Joshua A.T. Fairfield

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EDUCATION AND ACADEMIC EMPLOYMENT

- **Washington and Lee University School of Law** *Lexington, VA*
- Professor of Law 2013-*present*
- Ethan Allen Faculty Fellow for Scholarship *2014-15*
- Lewis Prize for Excellence in Legal Scholarship *2013*
- Elected: AMERICAN LAW INSTITUTE *2013*
- FULBRIGHT, MAX PLANCK INSTITUTE (Germany) *2012-2013*
- Associate Professor of Law (tenure 2010) *2007-2013*
- Director, Frances Lewis Law Center *2009-2012*
- Jessine Monaghan Faculty Fellowship for Teaching *2012*
- Huss Faculty Fellow for Law and Technology *2010*
- Nationally recognized scholar on electronic commerce, online economics, virtual worlds, electronic payments, and cryptocurrencies.
- Consultations with and presentations to White House Office of Technology Policy, Homeland Security Privacy Office, CIA, DOD, ODNI, IARPA, FTC, and CSBS on virtual worlds, privacy, online economics, and cryptocurrencies.

Indiana University School of Law – Bloomington *Bloomington, IN*

- Associate Professor of Law *2005-2007*
- Trustees' Award for Teaching

Columbia Law School *New York, NY*

- Associate-in-Law *2004-2005*
- Taught multi-field course introducing LLM students to each basic common law area, as well as common-law reasoning, legal theory, and methodology

University of Chicago Law School *Chicago, IL*

- J.D. (2001), *Magna Cum Laude*, Order of the Coif *1998-2001*
- The University of Chicago Law Review
- Symposium Editor, The University of Chicago Legal Forum

Swarthmore College *Swarthmore, PA*

- B.A. (History), Degree with Distinction, Phi Beta Kappa *1992-1996*

LAW PRACTICE

Jones Day *Columbus, OH*
Associate *2002-2004*

- Focus on commercial law and software / technology law

- Contributions to technology law cases before the Sixth Circuit Court of Appeals and the United States Supreme Court

Honorable Danny J. Boggs, Sixth Circuit Court of Appeals *Louisville, KY*
Judicial Clerk *2001-2002*

GENERAL EMPLOYMENT

Fairfield Language Technologies (now Rosetta Stone, Inc.) *Harrisonburg, Virginia*
Director of Research and Development *1996-98*

- Headed the department of research and development for the award-winning *The Rosetta Stone Language Library*, now the leading language-teaching software program for educational institutions.

SELECTED PUBLICATIONS

BitProperty, __ SOUTHERN CALIFORNIA LAW REVIEW __ (forthcoming 2015).

Property is the law of lists and ledgers. The vast majority of owned wealth is held in registries, from county courthouse records of registered deeds, to registries of mortgages, to stock certificate registrations, bank accounts, PTO or Copyright Office intellectual property registrations, or even a consumer's list of downloaded iTunes music. A mathematical breakthrough makes it possible to maintain and update these lists in a manner that has serious implications for law. Trustless public ledgers ("TPLs")—of which Bitcoin is just one example—are a new and powerful way to track ledgers at low cost and without centralization. Trustless public ledgers provide a way to create true, digital, rival, online property architectures.

This disruptive technology provides an opportunity to re-examine property law. Traditional property law online is anemic. Consumers do not own much online. Courts have applied intellectual property to consumer-purchased digital assets, but this has not worked well. Consider how much of a consumer's e-Book or music collection is truly owned by the consumer. What is needed is a clearing of the conceptual rubble, so that advances in technology can enable consumers to own digital objects, just as they own cars and houses. This article offers a new theory of property: that property is not assets, not identity, not use rights (the "bundle of sticks"), but an information protocol that quickly, clearly, and securely conveys information about who owns what. Such a theoretical window on property makes it clear that traditional property law is not alien to the internet. Instead, information is property's native application. That is the project of this piece.

Digital Innocence, with Erik Luna, 99 CORNELL LAW REVIEW 981 (2014).

The growth and breadth of surveillance has been the story of the year. Surveillance in the traditional narrative is supposed to make us less secure against abuses of

authority. But there is a silver lining. Surveillance provides alibis. The breadth and depth of corporate and government surveillance seems to guarantee the existence of such evidence, stored somewhere, proving the innocence of suspects and defendants. Assuming computer engineers can refine the tools necessary to find it, proof of innocence will be found.

This article calls for a new theorization of digital innocence, one which seeks to leverage the tools of big data, data-mining, ubiquitous consumer tracking, and digital forensics to prevent wrongful convictions and provide hard proof of actual innocence for those already convicted. The motivation for the paper is a simple but perhaps counterintuitive observation: modern ubiquitous surveillance technology can provide both inculpating and exculpating evidence. While citizens' lives are increasingly logged and tracked, online and off, it increases the chance of finding evidence tending to prove innocence.

Big Brother is Watching Because Little Brother has Opened the Door: An Experiment on Information Sharing in Social Networks, MAX PLANCK INSTITUTE FOR RESEARCH ON COLLECTIVE GOODS (Bonn, Germany), with Director, Prof. Dr. Christoph Engel (under peer review).

Because privacy has been over-theorized as an individual right, the privacy literature does not adequately discuss privacy as a public good. This under-theorization is especially apparent when one considers that social networks, like Facebook, are at the forefront of the debate about privacy. Given that privacy is a social construct, not an individual question, we believe it may be useful to think about privacy as a collective good, and lack of privacy caused by others as a public bad.

We test whether and how privacy is impacted by group behavior through a simple public bad experiment. The proposed experiment begins from a voluntary contribution mechanism. We incorporate elements to permit the stock of the public bad to accumulate as subjects contribute to the public bad, and use a decay function to permit the effects of their behavior to subside with time. The resulting stock of public bad is then scaled in ways that reflect potential growth curves or new uses of data in social networks.

