

## Empirilegal Analysis: Commencement of a dialogue, or a battle? Commentary on Responses to Epstein and King

### Introduction

Imagine there is an injured child lying unconscious on the side of a road. Further imagine that two adult strangers happen upon the child and both want to help. Both understand that in order to save the child, they must communicate with one another. Exacerbating the situation is the fact that the two strangers do not speak the same language and the languages they speak have different origins (e.g., one is Latin-based, and the other is symbol-based). The two must communicate with one another in order to save the injured child, but how do they do so given the language barrier? Perhaps they could fashion a crude system of hand signals that would get the job done without verbal communication. This may not be the ideal way for the two adults to accomplish their heroic goal, but given the language gap, it may be the best alternative. Some might argue these circumstances are much like the current situation between legal and science scholars. Both seek to understand and explain the world better, but each discipline approaches this goal in different ways.

The purpose of this paper is to introduce the term “empirilegal analysis” through the discussion of a recent altercation between legal and empirical scholars over what empirical legal research should be. “Empirilegal” refers to analysis that involves application of the principles of empirical research to any aspect of law. Aspects of law may include the people, their behavior, the cases, court decisions, law-making, etc.. The term “empirilegal” is meant as a substitute for the phrase “empirical legal” scholarship which is currently used to describe this type of scholarship. As the remainder of this

paper will show, what “empirical,” or “good empirical,” means is the subject of much controversy.

The way in which the altercation mentioned above will be examined in this paper will be reminiscent of Michael Stubbs’ work on “discourse analysis”.<sup>1</sup> A website devoted to the discussion of discourse analysis working off Stubbs’ definition portrays discourse analysis as, “concerned with *language use in social contexts*, and in particular with *interaction* or dialogue between speakers,” (emphasis added).<sup>2</sup> This paper addresses the way language is used during the interaction between the involved legal and empirical scholars. It argues that much of what turned the potential dialogue into an altercation was a set of miscommunications based on discrepancies between the cultures of law and science. Before beginning the argument, some relevant definitions must be addressed.

Culture is defined as, “1.a: the integrated pattern of human behavior that includes thought, *speech*, action, and artifacts and depends on the human capacity for learning and *transmitting knowledge* to succeeding generation; b: the customary beliefs, social forms, and material traits of a racial, religious, or *social group*,”(emphasis added).<sup>3</sup> Language is therefore undoubtedly one of the essential elements of culture. Sometimes language, or discourse analysis, can bring to light cultural differences when cultural clashes occur. Such clashes can occur when professionals and scholars from different disciplines attempt to communicate with one another about issues that involve them both. While members of each discipline speak the same basic language as the other, the ways in which that language is used can differ. Oftentimes the same word, especially if it is used

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<sup>1</sup> MICHAEL STUBBS, DISCOURSE ANALYSIS: THE SOCIOLINGUISTIC ANALYSIS OF NATURAL LANGUAGE (1983).

<sup>2</sup> <http://bank.rug.ac.be/da/da.htm>.

<sup>3</sup> <http://dictionary.reference.com/search?q=culture>.

as a term of art for a particular profession, has different meanings. These different meanings can reflect variations in the underlying culture of a discipline. Sometimes they can result in minor embarrassment. Examples of this are when a scientific expert fails to address a judge as “Your Honor,” or when an attorney explains to an empirical psychologist that psychology is not really a science. Sometimes these different meanings can result in clumsy insults that escalate into battles. The desperate scenario described in this paper’s introduction can be likened to the situation between legal and empirical scholars who try to communicate with one another without understanding the other discipline’s language usage or culture. Occasionally a battle ensues because of misunderstandings that stem from cultural unawareness, much to the demise of the combatants’ heroic, and many times mutual, ends. This unfortunate result likelier demonstrates a type of cultural misunderstanding rather than actual differences between the disciplines. Before unfolding the story of one such battle, a review of the differences and similarities between the cultures of law and science is appropriate.

To begin broadly, one author identifies some differences between law and science as timeframe related; law evolves slowly on precedent, and science moves forward.<sup>4</sup> In other words, law relies on past decisions to shape the future and science relies on innovation to help current knowledge about the world evolve. How prestige is assigned is also related to this difference in timeframe; in law, prestige comes from respecting and following past traditions, while in science, prestige comes from how well research progresses knowledge into the future.<sup>5</sup>

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<sup>4</sup> DAVID FAIGMAN, LEGAL ALCHEMY 6 (2000).

<sup>5</sup> *Id.*

The assumptions upon which scholars from these two disciplines base their work are also different.<sup>6</sup> Law engenders the thinking that people can operate beyond the influence of genetics and environment by exercising free will. On the other hand, science promotes the idea that genetics and environment, in various blends of the two, establish how people behave.

