to portray [the threat of comet impacts] realistically helps convey [the message that the threat can be mitigated] and raise awareness of a real issue.⁷²

The so-called “*War Games* effect,” named after the 1983 MGM film, refers to the capacity of a realistic fictional film to raise public awareness and increase research funding.⁷³ All things considered, there seems to have been a shift in popular culture toward a much more positive view of science and scientists.

The parallel to the “*War Games* effect” in television programs about law—the so-called “CSI effect”⁷⁴—is not as

⁶⁶ David Tenebaum, *Science Movies: Always Science Fiction?*, THE WHY FILES, Jan. 11, 2002, http://whyfiles.org/147sci_in_film/.

⁶⁷ WAR OF THE WORLDS (Paramount Pictures 2005).

⁶⁸ MINORITY REPORT (Cruise/Wagner Productions 2002).

⁶⁹ David Kirby, *Hollywood Disaster Movies Can Be a Great Vehicle for Science*, TIMES (London), June 30, 2005, at 12.

⁷⁰ Kirby, *supra* note 52; *see also id.* at 55 (“[T]he advisor’s version of ‘scientific fact’ may not represent majority opinion [and may] exclude competing versions.”).

⁷¹ *Id.* at 56–57.

⁷² *Id.* at 57 (quoting Joshua Colwell, who consulted on the film *Deep Impact*, which warned of comet and asteroid impacts).

⁷³ *Id.*

⁷⁴ *See* Richard Willing, ‘CSI Effect’ Has Juries Wanting More Evidence, USA

encouraging. Jurors, having watched forensic scientists (in the various CSI episodes) flawlessly solve crimes in highly sophisticated laboratories, come to expect that level of evidentiary proof in criminal trials.⁷⁵ Strangely, the popularization and lofty expectations of forensic science comes at a time when the reliability of most of the forensic sciences are being questioned by legal scholars.⁷⁶ Nevertheless, it seems that science is held in high esteem, and that lawyers and their real experts will tend to disappoint the public by not living up to an idealized view of science.

In the next section, I discuss how lawyer movies involving scientific experts tend to support an idealistic view of science, whether by representing science as the extra-legal solution to contested courtroom disputes, or by representing attorneys as manipulators of weak or greedy experts in order to win lawsuits. I concede that some trial movies concerning experts, which I identify and discuss, do not seem to fall into those two categories—a more modest image of science is sometimes evident. My analysis confirms, nevertheless, the notion that scientists seem to be overcoming the public relations problems created in decades of negative portrayals in science fiction cinema, while lawyers continue to look bad.

TODAY, Aug. 5, 2004, at 1A (stating that forensic science is presented as fact and infallible).

⁷⁵ See Paul Rincon, *CSI Shows Give 'Unrealistic View,'* BBC NEWS, Feb. 21, 2005, <http://news.bbc.co.uk/1/hi/sci/tech/4284335.stm> (explaining how CSI offers perception of near-infallibility of forensic science). This phenomenon is not new. See, e.g., THOMAS LEITCH, *PERRY MASON* 53 (2005) (arguing that the popularity of the "Perry Mason" television series tended to make potential jurors expect a confession, and to be critical of prosecutors who could not produce one). But see Valerie P. Hans et al., *Science in the Jury Box: Jurors' Views and Understanding of Mitochondrial DNA Evidence* 4 (Cornell Law Sch., Working Paper No. 07-121, 2007), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1025582 ("Empirical study of the CSI effect is in its infancy and the results are mixed. . . . [One study] found that undergraduate students who watched CSI were more critical of forensic evidence than their nonviewer colleagues. . . . [Another study] found no significant relationship between viewing CSI and treatment of forensic evidence.").

⁷⁶ See generally Jane Campbell Moriarty & Michael J. Saks, *Forensic Science: Grand Goals, Tragic Flaws, and Judicial Gatekeeping*, 44 *JUDGES' J.* 16 (2005) (exploring the failure of some forensic sciences to meet reliability standards, the revelation of erroneous forensic science through DNA technology, and increasing questions about the quality of forensic science).

