In Re: Claims of Racial Disparity, 2013 WL 5879422 (Conn.Super.) 2013.

The case title is not very informative. In Connecticut (as in all other states), a death sentence goes to the Supreme Court for review. In every such case in which the defendant was black, he alleged racial bias, that blacks more than whites are sentenced to death, especially when the victim(s) is (are) white. Bias must be shown across cases, yet this allegation was made in single cases. The Supreme Court therefore requested that the Public Defender's Office file a more general claim, so the issue could be decided once, for all death sentences.

The Public Defender's Office engaged a private law firm headed by attorney David Golub. That firm spent over a decade selecting cases that might have been prosecuted as death penalty cases, compiling information, developing a coding form, and coding. They even sponsored an analysis which, not concluding what Golub wanted it to, they suppressed. Ultimately they engaged John J. Donohue III as their expert. Donohue was then a professor of law at Yale, albeit also with a PhD in economics. When he testified, in 2012, he was a professor of law at Stanford, and told the court that one course that he taught was discrimination law.

LRA was engaged by the State's Attorney's office. This is not the place to present a full critique of Donohue's work. LRA did that at trial, and Judge Sferrazza accepted that critique in his finding for the state. We consider Donohue's work to be an embarrassment to the "profession" of statistics in law. He may disagree. Here, we will report on three issues, to make the point that LRA understands how to perform statistical analysis in litigation at a level that even the most credentialed "experts" do not. It is always a surprise to find what parts of our presentation influence the judge's decision, but that is a reason why our approach, which is to prepare a complete analysis and present a complete explanation, is important. We follow the Colin Powell principle: If you are going to take on this battle, commit enough resources to win it.

The first issue is the unit of analysis. Suppose we are looking at a firm's hiring for a particular category of job, over a several year period. We have data on the applicants—their age, gender, race, nominal qualifications and other characteristics defendant firm says it uses as a basis of its hire decision. The unit of analysis is the application. The event to be explained is the offer. The firm is responsible for its own decisions, not for the final result. This was at one time a novel approach, but today (we think) it is universally accepted that offers, not hires, denote the "winners."

Who are the losers? Usually applications are "alive" for only some period of time. Not every applicant competes with every other applicant. Especially, winners do not compete with people who have not yet applied. So the data work involves formulating "pools" of people who did compete against each other for these offers.

Given this description, it is inevitable that some people will appear as applicants more than once. Some might lose several times; some might lose and then win. No analyst ever has thought that he should delete repeat applications. No analyst has ever defined the unit of observation as the individual. Nor should any analyst do so. The unit

is the application if alive when the hire offer is made. The offer is the event being analyzed, and all applicants considered at that time are units of observation. It would clearly be wrong—no "expert" suggests otherwise—to follow each applicant's history, and consider him only once. If he is the subject of more than one decision, then he should be in more than one pool.

Closer to the death penalty situation, consider promotion of a college professor. She might be considered after two years as an assistant professor, for promotion to associate professor. Suppose she is retained on the faculty, but not promoted. She might be considered again the next year, and the next. Each year some characteristics have changed (she has one more year of teaching, may have more publications and student reviews of her teaching). But she is the same person. Gender is also a characteristic, and let us suppose it is the characteristic at issue. The question is how the promotion committee reacts to all characteristics, including gender. Each promotion review provides a decision, and the decision defines an observation. All such decisions within the relevant time period should be included in the analysis.

This might seem obvious, but in analyzing death sentences, Donohue thought otherwise. Some defendants faced a death penalty panel, the decision of that panel was overturned by the Connecticut Supreme Court on legal grounds, and most of those then faced another panel. (An analogy might be that the assistant professor was selected for promotion, but the college president vetoed it because they did not have the funds to pay for the higher position.) Decisions by the Supreme Court may have had a disparate impact, but a disparity caused by a valid factor is not discrimination. See *Robinson v. Polaroid*, for example. One has to assume that the high Court would consider its own decisions "valid." There is no reason to throw out decisions made by penalty panels because, later, they were validly over-turned. The point of an analysis when discrimination has been alleged is to find the discriminating action, if there is one. That means finding the discriminating actors, if there are any. At the penalty stage, that must mean the penalty panels. We should use every observation of a penalty panel decision to assess whether they discriminate on the basis of race. Donohue's selection of only some penalty panel decisions, when racial discrimination in those decisions is at issue, is not just wrong, it is incompetent.

The second issue is to understand what the Supreme Court "law" is. When the Supreme Court struck down the death penalty in most states, in *Furman v. Georgia*, 408 U.S. 238 (1972), it did not conclude that the death penalty is unconstitutional *per se*. As Chief Justice Burger summarized (at 375),

> the constitutional prohibition against 'cruel and unusual punishments' cannot be construed to bar the imposition of the punishment of death.