From a functional standpoint, the frameworks upon which the disciplines are built differ; this affects how members of the two disciplines interact with one another. The adversarial model is the foundation on which most legal organizations function. Scientific organizations tend to work under a more cooperative tone. Another difference at the functional level is that law decrees what should be, and science examines what is.<sup>7</sup> In other words, law, particularly in the litigation setting, is about two interested parties zealously representing their clients and promoting the version of the truth that most benefits their clients within the law. The idea is that these two adversarial versions of truth will cancel one another out, promoting an ultimate version of the truth to be determined by a disinterested third party (judge, magistrate, mediator). However, that ultimate version of the truth can only be based on the information provided by interested parties. The only facts that can be considered are facts that have been entered into evidence by the court through those interested parties.

On the other hand, in science there is not the same vested interest in how information is derived or shared. And, there is no limit to the avenues that can be explored, or the “evidence” that can be used to support a conclusion. In science conclusions about information are not presented as dichotomous results such as they are

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<sup>6</sup> *Id.*

<sup>7</sup> *Id.*

in law. Liable or not liable (civil), and innocent or guilty (criminal) typically comprise the only conclusion options in an adversarial setting. In science the “final answer” is presented in percentages, descriptions, explanations, or any combination thereof. In fact, for science, the notion of a “final answer” is antithetical to its culture because scientific culture promotes the assumption that knowledge and truth are constantly evolving and cannot be absolute. Furthermore, scientific researchers are trained to account for their biases, and to utilize techniques designed to counteract those biases. They are therefore as disinterested as observers could be. That is not to say they are entirely objective, for they are human, and there are typically human reasons behind why they research particular subjects.

In scientific scholarship, researchers are trained to counteract, or account for their biases, not construct information based on that bias. Scientists’ colleagues, journal editors and reviewers for peer-reviewed scientific journals are also trained this way. This is quite unlike the majority of reviewers for law journals who are law students with little, if any, prior experience with legal scholarship. They are even less likely to have any experience distinguishing good empirical scholarship from bad.

More specific differences between law and science involve how members of each discipline deal with relevant information. Even though its professionals are ever mindful of the impact legal decisions and scholarship can have on society as a whole, the law is mostly concerned about specific outcomes for specific people<sup>8</sup>. On the other hand science is concerned with looking at the general relationships between variables. This is

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<sup>8</sup> *Id.*

quite different from the “case-by-case” analysis used in law. It is also antithetical to a major principle in empirical design that touts the generalizability pitfalls of the  $n$  of 1.<sup>9</sup>

Law and science are not without similarities however. In fact, some have argued that the two disciplines clash because they operate in the same realm of society.<sup>10</sup> Both disciplines share the goal of determining the best conclusion based on the acquired information, even though the ways that information is acquired are different. When they gather relevant information, members of both disciplines must be aware of relevant principles and procedures. For instance, prosecutors who only have evidence obtained in noncompliance with civil liberties protocol know they should save filing charges until the time they have enough legally obtained evidence. Scientists follow a similar protocol by not using data collected in violation of research ethics principles or based on a faulty design. Thus, both prosecutors and scientists deal with information that has been obtained in violation of important rules. Also, both kinds of professionals have to be sufficiently aware of those rules in order to effectively accomplish their goals.

Both disciplines have guidelines that are meant to prescribe how information is collected so that it can be used appropriately. Both disciplines take these guidelines very seriously because not doing so can result in critical public policy violations. For instance, a guilty party may go free to commit another crime because an attorney did not follow the proper court protocol. At the same time, scientific research investigating the benefits of an innovative police training method may not get funded or published because its design fails to comply with replicability standards. These replicability standards, so critical in

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<sup>9</sup> This principle holds that if knowledge comes from a single observation from a single event or subject, its applicability is severely limited. Knowledge gained from multiple observations of multiple events or subjects is more capable of being applied to events or subjects in general. This is essentially the generalizability principle.

<sup>10</sup> *Supra* note 4.

scientific (a.k.a., empirical) research, are at the center of the altercation mentioned earlier in this paper. The remainder of this paper will describe the interchange while providing some thoughts on how what could have become a fertile dialogue instead disintegrated into a battle<sup>11</sup>.

### Good Intentions

The interchange at issue began, as many do, with good intentions. However, a key definition must be reviewed before delving into how it began. “[E]mpirical” means the following: 1) Relying on or derived from observation or experiment: empirical results that support a hypothesis; 2) Verifiable or provable<sup>12</sup> by means of observation or experiment: *empirical laws* (some of these laws are the focus of Epstein and King’s article) (emphasis added).<sup>13</sup> An excellent description of empirical reasoning can be found in an undergraduate level textbook on social science research, “[o]ne scientist used the following analogy to describe the role of the scientific method: Suppose we are trying to unlock a door with a set of previously untried keys. A person reasons, ‘If this key fits the lock, then the lock will spring when I turn the key.’”<sup>14</sup> Similarly the scientist has a choice of “keys” in the form of hunches and empirical techniques that are available to any appropriately trained researcher to open up the world for scrutiny and

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<sup>11</sup> This author admits to taking on the risk of inadvertently mimicking legal realism’s Cardozo in his valiant, but unwelcome, attempt to “mediate the feud between Llewellyn and Pound” during their arguments over what the law means to legal realists. DAVID L. FAIGMAN, *LABORATORY OF JUSTICE* 116 (2004). However, I would like to find some common ground between those involved in the controversy stemming from Epstein and King’s article in order to argue that a dialogue is more useful, possible, and quite necessary, to both sets of scholars.