IV. EXPERTS IN THE MOVIES

A. *Tainted Science: The Expert as Advocate*

Despite their ubiquity, experts continue to generate concerns for the judicial system. Doubts have been voiced about overly biased experts, inaccurate conclusions, misleading testimony, jury incomprehension, and the fear that scientific expert testimony may possess an "aura of infallibility."⁷⁷

In two relatively recent movies, *A Time to Kill*⁷⁸ and *A Few Good Men*,⁷⁹ trial experts are characterized as biased advocates, bought and paid for by lawyers and their clients. Both of the opposing experts in *A Time to Kill* are called upon to opine as to the temporary sanity of the defendant, Carl Lee Hailey, who is charged with murdering two accused rapists of Hailey's young daughter on the steps inside the courthouse. The prosecutor and the defense attorney each present a psychologist, and each lawyer tries to discredit the other's expert. The science in the case is presented to the viewers as debatable—this is not a movie about the clarity or credibility of psychological evaluations of sanity. That is, there is no direct idealization of science, because science is not an element of the plot. Rather, the idealization of science is indirect, insofar as the clear message is that expertise in the courtroom can be purchased from experienced witnesses. The implication is that such witnesses will not be concerned about *real* science, which could actually help in the search for truth, but only with saying what they are paid to say. The prosecution's expert, Dr. Rodenheaver, holds a university chair in psychiatry and directs a facility for the criminally insane. He looks distinguished, with a polished and confident demeanor, but in his many years as a courtroom expert he has never found a defendant insane, including one housed in his own care for over ten years. The expert for the defense, Dr. Bass, impliedly also highly-credentialed, is an overweight, sloppily-dressed alcoholic, but otherwise seems pleasant, professional, and trustworthy. Bass testifies that even the insane can premeditate a crime,

⁷⁷ *Id.* at 23 (citing DAVID H. KAYE ET AL., THE NEW WIGMORE: A TREATISE ON EVIDENCE, EXPERT EVIDENCE § 10.2, at 334 (2004)).

⁷⁸ A TIME TO KILL (Warner Bros. 1996).

⁷⁹ A FEW GOOD MEN (Columbia Pictures 1992).

which is the opinion for which he was hired. Instead of attacking his testimony as unreliable, the prosecutor discredits the witness by revealing Dr. Bass's conviction at the age of twenty-three for statutory rape of a seventeen-year-old he eventually married. Neither expert ends up looking good (although Dr. Bass is not as bad as Dr. Rodenheaver), but it is their role as advocates, and not their background in science, that brings them down. Indeed, they have impliedly abandoned their credible profession as a condition for their utility in the courtroom.

A Time to Kill highlights the unfortunate process of acquisition of scientific knowledge for law—each side hires an expert to help each side's lawyer advocate a legal position in a controversy. The problem of filtering science through the needs of a client is likewise illustrated in *A Few Good Men*, where a single expert helps to cover up the scandalous death of a soldier (with an undiagnosed heart condition) following a hazing ritual. Dr. Stone, an experienced physician and Chief of Internal Medicine at a hospital, is portrayed as an obedient colleague of the military officers involved in the cover-up. Dr. Stone's credentials, appearance, and bearing are stellar, but his testimony is easily discredited because he knows that his opinion—that the murdered soldier died of poisoning—is untrue. He abandons medical science, which is never an object of scorn in the film, to become a liar.

While the lawyer's role in finding an expert willing to support that lawyer's arguments is quite conventional, it is arguably a "negative" aspect in terms of public perception. Viewers of the films just discussed are likely not versed in the professional ethics of lawyers, and may not know that lawyers are ethically permitted to present doubtful or shaky expertise (as long as it is not *known* to be false).⁸⁰ Significantly, however, these films are not an indictment of science or scientists generally. *Some* scientists, the audience learns, are willing to become biased advocates, but science as a discipline abhors fraud; so it is scientists' association with law and lawyers that taints their scientific profession.

