NEW COURSE

University of Arizona, Cognitive Science Program

Master Seminar, Fall of 2014:
“Cognitive Science, Ethics and the Law”

Thursdays, 4:00 p.m. – 6:50 p.m., College of Law, Room 118
COGS/PSY/MGM/LAW/LING/PHIL 696E

Coordinators and conveners:
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The “Master Seminar” has been held successfully in the past 13 years. It is administratively a graduate course, with registered students (for the latest edition in the Fall 2012), from Cognitive Science, Law, Management and Organizations, Marketing, Linguistics, Psychology and Philosophy. They receive full credit for participating very regularly in all the sessions, and for reading the preparatory paper(s) that will be suggested by each lecturer in advance, and posted on the D2L course website. They are required to send two reasoned questions to the coordinators, destined to the speaker, after the seminar. Registered students are required to write a final paper of no more than 2500 words.

The general format is that each week a recognized expert, either on-campus or visiting, will lead the class on a topic related to the theme of the semester. The Master Seminar welcomes auditors, including intermittent ones. Each session will focus on foundational issues, aiming at a highly educated, but largely interdisciplinary, audience. The speakers are expressly invited to introduce their fields quite broadly, in the first and longest part of their talk, and then present state-of-the-art research, in an accessible form, without sacrifice of rigor. A lively discussion usually follows these presentations.

Fall 2014 General Description:
In recent years there has been a remarkable development of interdisciplinary studies exploring the cognitive components, for the most part unconscious, involved in legal settings. How do eyewitnesses reconstruct their memories? How do juries make sense of brain images? How can appellate judges make decisions about prejudicial evidence, without themselves being prejudiced by the evidence? How do emotional appeals impact jury decision making? The Master Seminar will offer a unique panorama of this field, drawing on leading scholars from around the country, from across Arizona, and from across four colleges here at the University of Arizona.
PROGRAM

August 28
General Introduction by the Professors Piatelli-Palmarini and Robertson and Christopher Robertson (Associate Professor at the James E. Rogers College of Law, University of Arizona, and Director of the Law and Behavior Research Laboratory)

Can Randomized Vignette-Based Experimentation Be Used in Real Litigation to Inform Counterfactual Questions and Reduce Bias?
Judges and juries must often resolve counterfactual questions: Would the patient have accepted the treatment if she had received a proper disclosure? Would the jury have convicted even if the judge had not erroneously admitted the evidence? Would a prudent radiologist have seen the cancerous tumor? Unfortunately, these determinations are speculative, and subject to cognitive biases, including confirmation and hindsight biases. Robertson will present three papers arising out of the Law and Behavior Research Lab at University of Arizona, which pilot novel experimental methods using online populations to potentially inform real court cases.

September 4
Nick Schweitzer (New College of Interdisciplinary Arts and Sciences, Sandra Day O’Connor College of Law, Arizona State University)

Neuroimagery and the Jury
Modern neuroscience techniques offer unprecedented insight into humans' mental states. The most salient of these techniques to the public are neuroimages (fMRI, PET, etc). This talk will explore how these images are being used by the US legal system, the fears surrounding them, and the empirical evidence regarding these images' ability to convey meaningful, legally-relevant evidence.

September 11
David Yokum (Department of Psychology, University of Arizona. Fellow with the U.S. Social and Behavioral Sciences Team (SBST), in Washington, D.C).

“Formalytics”: Using Behavioral Insights to Improve Uncle Sam’s Correspondence
The government regularly engages its citizenry via letter, email, and other written ways in an effort to provide information and, ultimately, to solicit input or action. Although seemingly mundane, such “forms” are of remarkable importance. Citizens are prompted to pay taxes and parking fines, show up for jury duty, complete the Census, volunteer, get vaccinated, vote, apply for student financial aid or veteran benefits, etc... Also seemingly mundane – but rather remarkable upon reflection – are the innumerable cognitive demands that must be met in order for a form to be noticeable, comprehensible, motivating, memorable, and actionable, and how even subtle changes in form design can have profound effects on these dynamics. We’ll explore how cognitive science offers unique insights into effective form design – a sort of “formalytics,” if you will, which includes topics such as visual search patterns, framing, and identity priming, as well as opportunities for (and results from) empirically testing how predicted form designs fare in the real world of Uncle Sam’s...
correspondence. At several turns we will consider legal implications (e.g., pertaining to the regulation of financial communications).