<sup>12</sup> Note should be made that “prove” is often considered to be a taboo verb in the discipline of science. A basic tenet of science is that nothing can ever be “proven” completely. This is yet another example where the two worlds of science and law collide for one could argue that “prove” may be the most consequential word in the discipline of law.

<sup>13</sup> <http://dictionary.reference.com/search?q=empirical>.

<sup>14</sup> J.B CONANT AND L.K. NASH, Eds. *Harvard Case Studies in Experimental Science* Vol 1 (1957), quoted in ROSNOW & ROSENTHAL, *infra* note 15 at 7.

measurement.<sup>15</sup> It is this dependence on systematic logic, observation, and measurement (i.e., empirical reasoning) that is the essential connection among scientists working on many different problems. This is true even if they use different procedures and measurements in their work. Furthermore, there is often more than just one “right” key even in the same field, because each key opens a limited domain.

Rosnow and Rosenthal affirm this analogy by saying the scientific method is not referred to as a rigid, solitary procedure by which scientists settle disputes. This is another variation from law as a discipline. Scientific method is actually marked by empirical reasoning which is a combination of “logic, *carefully organized observation*, and measurement,”(emphasis added).<sup>16</sup> The “carefully organized” language is crucial and essentially refers to *systematic* logic, observation, and measurement. It is not enough to go out into the world and make observations. These observations have little meaning if they are not made in a systematic way that is therefore replicable by another researcher who can show the relationships found did not occur just by chance.

These notions of systematic examination and replicability, standard in science, are emphasized in the Epstein and King article as needing more attention by legal scholars who perform empirical research. It is understandable that legal scholars have less familiarity with these principles, and their critical role in empirical work because these principles are not part of legal training. In fact, at the most recent Association of American Law Schools (AALS) annual conference, themed “Empirical Scholarship: What Should We Study and How Should We Study It?” a presenter suggested that almost

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<sup>15</sup> RALPH L. ROSNOW, & ROBERT ROSENTHAL. BEGINNING BEHAVIORAL RESEARCH: A CONCEPTUAL PRIMER 7 (5<sup>th</sup> ed. 2005).

<sup>16</sup> *Id.*

all legal research is empirical because it studies the “real world.”<sup>17</sup> However, the speaker did not discuss the need for systematic study or better design in empirilegal scholarship. The conference’s website also provided a description of the theme stating that it operated under that notion that there is no “orthodox[y]” to empirical scholarship<sup>18</sup>. Many scientists who have spent years studying research design, statistics, and other science conventions, will likely beg to differ on that point.

It is important to note that research cannot do what it seeks to do wholly without error, regardless of the discipline. Acceptance of error inevitability is another aspect of scientific culture and is related to the anti-absolutist notion raised earlier. Scientists are trained in techniques to reduce error as much as possible given the realities in which they work. However, they cannot ever eliminate it altogether. Unfamiliarity with this crucial aspect of scientific culture contributed much to the battle that erupted after Epstein and King’s ill-received article. Closer review of their article, and the resulting responses, will demonstrate how this happened.

In their article, Epstein and King exhibit the empirical notion of systematic examination by methodically reviewing law review articles with the term “empirical” in their titles. Epstein and King use this data to demonstrate their basic conclusion that legal scholars are ‘deeply flawed’<sup>19</sup> in their efforts to conduct empirical legal (a.k.a. “empirilegal”) research. They recommend that legal scholars seek guidance from social scientists on how to apply methodological rules and reform legal education. It is

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<sup>17</sup> Tracey E. George, Vanderbilt University Law School, AALS Plenary Session: Conducting Empirical Research in a Law School Setting “How is Collaborative Empirical Scholarship Received in Law Schools’ Promotion Reviews and Other Rewards” (January 5, 2006).

<sup>18</sup> <http://dictionary.reference.com/search?q=orthodoxy>. “Orthodoxy” is defined by dictionary.com as “a belief or orientation agreeing with conventional standards.”

<sup>19</sup> Lee Epstein & Gary King, *Exchange: Empirical Research and the Goals of Legal Scholarship: The Rules of Inference*, 69 U. CHI. L. REV. 1, 6 (2002).

important to note that while legal education reform is a popular, and enticing subject, it reaches beyond the scope of this paper. Thus, empirical rule application will remain the focus.