⁸⁰ See MODEL RULES OF PROF'L CONDUCT R. 3.3(a)(3) (2007); *id.* R. 3.3 cmt. 8. Lawyers do not vouch for their experts; lawyers are permitted to do the best they can to serve their clients in the circumstances. See STEVEN LUBET, EXPERT TESTIMONY: A GUIDE FOR EXPERT WITNESSES AND THE LAWYERS WHO EXAMINE THEM 171–72 (1998).

Another example of expert as a biased advocate appeared nearly fifty years ago in *Anatomy of a Murder*.⁸¹ Dr. Raschid, the medical examiner testifying for the prosecution, appears to have only made examinations that would help the prosecutor, to the exclusion of others that might help the defendant. The contemporary fascination with forensic science, represented by the popularity of the various CSI television programs, mirrors the public trust in forensic science in the mid-twentieth century:

An exhibit on the scientific virtues of the medical examiner system . . . at the 1933 Century of Progress Fair in Chicago . . . [explained that a medical examiner was] “a non-political official, expert in medicolegal pathology, who conducts a scientific investigation into the cause of death, whose work is purely medical [and whose findings are] impartial.”⁸²

Notwithstanding such idealizations, some medical examiners may give in to the influence of unethical prosecutors, as in *Anatomy of a Murder*.

Likewise, the figure of Dr. Towler in *The Verdict* confirms the image of the expert as advocate.⁸³ Prior to his testimony for the defense in a medical malpractice suit, Dr. Towler is coached by a roomful of lawyers from the large law firm representing the defendant hospital. While this is a conventional practice, viewers would likely get the impression that the witness is being taught how to respond to cross-examination to avoid telling the truth. Indeed, the doctor is portrayed as both naïve and honest until he is trained by defense counsel.

In all of these films, science is not an object of disdain—it is fraudulent science, in the service of advocates, that is the target. These films are complimented by another type of film that glamorizes science as a perennial producer of stable knowledge to bring closure to legal conflicts.

⁸¹ ANATOMY OF A MURDER (Carlyle Productions 1959).

⁸² Johnson-McGrath, *supra* note 25, at 192 (quoting Century of Progress Records, World's Exposition 1933-1934, University Library, University of Illinois at Chicago).

⁸³ THE VERDICT (20th Century Fox 1982).

B. *Idealized Science: The Expert as Savior*

*Science is mechanical, technical, value-free, and nonhumanistic. Science pronounces the law as supplied by nature. Law seeks justice . . . [and] is dialectical, idealistic, nontechnical, value-laden and humanistic.*⁸⁴

If scientists can avoid the temptation to become advocates—thereby avoiding accusations of bias, interest, and motivation—they can maintain an image of objectivity even in the contested world of lawyers. Some lawyer movies promote this image of expertise, including *Erin Brockovich*, *Primal Fear*, *Presumed Innocent*, and even the comedy *My Cousin Vinny*.

In the true story of *Erin Brockovich*, the heroic file clerk working for a plaintiff's lawyer discovers a cover-up of industrial poisoning of a city's water supply.⁸⁵ In the midst of a moving drama portraying the stress upon working single mothers, the devastating damage caused by the poisoning, the arrogance of defense counsel, and the oblivious plaintiff's attorney for whom Erin works, the image of expertise can be easily missed. However, Erin meets with a professor who offers scientific information that confirms the cover-up; the professor even calls her later with more information, and she is able to help win the largest settlement ever paid in a direct-action lawsuit. As an image of science in law, this one is pristine—the professor is not even *dealing* with a lawyer, and he does not appear in court or even get paid; he's completely untainted. He is neither slick nor polished, but rather a modestly dressed professor who holds the determinative scientific knowledge to bring justice in the wake of a tragedy.

Primal Fear is the story of a teenager, charged with the murder of a Chicago archbishop, who is represented by an unlikable defense attorney.⁸⁶ Dr. Weil, a medical examiner, is able to establish that a left-handed person, like the defendant, inflicted the wounds on the victim. Weil's clear and simple explanation leads the audience to the truth. Even though judicial reservations have been expressed concerning the reliability of "science for litigation"—i.e., testimony based on

⁸⁴ Howard T. Markey, *Jurisprudence or "Juriscience"?*, 25 WM. & MARY L. REV. 525, 527 (1984) (warning that science should not displace law).