Rather, it concluded that the imposition of death was arbitrary, because states had not clearly defined standards that distinguished death-worthy crimes from those for which life imprisonment was sufficient. The states would have to define a classification so that only

some murders—let's say the "worst"—would make a defendant eligible for a death sentence.

In *Gregg v. Georgia*, 428 U.S. 153 (1976), the Court's opinion reiterated that the question whether the death sentence was unconstitutional "was not resolved by the Court" in *Furman* (1972). Here, in *Gregg* (1976), at 169,

> We now hold that the punishment of death does not invariably violate the Constitution.

Georgia had revised its law to specify characteristics of crimes that subjected the defendant to death, and jury instructions to consider "aggravating" and "mitigating" factors. Other states had made similar revisions, and their death penalties were reinstated. So, for example, in Connecticut, some homicides can become "capital" felony cases. Killing an officer while on duty, killing more than one person, killing associated with sexual assault—these are some of the characteristics that make a defendant eligible for death.

What did Donohue do wrong? The Supreme Court accepted a classification scheme that defined characteristics of the "worst" murders. It did not call for a rank ordering of murders which, among other problems, would have been valid only until another capital felony conviction. What if, just before (or just after!) death sentences were carried out, there were other convictions for crimes that might have been deemed even worse? Would a penalty panel have to review the older case, as well as the one before it, and make a comparative judgment? The solution is to place in the law the characteristics that define death-eligible murders. The Supreme Court accepted a classification as fulfilling the state's obligation to eliminate arbitrariness in the death penalty.

Donohue did not understand this distinction. He thought the Supreme Court had asked for a ranking of "badness" of cases. He presumed that he could make such a ranking, and that a rational system would have sentenced only those defendants at the top of that ranking to death. In fact, for the reasons stated just above, Donohue's call for rank ordering crimes reflects high school level thinking. A classification is more sophisticated. The state of Connecticut had done all the Supreme Court asked.

With some exceptions, the coders had done a good job of identifying cases that fell into Connecticut's capital felony classification. Donohue engaged graduate students to rank order those cases he thought fit the "capital felony" classification from one page case summaries "scrubbed" of racial information. That the way he did so violated laws of elementary arithmetic (averaging ordinal numbers) emphasizes Donohue's lack of skill. Given only a weak relationship between his measure of students' ranking and death sentences, Donohue expected the court to find the system irrational. Death sentence decisions were not limited to the "worst" as his graduate students saw them, from the limited information they had. Donohue never even asked how one might determine the validity of this ranking. How could one question his graduate students' assessments? This nonsense from a full professor who teaches this subject!

The third issue is to understand the process or, better, how to analyze the process. Donohue started with the first stage, estimating the prosecutor's decision whether to charge the defendant with a capital felony. His observations were all those defendants who might have been so charged, under the law. Although he made some errors in practice (including some defendants who were not death eligible, and dropping one defendant who was), in principle this is the correct first step. Donohue set up a regression (and a logit specified the same way) with some pre-determined variables, never considering most of the over 600 elements coded for each case. He found "race" to be a factor in his regressions, although LRA showed that alternative—arguably better—specifications did not allow the same conclusions.

The litigation was not about who was charged with a capital felony. It was about who was sentenced to death. Between charge and sentence the death "eligibility" of a defendant may change. The charge may not survive a probable cause hearing. The defendant may be found not guilty of the crime, or not guilty of the death-eligible charge. He may plead guilty in exchange for taking a death sentence off the table, or the prosecutor may take death off the table on his own.

Donohue's only other regression (and logit) used the death sentence as his dependent variable. His observations were the same defendants originally determined to be eligible for a death sentence, ignoring whether, at the time a death decision is made, they were still eligible, and dropping decisions subsequently over-turned. His specification used the same independent variables, although the charge decision was made by a prosecutor, and the death decision by a penalty panel.

Errors in this approach are legion. Those determining the sentence could only choose death among those eligible for death at that time. Donohue ignored the process, during which some defendants previously thought eligible for the death sentence became ineligible. It is like asking why an assistant professor was not promoted at the end of his third year, when he had left for another institution at the end of his second year. Not having been informed that these people were not eligible for the death sentence, the regression evaluated the effect of characteristics on that sentence as if they were. Once again, this work is not just bad, it is incompetent.

Given John Donohue's stature—not only as a full professor at a prestigious university, but as an author of articles about whether the death penalty deterred murders—it was important at trial to go through all of the logic above, and more, to establish that he was not the expert he appeared to be. Evidence of the necessity of a strong rebuttal is that the *New York Times* had published a *precis* of his rank-order argument with the title "The Random Horror of the Death Penalty" (by Lincoln Caplan, January 8, 2012 at SR10). The *Times* has never reported that LRA's critique, besides being correct, was successful.

LRA's own report not only contained this critique, but corrected Donohue's errors and found no evidence supporting petitioners' contentions of racial bias in death sentencing. Not surprisingly, Attorney Golub decided to sacrifice his own "expert" report to keep LRA's report from the judge. Neither report became evidence in the case.