Epstein and King begin their article by acknowledging that legal scholars have been using empirical methodology for as long as they have been researching the law. However, they note that these scholars have been doing so without complying with several of the rules of inference that are an essential part of empirical methodology. Epstein and King further argue that legal scholars have not availed themselves of the important lessons learned by scientists over the last hundred years or so.<sup>20</sup> Empirical methodology underwent a revolution during this time.<sup>21</sup> One of the lessons Epstein and King mention is the importance of having journal articles that are earmarked solely for the discussion of empirical methodology. This kind of inclusion is widespread in the journals of other established academic fields but is hard to find in law reviews. Epstein and King caution that this lack leads consumers of legal scholarship to learn information that is less precise about the empirical world than is implied by affirmative, yet not overconfident, conclusions. A related problem involves legal scholars' use of the term "empirical." Such use can lead to an inappropriate effect on how judges, legislators, and administrators decide public policy.<sup>22</sup> They add that law research claiming to be empirical that does not follow the rules of inference will not typically follow in the footsteps of its scientific counterpart in striving for reliability and validity.

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<sup>20</sup> *Id.* at 2. See also Steven B. Dow, *There's a Madness in the Method: A Commentary on Law, Statistics, and the Nature of Legal Education*, 57 OKLA. L. REV. 579, 580 (2004) for notion that little has changed in legal education over the past century.

<sup>21</sup> See Steven B. Dow, *There's a Madness in the Method: A Commentary on Law, Statistics, and the Nature of Legal Education*, 57 OKLA. L. REV. 579, 580 (2004). See also *supra* note 4, at 7.

<sup>22</sup> *Id.* at 6.

After explaining the empirical rules of inference as they would be applied to subjects examined in legal scholarship, Epstein and King are careful to note that their intentions are not to berate professors of law or the scholarship they produce. They claim their intention is to contribute to reducing current “problems in the literature.”<sup>23</sup> They also make a point to say that because professors of law are in the habit of drawing inferences about the “real world” they have a “strong interest in learning how to conduct empirical research *properly*,”<sup>24</sup> (emphasis added). Epstein and King see their function as enabling law professors to “contribute to a credible, valid, common, and ultimately more valuable research enterprise,” by setting out the rules of inference with their accompanying guidelines in an effort to improve legal scholarship quality.<sup>25</sup> As will be discussed in more detail later, it may come as no surprise that some legal scholars did not deem themselves as in need of such enabling.

To their end, Epstein and King made the following recommendations<sup>26</sup>:

1. Offer courses in empirical research for law school students;
2. Enhance opportunities for faculty to conduct high quality empirical research—and then disseminate it quickly;
3. Encourage employers to hire students with empirical training;
4. Move to an alternative model of scholarly journal management; and
5. Develop standards for data archiving.

It would appear that Epstein and King have the best of intentions to provide legal scholars with the rules of inference in an effort to improve legal scholarship. Epstein and King even go so far as to rave about the importance of law as a field, which they argue renders it in need of a methodology subfield.<sup>27</sup> They state that their intentions are to

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<sup>23</sup> *Id.* at 10-11.

<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> *Id.* at 58.

<sup>27</sup> *Id.* at 11.

make it so that legal scholars are able to tell the difference between good and bad empirical work. This is a need that some legal scholars and judges have identified as prevalent.<sup>28</sup> However, based on the responses to Epstein and King’s well-intentioned piece, it would appear that their delivery had more impact than their message.

Practice What You Preach: Response by Cross et al.

Cross et al. defend legal scholarship and criticize Epstein and King for not abiding by the very rules they use to criticize legal scholarship. Their major objection appears to be that Epstein and King’s comments are too personal. For example, they suggest that the authors Epstein and King criticize should have been coded and not explicitly named.

The authors of this response begin by commending Epstein and King on their suggestions and acknowledging the value of the detailed instruction in empirical methodology.<sup>29</sup> While this response initially demonstrates gratitude to Epstein and King for their instruction, the remainder of the response details what is viewed as an “unremitting and excessive attack on the current state of empirical legal research methodology.”<sup>30</sup> The authors do not say these “attacks” are completely unwarranted but they identify some of them as failing to accomplish what they intend. Cross et al. turn Epstein and King’s methodology around on them. They charge that, “their assault on legal scholarship violates many of their own rules of inference. These violations degrade their analyses and erode confidence in their conclusions and recommendations. In the

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<sup>28</sup> *Supra* note 4. See also Shirley A. Dobbin et al., *Applying Daubert: How Well do Judges Understand Science and Scientific Method?*, 85 *Judicature* 244, (2002).

<sup>29</sup> Frank Cross, Michael Heise, & Gregory C. Siske, *Empirical Legal Research and the Goals of Legal Scholarship: Above the Rules: A Response to Epstein and King*, 69 *U. CHI. L. REV.* 135 (2002).