⁸⁵ ERIN BROCKOVICH (Jersey Films 2000).

⁸⁶ PRIMAL FEAR (Paramount Pictures 1986).

research done after a lawsuit has been filed—resulting in a preference for untainted pre-trial research as the basis for courtroom expertise, forensic scientists have somehow escaped this condemnation.⁸⁷ When *Daubert* was remanded to the U.S. Court of Appeals for the Ninth Circuit, Judge Kozinski supplemented the U.S. Supreme Court's "factors" to consider in admissibility decisions with the statement:

One very significant fact to be considered is whether the experts are proposing to testify about matters growing naturally and directly out of research they have conducted independent of the litigation, or whether they have developed their opinions expressly for purposes of testifying. . . . [W]e may not ignore the fact that a scientist's normal workplace is the lab or the field, not the courtroom or the lawyer's office.⁸⁸

As this standard would cast doubt on forensic scientists, including medical examiners, Judge Kozinski immediately drops a footnote:

There are, of course, exceptions. Fingerprint analysis, voice recognition, DNA fingerprinting and a variety of other scientific endeavors closely tied to law enforcement may indeed have the courtroom as a principal theatre of operations. As to such disciplines, the fact that the expert has developed an expertise principally for purposes of litigation will obviously not be a substantial consideration.⁸⁹

The exception for forensic science is likely, however, unjustified, given that "[m]any of the forensic techniques used in courtroom proceedings, such as hair analysis, fingerprinting, the polygraph, and ballistics, rest on a foundation of very weak science, and virtually no rigorous research to strengthen this foundation is being done."⁹⁰ Thus, the infallibility that is often attributed to forensic science in popular culture is illusory and best explained by the public's idealization of science in law.

⁸⁷ See Gary Edmond, *Supersizing Daubert: Science for Litigation and Its Implications for Legal Practice and Scientific Research*, 52 VILL. L. REV. 857, 857, 863–65 (2007).

⁸⁸ *Daubert v. Merrell Dow Pharms., Inc.*, 43 F.3d 1311, 1317 (9th Cir. 1995).

⁸⁹ *Id.* at 1317 n.5 (citation omitted).

⁹⁰ D. Michael Risinger & Michael J. Saks, *A House with No Foundation: Forensic Science Needs to Build a Base of Rigorous Research to Establish Its Reliability*, ISSUES IN SCI. & TECH., Fall 2003, at 35, 35.

Presumed Innocent is also a murder mystery involving a prosecutor who is accused of killing his lover, also a prosecutor.⁹¹ A fingerprint specialist is able to establish a match between the defendant's print and a print on a bar glass found at the crime scene. Even though there is some doubt because the glass cannot be produced at trial, the fingerprint evidence is presented as conclusive. Evidence scholars, it bears noting, have become increasingly critical of latent fingerprint identification—it does not have a tradition “of disinterested self-testing,”⁹² the “verification process [conducted by law enforcement officials] is ‘vulnerable to unconscious bias or deliberate malfeasance’ by examiners,”⁹³ and “[a]ppropriate measures of error rates for fingerprint examiners do not exist.”⁹⁴ Indeed, fingerprint analysts provide the clearest example of the strategy in forensic science—“a growing body of unreliable research funded by law enforcement agencies with a strong interest in promoting the validity of”⁹⁵ their techniques—of placing its claims beyond the realm of empirical research:

[Fingerprint examiners claim] that their technique has a “methodological error rate” of zero and that any errors that occur are therefore lapses on the part of individual examiners. Because the technique can never be performed except through the subjective judgment of human fingerprint examiners, it is impossible to test the claimed division of responsibility for error empirically. The claim is thereby rendered unfalsifiable.⁹⁶

Yet courts and the public often continue to view fingerprint analysis as conclusive, due in part to the history and progress of forensic science in the early twentieth century:

Forensic scientists . . . [presented] their opinion as to the truth that evidence tells. By invoking science's cultural authority and alleged objectivity, scientists sought to transubstantiate opinion into fact. To do so, they had to ignore or deny that this truth

⁹¹ PRESUMED INNOCENT (Mirage 1990).