September 18  
**Peter H. Ditto** (Department of Psychology & Social Behavior School of Social Ecology  
University of California, Irvine)  
**Moral Intuitionism & The Illusion of Public Reason**  
Morbidity is something we feel more than think. This emerging view that judgments about right and wrong are grounded in emotion and intuition rather than principled reasoning has important implications for understanding political beliefs and behavior. In this talk I will present evidence that the differing moral intuitions of Liberals and Conservatives shape their reasoning in ways that lead each side to see their own moral vision as principled, logical, and effective and the other side's vision as hypocritical, illogical, and counterproductive. Motivated reasoning cloaks moral conflict in a veneer of public reason and contributes to the corrosive political polarization that plagues contemporary American politics.

September 25  
**Shaun Nichols** (Department of Philosophy and Cognitive Science Program, University of Arizona)  
**Rational Learners and Non-Utilitarian Rules**  
Hundreds of studies on moral dilemmas show that people's judgments do not conform to utilitarian principles. However, the exact nature of this nonconformity remains unclear. Some maintain that people rely on deontological “side constraints” that are insensitive to cost-benefit analysis. However, the scenarios that are used to support this intuition, e.g., the magistrate and the mob, contain an important confound. In these cases, we consider whether it is appropriate for one person to violate a moral rule in order to prevent others from committing similar violations. In that case, people tend to say that it would be wrong to violate the rule. In a series of experiments, we showed that people give very different responses when the question is whether an agent should violate a moral rule so that she herself doesn't have to commit more such violations in the future. This suggests that a critical feature of our moral rules is that they function in an intra-agent, rather than inter-agent manner. But this raises a further question – why do our rules have this non-utilitarian character? One prominent view (e.g. Mikhail 2007) holds that the structure of moral rules plausibly depends on an innate moral grammar. We propose instead that given the evidence that the young child has, a rational Bayesian learner would in fact arrive at non-utilitarian rules.

October 2  
**Amanda Pustilnik** (Associate Professor of Law at the University of Maryland Frances King Carey School of Law, faculty member and fellow at Massachusetts
General Hospital Center for Law, Brain, and Behavior and at Petrie-Flom Center for Health Law, Biotechnology, and Bioethics at Harvard Law School

Imaging Brains, Changing Minds: How the Neuroimaging of Pain Should Change Law & Norms

Legal doctrines and decisional norms treat chronic pain claims differently than other kinds of disability or damages claims because of bias and confusion about whether chronic pain is real. Now, breakthrough neuroimaging can make pain visible, shedding light on these mysterious ills. Neuroimaging shows these conditions are, as sufferers have known all along, painfully real. This talk will address issues related to where law ought to change because of innovations in structural and functional imaging of the brain in pain. It describes the impact that developments in neuroimaging make on disability law and evidence law, and, eventually the law's norms about pain. It suggests that pain neuroimaging will solve certain, but not all, current legal problems relating to chronic pain. More broadly, it suggests that such neuroimaging will open the door to reconsiderations of law's treatment of other subjective phenomena like mental states and emotions, going to the theoretical heart of legal doctrines about body and mind.

October 9

Linda J. Demaine (Professor of Law & Affiliate Professor of Psychology. Director, Law and Psychology Graduate Program. Willard H. Pedrick Distinguished Research Scholar, Sandra Day O'Connor College of Law, Arizona State University)

Seeing is Deceiving: The Tacit Deregulation of Deceptive Advertising

This talk will reveal the central paradox in modern advertising law—that despite advertisers' nearly universal shift from linguistic claims to comparatively powerful visual imagery, the FTC and courts continue to scrutinize the more trivial linguistic elements of ads while leaving visual imagery mainly unregulated. As a result of this misplaced effort, the more pervasive and persuasive the form in which an advertiser makes its deceptive claims, the less subject to regulation the claims will be. The Article analyzes the causes of this paradox and offers preliminary suggestions for how the FTC and courts could effectively adapt the general framework they apply in deceptive advertising cases to the unique characteristics of visual imagery. It concludes by explaining that a more rigorous assessment of visual imagery would fulfill Congress’s intent to protect consumers and business firms from deceptive advertising and comport with Supreme Court commercial speech jurisprudence, while avoiding the market inefficiencies and loss of social capital associated with widespread deception.

October 16

Lisa Ordóñez (Professor, Levine Family Faculty Fellow, Department of Management and Organizations, University of Arizona)

Goals, Ethics, and Decision Making

In this session, we will discuss the interconnection between goal setting, Prospect Theory, and unethical behavior. Much of the research in goal setting has focused on the positive motivational force that goals can create. However, my research has shown a darker side of goals that lead people to making poorer decisions and
engaging in unethical behavior. Interestingly, goal setting behavior (both positive and negative) can be explained by assuming that the goal is the reference point: thus, the Prospect Theory utility function becomes an explanatory mechanism for the motivational impact of goals.