<sup>30</sup> *Id.*

end, despite its promising thesis, their article becomes an exemplar of how descriptive research should not be conducted.”<sup>31</sup>

The Cross et al. response becomes a good example of what can happen when scholars, admirable in their own fields, attempt to converse about another’s trade without understanding the other’s culture and language. Misunderstandings can happen and feathers can get ruffled. Even though the Epstein and King piece is a shining example of how *not* to address legal scholars, Cross et al.’s invective is not typical in scientific scholarship. That is not to say the sentiment behind their response is not typically encountered. In fact, scientific scholars criticize one another’s work all the time, but the language is usually more diplomatic. One could easily argue that some of the points raised in the Epstein and King piece are far from diplomatic. The best supporting example is when they say that empirilegal scholarship is “deeply flawed.” In fact, Cross et al. take Epstein and King to task for it. This justifies why it is so crucial to understand the culture of your intended audience relative to how it might perceive your message.

The language in science is not often acerbic, even when heavy criticisms are levied. In law, however, persuasion and advocacy are part of everything lawyers say, do, and write. Additionally, expressing one’s points in an absolutist, overconfident manner is an integral part of legal culture.<sup>32</sup> These aspects of legal culture are clearly antithetical to those in scientific culture and clearly contribute to the culture clash we see unfolding. Cross et al. seem to be less concerned with Epstein and King’s point of sharing the information one would expect legal scholars to want. It would appear that Cross et al.

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<sup>31</sup> *Id.*

<sup>32</sup> This is a surprising situation because one might expect lawyers to be less sensitive to criticism as a result of the adversarial nature of their work, but one could argue that criticism is experienced differently when it comes from an outsider.

have instead perceived Epstein and King's message as a derision of legal scholars for even trying to perform empirical work.

Cross et al. then take Epstein and King to task for each point of empirical procedure they identify as crucial in their article. However, they make the same mistake identified by Epstein and King when they seem to expect the procedure and results to be entirely without flaw. This illustrates further the culture clash between law and science that was first raised earlier in this paper. In law there are such standards as "beyond a reasonable doubt," and dichotomies such as "guilty" and "not guilty." In science, one cannot even say with total confidence that the sun will rise in the morning as it is antithetical to scientific culture to know something so completely. In science error cannot be eliminated and overconfident statements of fact are heavily frowned upon. However, researchers can reduce error by complying with the methodological rules Epstein and King suggest. Furthermore, when a scientist offers conclusions, they offer them using more tentative, anti-absolutist language than would a lawyer.

While Cross et al. agree that knowledge in empirical methodology is valuable, they appear to take personal exception to the delivery of this message. They agree that "proof by anecdote"<sup>33</sup> is exactly the kind of issue legal scholars are trying to address. However, they do not appear to recognize the problems with *how* legal scholars seek to rectify this issue. Instead, they seem to bristle at the idea of making changes to legal education. This may be the result of a fear that it may lose its uniqueness among graduate programs. This perception is derived from Cross et al.'s statement that, "[t]he basic thrust of [Epstein and King's] proposal is to make the system more like the convention in social science and many other disciplines.[...] No amount of *trashing*

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<sup>33</sup> *Id.* at 147 (footnote omitted).

*legal scholarship* for inferential errors can make the case for such a shift without a comparable evaluation of the social science scholarship that they prefer,” (emphasis added).<sup>34</sup> One could argue that this would be a fair challenge if there were more social scientists attempting to perform legal research and publishing their work as legal research. Cross et al. could have made this a more effective argument had they identified empirical scholarship specifically claiming to perform legal research without following the rules of legal research. They could have then likewise demonstrated the relevant flaws so that social scientists could be better informed about the work they are trying to accomplish.

Cross et al. do admit to some of Epstein and King’s assertions when they state, “[w]e are mindful of shortcomings in the current state of legal research<sup>35</sup> and suspect that many of Epstein and King’s proposals on this point might well lead to an improvement.”<sup>36</sup> However, they go on to say that, “they certainly have not established the necessary inferences to support their proposal, and they ignore the considerable literature criticizing aspects of the peer review process. Indeed, the peer-review process itself looks insupportable by the very rules of inference established by Epstein and King.”<sup>37</sup> Cross et al. seem to miss the point of what Epstein and King are saying. Epstein and King don’t appear to be touting the virtues of peer review as unassailable, but they merely identify peer review as better than subordinate review. Conventional wisdom dictates that it is better to have a multiple seasoned veterans review a scholar’s

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<sup>34</sup> *Id.*

<sup>35</sup> Epstein and King address only a particular type of legal research with regard to their recommendations (i.e., empirical legal research).

<sup>36</sup> *Id.*

<sup>37</sup> *Id.* at 147-48 (footnote omitted).

work, than a single unseasoned subordinate. This is especially true when that work informs policy that shapes society and its laws.