⁹² Recent Case, 115 HARV. L. REV. 2349, 2349 (2002) (criticizing United States v. Havvard, 260 F.3d 597 (7th Cir. 2001), for upholding the reliability of latent fingerprinting expertise). “[F]ingerprint expert testimony does not survive application of the *Daubert* factors . . .” *Id.*

⁹³ *Id.* at 2352 (quoting SIMON A. COLE, SUSPECT IDENTITIES: A HISTORY OF FINGERPRINTING AND CRIMINAL IDENTIFICATION 269 (2001)).

⁹⁴ *Id.* (citing Jennifer L. Mnookin, *Fingerprint Evidence in an Age of DNA Profiling*, 67 BROOK. L. REV. 13, 59 (2001)).

⁹⁵ Risinger & Saks, *supra* note 90.

⁹⁶ *Id.* at 37.

was inevitably filtered and shaped by professional experience, interests, and personal biases.⁹⁷

Even though forensic science “differs significantly from what most of us consider science to be,”⁹⁸ there “has been a carefully fostered public perception of near-infallibility.”⁹⁹ While research can undermine that perception, cinema can strengthen it.

Finally, *My Cousin Vinny* highlights the decisive role of technical knowledge in establishing the innocence of co-defendants in a murder trial.¹⁰⁰ The story involves the legal victory of an inexperienced lawyer over the experienced prosecutor,¹⁰¹ which parallels the scientific victory—over the prosecutor’s tire mark expert—of the defense attorney’s fiancé, Mona Lisa Vito, an unemployed hairdresser who used to work as a mechanic in her father’s automobile repair shop. She is unfazed by trick questions on the witness stand, and thereby rises above the world of advocacy into the realm of scientific certainty. The stabilizing force of technical knowledge thereby settles the rhetorical instability of the trial.

These films reflect an idealized image of science in the courtroom, which is consistent not only with public perceptions of expertise but also with the identifiable idealization of science by many judges.¹⁰² Indeed, all of the films discussed above, whether representing experts tainted by law or experts who rise above law to provide determinable knowledge, rely upon an idealized view of science as significantly different from and better than law. Another category of films, however, reflects a more modest view of science as a human and cultural enterprise.

⁹⁷ Johnson-McGrath, *supra* note 25, at 193 (providing the 1934 trial of Bruno Hauptmann for kidnapping and murdering the “Lindbergh baby” as an example of the triumph of forensic science).

⁹⁸ Risinger & Saks, *supra* note 90.

⁹⁹ *Id.* at 36.

¹⁰⁰ MY COUSIN VINNY (Palo Vista Productions 1992).

¹⁰¹ This motif, with roots in jokes about the wisdom of rural individuals over the arrogant city-slicker, is also evident in *Legally Blonde*, where a law student prevails over experienced opposing counsel, and in *Erin Brockovich*, where a file clerk prevails over a large law firm. LEGALLY BLONDE (Marc Platt Productions 2001); see THOMAS J. HARRIS, COURTROOM’S FINEST HOUR IN AMERICAN CINEMA 102 (1987) (“[T]he ‘classic’ elements of courtroom drama [include] the humble country lawyer versus the city slicker, with the former defeating the latter by virtue of his essential honesty . . .”).

¹⁰² See generally CAUDILL & LARUE, *supra* note 34 (arguing, in a study of judicial images of expertise, that many judges idealize science).

C. *A Measured Assessment: The Expert as Human*

Some lawyer movies offer relatively positive images of trial experts, while at the same time acknowledging the pragmatic limitations of the scientific enterprise. For example, in *Suspect*, a homeless individual is falsely accused of murder, and the prosecutor calls two witnesses in an attempt to prove his case.¹⁰³ The first, a forensic pathologist, is represented as professional and competent, but is a bit uncomfortable when challenged. On cross examination, it becomes clear that his testimony concerning whether the murder weapon, a knife, belonged to the defendant was inconclusive, and the expert overlooked the fact that the defendant was left-handed (he had testified that the knife wound indicated a right-handed killer). The second expert, a police detective, testified on the basis of his experience that homicides are usually committed by the most obvious suspect. The detective is also represented as confident and competent, but on cross-examination the defense attorney rebuts his testimony by revealing past discoveries of falsely accused individuals on death row. Viewers of the film are, perhaps unwittingly, introduced to the persistent problem of “over-claiming” by experts (and “over-valuing” by jurors) in the presentations of expertise. Because evidence of guilt (or liability in civil cases) is often inconclusive, some experts exaggerate and express “a confidence not warranted by the evidence.”¹⁰⁴