PLEASE NOTICE THE CHANGE OF DATE AND ROOM
October 25 (Exceptionally co-convened with the Cognitive Science Colloquium, Friday at 12 noon. Speech, Language, and Hearing Sciences Bldg, Rm. 205)
Elizabeth Loftus (Distinguished Professor of Social Ecology, and Professor of Law, and Cognitive Science, University of California, Irvine)
The Memory Factory
In our studies of memory distortion, we can alter, in people’s minds, the details of events that were actually experienced. We can also plant entire memories of events that never happened – “rich false memories.” False memories matter: they affect people’s later thoughts, intentions, and behaviors. Moreover, false memories look very much like true memories – in terms of behavioral characteristics, emotionality and neural signatures.

October 30
Terence E. Horgan (Professor of Philosophy, University of Arizona)
Reasons-Responsive Moral Judgment and the Phenomenology of Moral Experience
Among psychologists studying moral judgment-formation, the “social intuitionist” model recently has been influential. On one construal, this model asserts both (i) that most human moral judgments are the product of rapid, gut-level emotional responses, and (ii) that any justificatory reasons that might be articulated after the fact are usually just confabulations. I will describe a range of evidence that supports a contrary view, viz., that most human moral judgments—including those that are spontaneous and affect-laden—are highly reasons-responsive. The evidence comes largely from careful introspective attention to the phenomenological character of moral experience. The phenomenology of joke-getting provides an instructive analogy. (This talk draws on work in progress, with my colleague Mark Timmons, on a book tentatively entitled Illuminating Reasons: An Essay in Moral Phenomenology.)

November 6
Barak Orbach (Professor of Law, James E. Rogers College of Law)
Red Flags
This Essay explores extreme circumstances in which, because of available warning signs, decision makers know (or should know) that a high-impact negative event is about to happen or is already happening (“red-flags situations”). Several legal principles, such as those of the jurisprudence of omissions and inaction and the business judgment rule, shield decision makers from liability for failures to respond to red-flags situations. The Essay shows that, because of a wide range of systemic judgment errors, decision makers often fail to address red-flags situations. It studies the pathology of such failures and the soundness of the present legal approach to red-flags situations. The Essay argues that by revising legal standards to reflect realistic
premises concerning judgment under uncertainty, society can attain great benefits in the form of reduced failure costs.

November 13  
**Jessica Salerno** (Social and Behavioral Sciences division of the New College of Interdisciplinary Arts and Sciences at Arizona State University, and JD/PhS Program in Psychology and Law)  
**The Emotional Side of Legal Decision Making**  
Judges are tasked with determining whether the probative value of emotionally disturbing evidence outweighs its potentially prejudicial effect on jurors’ decisions. The current legal framework for distinguishing between the probative and prejudicial effects of evidence relies on the assumption that "emotion" is the hallmark of prejudice. I will present several aspects of my research program investigating the emotional side of legal decision making relevant to this issue. More specifically, I will present conclusions from a recent review of psychological research regarding the effect of gruesome photographs and victim impact statements in court, in which we argue for a more sophisticated and nuanced view of emotion's role in evaluating the relative probative and prejudicial effects of emotional evidence. I will also present two recent lines of experimental mock juror research investigating two very different effects of riling jurors’ emotions. The first line of research demonstrates how mock jurors’ moral emotions affect their verdict decisions. The second demonstrates how mock jurors’ expression of emotion during deliberation can lead to historically underrepresented jurors (women, African Americans) having less influence on their co-jurors’ opinions during deliberation, relative to White male mock jurors.

November 20  
**Charles Fried** (Beneficial Professor of Law at Harvard Law School, previously justice of the Supreme Judicial Court of Massachusetts and Solicitor General of the United States, arguing inter alia the landmark case concerning scientific evidence, *Daubert v. Merrell Dow Pharmaceuticals.*)  
**Judging Scientific Truth.**  
This is an account of how in the past courts had used the testimony of those claiming to have scientific knowledge, how that practice changed with the adoption of the Federal Rules of Evidence in 1975, and what the current practice is. Practical and theoretical questions are raised about the current practice.

December 4  
**Michael Saks** (Regents' Professor of Law and Psychology; Faculty Fellow, Center for Law, Science & Innovation; Arizona State University)  
**Are Juries Persuaded by Neuroscience Expert Evidence?**  
A series of experiments tested whether and when jurors are persuaded by brain-scan-based evidence to find that a criminal defendant (a) lacked the requisite mens rea to be found guilty, (b) was insane, (c) should not be executed following conviction for capital murder. Does the neuro-image evidence blow them away, or does it blow right past them without effect? What are the legal and ethical implications if such images
have effects on jurors that are inordinately strong? What if they have weak or no effects when there is a genuine message the jurors need to hear?