Cross et al. close their vociferous response by stating that their essential point is that Epstein and King should practice what they preach. They say, "[w]e can only hope that their deeply flawed effort to achieve their goal will neither diminish nor deflect attention from a worthwhile and important thesis."<sup>38</sup> Finally, what Cross et al. may have intended as thought-provoking in closing comes across as a spiteful warning, "[t]wo of us serve as peer reviewers for social science journals and, had their article been submitted to us for review, we would have suggested that the authors revise and resubmit."<sup>39</sup> One feels compelled to consider the authors' intended audience as made up primarily of scholars writing empiri*legal* scholarship. Thus, submission to a social science journal would not have accomplished much. This is a result Epstein and King are sure to have considered when formulating their paper.

It would appear that Cross et al., and perhaps the authors of the other responses, have not recognized an important cultural difference in their response to Epstein and King. This difference is mainly that legal culture mandates a "fight-and-win" mentality. On the other hand, scientific culture mandates a "co-discovery of knowledge" mentality. Of course competition exists in science, and among its scholars, but not in the same way it exists for legal professionals and scholars. Cross et al. perform well in their roles as persuaders and advocates of the legal scholarship they and their colleagues perform. In doing so they appear to be engaging in a kind of battle with well-intended, yet unwelcome scientists. Cross et al., however, are not the only warriors in this ill-

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<sup>38</sup> *Id* at 150.

<sup>39</sup> *Id.* at 151.

construed battle. Another less-than-welcoming response was published at the same time by Goldsmith and Vermeule.

It's All Statistics to Us: Goldsmith & Vermeule.

Goldsmith and Vermeule reflect some of the points made by Cross et al., but they do so more vehemently.<sup>40</sup> Like Cross et al., they include in their vehemence an acknowledgement of the importance of the subject matter at the foundation of Epstein and King's message. They say, "[I]awyer's and judges, and indeed educated people generally, would benefit from a basic knowledge of statistical methods. Putting aside the opportunity costs of statistical training... greater attention to the rules of inference would, when appropriate, improve legal scholarship."<sup>41</sup> Goldsmith and Vermeule's misunderstanding of empiricism may be shared by some of the law schools that do not find the opportunity costs so intimidating. These schools offer courses designed to teach law students how to understand statistics, especially in the legal context.<sup>42</sup> Additionally, one could easily argue that there is no more appropriate a circumstance requiring the use of empiricism's rules of inference than when scholarship labels itself as "empirical", or as using "empirical analysis." As acknowledged earlier in this paper, this was the case with all of the articles Epstein and King used in their study. In fact, a search using the term "empirical" in law review articles' titles is the very methodology used by Epstein and King to collect their data. Despite Cross et al.'s claims of irreproducibility, this technique does not seem difficult for anyone with access to Lexis-Nexis or Westlaw.

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<sup>40</sup> Jack Goldsmith & Adrian Vermeule, *Empirical Research and the Goals of Legal Scholarship: Empirical Methodology and Legal Scholarship*, 69 U. CHI. L. REV. 153 (2002).

<sup>41</sup> *Id.* at 153.

<sup>42</sup> A few examples of these law schools are: George Mason University School of Law, Duke University School of Law, and University of Michigan School of Law.

Goldsmith and Vermeule make a less-than-generous comparison between law and science when they disclaim science’s ability to make change as a result of its findings: [a]t its best, persuasive legal scholarship displays a power to elucidate the logic of doctrinal practices in enlightening ways, to engage audiences, and to motivate legal and social change—a power usually lacking in the pallid output of statistical empiricism.<sup>43</sup> One has merely to consider a few of the multitude of cases that have made changes in society reflecting the coordination of scientific and legal tools: *Oregon v. Muller*<sup>44</sup>, *Brown v. Board of Education*<sup>45</sup>, *Dothard v. Rawlinson*<sup>46</sup>, and *Daubert v. Merrell Dow Pharmaceuticals*<sup>47</sup>. Furthermore, one could also consider the use of science by legislators who rely on its informative and impactful nature to create the laws lawyers are charged with learning, and courts are charged with interpreting.

Even though Goldsmith and Vermeule do a good job of defending legal scholarship and describing its value, they insist their point is not to, “defend an adversarial picture of legal scholarship.”<sup>48</sup> This is an interesting point given that this nature may be behind the cultural discrepancy at the heart of this unfolding conflict. They explain that while lawyers certainly color facts and law to comport with their outcome preferences, the end result is a “fully rounded picture of the truth.” They go on to argue that the same thing happens in legal scholarship by saying, “[i]n both the academic and courtroom settings, there is a system-level justification for the competitive production of evidence that Epstein and King’s simple critique assumes away.”<sup>49</sup> This

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<sup>43</sup> *Supra* note 40, at 156.

<sup>44</sup> 208 U.S. 412 (1908).