Although the experts in *Suspect* are ultimately shown to have exaggerated, such that their testimony is not represented as decisive truth, they are not portrayed negatively as bought-and-paid-for advocates. Rather, the experts in *Suspect* are characterized as doing the best they can with inconclusive data, limited resources, and human frailties. The difference between these experts and biased witnesses who will say anything to serve a client is subtle, but in *Suspect* it is the reasonable limitations of science, rather than the dishonesty of experts, that are represented as problematic.

That distinction is clearer in the comedy *My Cousin Vinny*, where the forensic expert for the prosecution is portrayed as almost neutral—with eighteen years of F.B.I. experience, he

¹⁰³ *SUSPECT* (ML Delphi Premier Productions 1987).

¹⁰⁴ Samuel R. Gross & Jennifer L. Mnookin, *Expert Information and Expert Evidence: A Preliminary Taxonomy*, 34 SETON HALL L. REV. 141, 144 (2003).

appears to be a professional doing his job, not a recruited advocate. His confident delivery, based on carefully-collected crime scene samples and technically-advanced analysis, is compelling. He is, however, wrong, which the outsider-expert, Mona Lisa Vito, is able to demonstrate with her superior street knowledge.¹⁰⁵

Two other films, *I Am Sam*¹⁰⁶ and *Agnes of God*,¹⁰⁷ highlight the human side of science. In *I Am Sam*, the court-appointed psychologist is represented as biased against Sam, a mentally challenged father trying to get custody of his young daughter. The science is almost beside the point, as the psychologist's confident testimony is obviously weakened by her preconception of Sam as an unfit parent. When the psychologist is confronted with her own history—that her son died from an overdose—she bursts into tears. Interestingly, any message in the film about the unreliability of expertise is eclipsed by a message about the source of unjustified prejudice in our society. The expert's bias is not due to intentional scientific fraud or unethical lawyering, both of which might support an idealized image of science *when it is* methodologically sound and untainted by lawyers. Rather, occasional bias is represented as unconscious, unfortunate, and unavoidable in science because it is a human enterprise.

Agnes of God, similarly, also involves an expert with preconceived notions, this time involving a novice nun accused of manslaughter in the death of her baby. The expert is determined to see the accused put in prison, but her anti-Catholicism is due to her sister's death in a convent. Throughout the film, she softens and changes her mind about the culpability of the accused. Like *I Am Sam*, *Agnes of God* illustrates the instability of expertise, although in both films the expert begins with a personal bias that is overcome. (In neither film, however, does

¹⁰⁵ There is an analogy here with recent research into public understanding of science. We should not assume "that local understandings [of non-scientists] are inadequate or deficient in comparison to formal, scientific understandings. On the contrary, they may well represent a more robust and well-tested body of advice, information, and practical assistance than any new or externally generated piece of technical evidence." Alan Irwin, Alison Dale & Denis Smith, *Science and Hell's Kitchen: The Local Understanding of Hazard Issues*, in MISUNDERSTANDING SCIENCE?: THE PUBLIC RECONSTRUCTION OF SCIENCE AND TECHNOLOGY 47, 55 (Alan Irwin & Brian Wynne eds., 1996).

¹⁰⁶ I AM SAM (Avery Pix 2001).

