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Neuroscience is coming to the law. Can we keep politics out of it?

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Neuroscience is appearing everywhere. And the legal system is taking notice. The past few years have seen the emergence of "neurolaw." A spread in the NYT Magazine, a best-selling NYT book, a primetime PBS documentary, the first Law and Neuroscience casebook, and a multimillion-dollar investment from the MacArthur Foundation to fund a Research Network on Law and Neuroscience have all fueled interest in how neuroscience might revolutionize the law.

The potential implications of neurolaw are broad. For example, future developments in brain science might allow: criminal law to better identify recidivists; tort law to better differentiate between those in real pain and those who are faking; insurance law to more accurately and adequately compensate those with mental illness; and end-of-life law to more ethically treat patients who might be able to communicate only through their thoughts. Increasingly courts, including the U.S. Supreme Court, and legislatures are citing brain evidence.

But despite the media coverage, and much enthusiasm from science and legal elites, our new research shows that Americans know very little about neurolaw, and that Republicans and independents may diverge from Democrats in their support for neuroscience based legal reforms.

In our study, we conducted an experiment within a national survey of Americans (more details about the survey are in our article). Everyone in the survey was told that, "Recently developed neuroscientific techniques allow researchers to see inside the human brain as never before."

One group of respondents was then asked: "Thinking about how neuroscience might be used in the legal system, do you disapprove or approve of legal reforms based on advances in neuroscience?" Among this group, 40 percent were undecided, and the rest split between disapproval and approval. There were no significant differences between Republicans and Democrats in baseline support for neurolaw.

But our further findings raise concern. With respect to the criminal justice system, commentators have observed that neuroscience could either aid criminal defendants or aid the prosecution. Thus, we exposed two other groups of respondents either to the prospect that neuroscience would help the prosecution, leading to harsher sentences, or to the prospect that it would help the defense, leading to lighter sentences.

When framed as being helpful to criminal defendants, both Republicans and Independents voiced

more disapproval of using neuroscience in law. Democrats were not affected by either of these frames.

This finding shows again how science based on individuals' political or cultural leanings. And it is particularly concerning with regard to neurolaw — which, has yet to become a partisan political issue. For example, the Web site Conservapedia, which has been criticized for misrepresenting evolution and global warming, describes neuroscience in neutral terms, stating that "Neuroscience is the scientific study of the nervous systems …" and that "… Neuroscience is a rapidly growing field of interest."

But our study shows that neuroscience may not remain neutral for long. If framed in certain ways, neuroscience could fall victim to the same fate as climate change science. Such a development can only be avoided with careful attention to how neuroscience and its application to the legal system are presented to the public and politicians.

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