<sup>45</sup> 344 U.S. 1 (1952).

<sup>46</sup> 433 U.S. 321 (1977).

<sup>47</sup> 509 U.S. 579 (1993).

<sup>48</sup> *Supra* note 40.

<sup>49</sup> *Id.*

argument is a fair one, but it does not take into account why empirical analysis does not consider competition. This author posits that it is because empirical researchers are generally trained to understand information as without sides. In fact, there may be some circumstances where scientists encourage others to examine the same domain as they examined so that their conclusions may be validated (that is the hope of course).

Goldsmith and Vermeule exhibit a tendency to use statistics as a proxy for empiricism. Their perspective includes quantitative analysis, but not qualitative analysis which can provide a great deal of rich information, even when the information is acquired in a systematic way. This means researchers are trained to be objective observers. If the research design does not call for the objective checks inherent to quantitative types of empirical research, then researchers are trained to account for their subjectivity by making it explicit in their reports. This is a commonly accepted practice in qualitative research and is referred to as “reflexivity.”<sup>50</sup>

An interesting point to make is that Goldsmith and Vermeule’s comment on law’s adversarial nature is a reference to legal culture, but merely a reference. Epstein and King also make a reference to culture when they say that legal scholarship applies the “rules” of persuasion and advocacy instead of the rules of inference.<sup>51</sup> On their own own, however, these brief references are insufficient to adequately address what is causing the battle we see unfolding in responses to Epstein and King.

Ultimately, even though Goldsmith and Vermeule admit “lawyers and judges... would benefit from a basic knowledge of statistical methods,<sup>52</sup>” they seem to take Epstein and King’s comments as an indictment of *all* legal scholarship, not just legal scholarship

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<sup>50</sup> MICHAEL QUINN PATTON, *QUALITATIVE RESEARCH & EVALUATION METHODS* 65 (2002).

<sup>51</sup> *See supra* note 19, at 9.

<sup>52</sup> *Id.* at 153.

purporting to be “empirical”. To be fair, Epstein and King do take issue with the review process in legal journals which applies to virtually all legal scholarship. However, if one reads their introduction, and looks at the data they describe, one will likely recognize that they are remarking primarily on legal scholarship labeling itself as “empirical”.

All Right, Let’s All Just Settle Down: Revesz<sup>53</sup>

Even though Revesz does much to defend empirical legal scholarship, he admits that, “it may well be the case that empirical legal scholarship is in bad shape. But how do we know that social scientists do not engage in the same, or other, pitfalls when they write about law related subjects?”<sup>54</sup> That would be a fair enough argument if the subject at issue were not the *empirical* research *legal* scholars do. Like Goldsmith and Vermeule, Revesz seems to miss the point about matching scholarship label with the appropriate rules. In other words, if the work is going to be called “empirical”, then it should follow the principles around which empirical work is supposed to be performed. Scientific scholars who want to be published in scientific journals generally know that they must follow these rules, or risk not having their work accepted for publication, or accepted into the scientific community.

Like attorneys who must be licensed in a particular jurisdiction to so much as provide legal advice in that jurisdiction, perhaps scientists merely want to maintain the standards of their discipline. One might expect this sense of professional integrity to resonate well with lawyers who are members of a profession as esoteric as it is powerful and prestigious. The three responses reviewed in this paper betray no such empathy.

Additionally, this mismatch between espoused technique and compliance with technique

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<sup>53</sup> Richard L. Revesz, *Empirical Research and the Goals of Legal Scholarship: A Defense of Empirical Legal Scholarship*, 69 U. CHI. L. REV. 169 (2002).

<sup>54</sup> *Id.* at 185.

principles used by legal scholars flies in the face of a legal culture tenet that is taught in professional responsibility courses at law schools nationwide. This tenet holds that the “appearance of impropriety” is to be avoided at all times by lawyers. Law students are taught that even any appearance of improper behavior on behalf of an attorney can have disastrous consequences. An attorney should not even appear to be doing anything untoward, or that could be misconstrued as untoward. One would thus expect legal scholars, who are attorneys regardless of licensure status, to be quite careful about how they hold themselves, and their scholarship, out to the world.

Most importantly, Revesz indicates approval of Epstein and King’s position that an interdisciplinary dialogue would be desirable. He further approves of their contention that legal scholars would surely reap the rewards of such a dialogue. He insists, however, that Epstein and King are mistaken in their belief that the rewards would be only one-way. One could hardly disagree with that statement given Epstein and King’s praise of the law field described earlier in this paper.

Revesz implies that legal scholars do not exist in a world apart from their equivalents in social science. He also insists that institutions embracing both types of scholars exist and are doing well. However, he provides limited information about a handful of relevant conferences and meetings, and scholars who have “created vigorous and successful institutions.”<sup>55</sup> Revesz further asserts that legal scholarship has been gradually integrated with other parts of the academy over the last thirty or so years with some information to support this assertion. However, it does not seem that this information adequately addresses the extensive involvement between the two fields that Epstein and King encourage.