¹⁰⁷ AGNES OF GOD (Columbia Pictures 1985).

the expertise improve—it just goes away.) My categorization of *I Am Sam* and *Agnes of God* as representing a modest view of expertise is based on the manner in which these films neither glamorize nor critique science. Even if “science in the long run gets most things right,” the

sources of error . . . are numerous: [T]he small size of many studies, for instance, often leads to mistakes, as does the fact that emerging disciplines, which lately abound, may employ standards and methods that are still evolving. Finally, there is bias, which [can be considered] ubiquitous. Bias can take the form of a broadly held but dubious assumption, a partisan position in a longstanding debate . . . or . . . a belief in a hypothesis that can blind a scientist to evidence contradicting it.¹⁰⁸

The latter type of error—blinding belief in a hypothesis—is illustrated by the experts in *I Am Sam* and *Agnes of God*. While the experts are clearly portrayed negatively, the indictment is personal to them, thereby tempering any idealization of science but not rejecting their *fields* of expertise.

Another example of a modest view of expertise is in the film *Music Box*, a story of a Hungarian immigrant represented by his daughter when he is arrested for Nazi wartime atrocities.¹⁰⁹ The expert for the prosecution, a senior forensic document examiner, uses scientific techniques to authenticate a photograph. He is challenged, however, for his potential bias as a Jew, but his testimony turns out to be accurate despite his desire to see the defendant convicted. The implication is that all experts have biases, but that such biases do not necessarily signal bad science. *Music Box* thereby illustrates that a modest view of the scientific enterprise is neither a critique nor a skeptical view of science.

Finally, in the film *Primal Fear*, a psychologist for the defendant attempts to demonstrate that the accused is mentally ill. The defendant, however, lies and puts on a show to help the psychologist, which results in a faulty evaluation. While there is nothing wrong with the science or the scientist, the “outside” influence of the defendant renders the expertise useless. The representation of science in *Primal Fear* therefore rounds out the

¹⁰⁸ David Dobbs, *Trial and Error: The Scientific-Publishing System Does Little to Prevent Scientific Fraud. Is There a Better Way?*, N.Y. TIMES, Jan. 15, 2006, (Magazine), at 18.

¹⁰⁹ MUSIC BOX (Carolco Pictures 1989).

modest view of expertise in the courtroom. Science is not, by virtue of its methodological conventions and cultural authority, flawless. Sometimes there is external interference, sometimes a scientist has an unconscious bias, and sometimes there is fraud; but even at its best, science is a cultural activity with limited data, measurement technologies, and resources, such that genuine debates and uncertainties are inevitable.

Such films can be contrasted with the films discussed in the first two categories—bought-and-paid-for experts and those who deliver extra-legal truth—because science is not idealized. The modest or nonromantic view of expertise nevertheless represents a positive and realistic assessment of the scientific enterprise. If the only problem with courtroom expertise was that some experts are frauds, and that otherwise, experts rise above the rhetorical fray to produce determinable knowledge, then the idealization of science would be justified. But the field of possibilities for science in law is not thereby exhausted; realistically, even the best science is often as contested, rhetorical, and unstable as the legal context into which it is delivered.

CONCLUSION

The representations of law and lawyers, and science and scientists, in lawyer movies are complex and diverse. Even when legal scholars say that lawyers are generally portrayed negatively in film, there are numerous positive images, such that one can only speak of “the majority of lawyer movies.” Similarly, while the images of experts in lawyer movies are predominantly positive, there are numerous negative portrayals. Even so, the negative portrayals, as well as the representations of science as a modest, human enterprise in cinema about law, do not seem to condemn science and scientists as dangerous, arrogant, or amoral, as did much (but again, not all) early science fiction cinema. Just as the popular perception of scientists represented in cinema about science is nowadays quite positive, the portrayal of science and scientists in lawyer movies is correspondingly positive. At the intersection of law-and-literature studies and science-and-literature studies, the stock of science and scientists is rising, even as law and lawyers remain in trouble. While this phenomenon is likely to benefit the scientific enterprise, in terms of attracting funding and promoting science careers, the idealization of science in popular culture has even more adverse

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consequences in the legal context—i.e., beyond the comparative loss of reputations on the part of law and lawyers. Judges and jurors who do not recognize the limitations on the cultural authority of science may alternatively accept the unreliable testimony of experts who claim certainty, and reject the reliable testimony of experts who concede their uncertainties.