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<sup>55</sup> *Id.*

Revesz further notes that, “there are a number of interdisciplinary peer-reviewed journals in which both legal and social science academics publish their work. Epstein and King appear to have simply missed what may be the most important intellectual development in legal scholarship in the last couple of decades: its gradual integration with other parts of the academy.”<sup>56</sup> This author would argue that there has indeed been some integration, but Revesz’ comment misses Epstein and King’s point that espoused methodology should match actual methodology principles, regardless of what type of scholar is reviewing what for which journal.

Revesz concludes with acquiescence that student editors of law reviews are likely not sufficiently trained to determine the value of empirical studies. This is true even if they can usually determine how important the examined question is. He firmly asserts, however, that:

empirical legal scholarship has a great deal to contribute to the understanding of law and legal institutions, and social scientists would benefit from paying close attention to the methodological innovations performed by legal scholars. Because of their flawed methodology and unwarranted criticisms and exaggerations, Epstein and King have missed an important opportunity to examine what legal and social science empirical scholarship can learn from one another.<sup>57</sup>

This author finds the comment about “methodological innovations performed by legal scholars” particularly compelling. Law is a fascinating field that may inadvertently be inhospitable to scientific inquiry. However, if anyone is going to be able to break new ground in how the law is examined empirically, it will likely be legal scholars because they undoubtedly understand the law field better than scientists.<sup>58</sup> To be sure, in order for

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<sup>56</sup> *Id.* at 188 (footnote omitted).

<sup>57</sup> *Id.* at 188-89.

<sup>58</sup> An important point to make is that the number of social scientists with law degrees appears to be increasing.

the empirilegal work legal scholars conduct to improve, it is important that they abide by the principles forming the foundation of empiricism. This is much like what they would have to do were they to practice in a new jurisdiction: they would have to learn new court rules. Legal scholars must therefore familiarize themselves with how these principles work and should be applied. Some likely already do and are therefore able to prevent, or effectively respond to criticism by empirical scholars. It is important to note that Epstein and King's criticisms are the very same criticisms empirical scholars give one another when the principles are not followed. Empirical scholars will also have to learn how to develop mutually beneficial relationships with legal scholars who have not been trained in empirical methodology and wish to do empirilegal research. They will have to learn about legal language and culture in order to be effective in this role and avoid ruffling the feathers of their esteemed counterparts in law.

### Smoothing Ruffled Feathers

This “deeply flawed” discourse demonstrates how professional cultures can clash. These authors all agree that an understanding of empirical methodology is useful. They also agree on the value of the “rules” explicated by Epstein and King. This is an excellent start. Even though neither side of the dialogue explicitly states that the methodology used should be systematic in order to qualify as empirical, parties in both disciplines recognize the great value of replicability. Replicability is the reason for systematization. Research should be systematic so that external validity (a.k.a. generalizability) is promoted making the conclusions reached applicable to more than just one research sample. Systematic measurements or observations are likely more dependable than haphazard ones and are certainly more replicable. Therefore, systematic

methods lead to replicability making external validity more possible. This is a significant point of agreement. Neither side addresses, though Revesz implies, that law does not lend itself well to empirical investigation, at least not from a quantitative standpoint<sup>59</sup>.

Finally, none of the authors addresses the important role played by stark differences between the cultures. The outcomes just examined would make it seem that none of them recognized, or concerned themselves about, the potential for the kind of conflict that erupted. The purpose of this paper was to attempt to lend perspective to the debate by classifying it as a rocky start to a crucial dialogue. This is a dialogue that scientific and legal scholars would both benefit from. It is also a dialogue that would benefit society at large.

Richard Revesz provides the most diplomatic and most systematic of the three responses to Epstein and King's provocative paper. Furthermore, Revesz' response is the most hopeful. He notes that, "in their haste to show that legal academics have failed, Epstein and King miss an important opportunity to explore the ways in which each discipline can contribute to the other. In contrast, I hope that this Response can be a catalyst for useful interdisciplinary interactions."<sup>60</sup>

This author would like to think Revesz's hope is widely shared. This paper was written in an effort to expand upon that hope. It is therefore up to those of us in law, in science, and especially those of us who are in both, to promote this dialogue and smooth the feathers that inevitably get ruffled when two cultures collide.

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<sup>59</sup> A good example of this is attempts to measure a prosecutor's performance. Should it be measure by convictions? Does that measurement include plea bargains? Are political agendas controlled for? Should supervisor ratings be used despite the literature indicating their poor reliability and validity? Should public opinion be counted? Even all of these together could not provide an accurate picture of how well a prosecutor performs his job, especially because of his range of discretion.

<sup>60</sup> *Supra* note 50 , at 171.