"Do-Not-Track" as Default, 11 NORTHWESTERN JOURNAL OF TECHNOLOGY AND INTELLECTUAL PROPERTY 575 (2013).

Do-Not-Track has the ability to change the relationship between consumers and advertisers in the information market. Everything will depend on implementation. If Do-Not-Track can be implemented as a default, automated browser feature that consumers can choose by selecting their browser, it will be effective and widely used.

The W3C standard setting body for Do-Not-Track has, however, endorsed a corrosive standard in its Tracking Preferences Expression draft. This standard requires consumers to set their privacy preference by hand. This "bespoke" standard follows in a long line of privacy preference controls that have been neutered by increased transaction costs.

This article argues that privacy controls must be firmly in consumers' hands, and must be automated and integrated to be effective. If corporations can deprive consumers of privacy through automated End User License Agreements or Terms of Service, while consumers are constrained to set their privacy preferences by hand, consumers cannot win. Worse: the TPE bespoke standard is anticompetitive. Browsers like Microsoft's Internet Explorer 10 will launch with default Do-Not-Track enabled. But the TPE bespoke standard offers advertisers a free pass to ignore the Do-Not-Track flags that will be set by IE10, thus preventing browsers from competing by offering automatic, integrated, and therefore useable privacy features.

Mixed Reality: How the Laws of Virtual Worlds Govern Everyday Life, 27 BERKELEY TECHNOLOGY LAW JOURNAL 55 (2012).

Imagine a world in which car manufacturers can tell you which neighborhoods you can drive through, in just the same way that your cell phone provider now tells you which network you can use. Imagine a world in which your clothes are free, but carry shifting advertisements on smart fabric. Imagine a world in which you can choose to edit your ex-husband out of your existence – you can't see him, hear him, see anything he's written, hear any phone calls, nothing. This is the future of mixed reality, where virtual experiences interact side by side with our everyday walkabout life. Through mobile technology, computing has finally come out from behind a desk and into the street. At the same time, realspace is being hyperlinked, indexed, and augmented with rich virtual datasets. The laws that govern virtual experiences are thus increasingly impacting our everyday lives. Law is playing a desperate game of catch-up as Google is sued because pedestrians following Google Maps cross a street at the wrong place, or nation-states almost start a war after Google Earth shows a border in the wrong location. This article stakes out a careful path for the law as it attempts to negotiate what happens when virtual experiences enter the real world with full force.

Avatar Experimentation: Human Subjects Research in Virtual Worlds, 2 U.C. IRVINE LAW REVIEW 695 (2012).

Researchers love virtual worlds. They are drawn to virtual worlds because of the opportunity to study real populations and real behavior in shared simulated environments. The growing number of virtual worlds and population growth within such worlds has led to a sizeable increase in the number of human subjects experiments taking place in such worlds. Yet people within virtual worlds act much as they would in the physical world, because the experience of the virtual world is "real" to them. The very characteristics that make virtual worlds attractive to researchers complicate ethical and lawful research design.

"Do Not Track" as Contract, 14 VANDERBILT JOURNAL OF ENTERTAINMENT AND TECHNOLOGY LAW 545 (2012).

Support for enforcement of a do-not-track option in browsers has been gathering steam. Such an option presents a simple method for consumers to protect their

privacy. The problem is how to enforce this choice. The Federal Trade Commission (FTC) could enforce a do-not-track option in a consumer browser under its Section 5 powers. The FTC, however, currently appears to lack the political will to do so. Moreover, the FTC cannot follow the model of its successful do-not-call list since the majority of Internet service providers (ISPs) assign Internet addresses dynamically—telephone numbers do not change, whereas Internet protocol (IP) addresses may vary.

This Article explores whether, as a matter of contract law, a browser do-not-track option is enforceable against a corporation, and concludes that it is. The emerging standard of online consent has been whether a party proceeds with a transaction after the counterparty informs the party of the terms of the contract. Adhesion contracts in electronic contexts have bound consumers for over a quarter century in precisely this manner. This Article argues that what applies to consumers should apply to corporations. When a consumer expresses her preference, in the very first exchange between the consumer and corporate computers, for the corporation not to track her information, the company is free to refuse the transaction if it does not wish to continue on the consumer's terms.

Nexus Crystals: Crystallizing Limits on Contractual Control of Virtual Worlds 38 WILLIAM MITCHELL LAW REVIEW 43 (2011).

Top 10 *SSRN Download, Political Processes, Public Choices, Individual & Social Well-Being; Technology & Ethics.* The foundational social contract of the internet is the End User License Agreement, (EULA), not the United States Constitution. Community-governing contracts, whether website Terms of Use (TOU), or software End User License Agreements (EULAs), are the flashpoint for an ongoing discussion about whether there are limits to the control intellectual property owners can assert over their customers. For example, can a game company sue a player who cheats (which violates the EULA) for copyright infringement? This article argues that it cannot, and that there is a coalescing consensus on limits to these licenses, although the circuits differ as to method.

Castles in the Air: F. Gregory Lastowka's VIRTUAL JUSTICE, 51 JURIMETRICS 89 (2010).

This review in the #1 peer-reviewed journal of law, science, and technology critically examines Gregory Lastowka's new book from Yale University Press, VIRTUAL JUSTICE. The review concludes that VIRTUAL JUSTICE stands apart from prior efforts in the field because it recognizes that the study of law in virtual worlds is not a niche, but is instead a compelling example of how communities produce law through their encounter with novel technologies. The review therefore applauds Lastowka's core premise: that virtual worlds are cultural spaces that generate law. Lastowka's insights reach beyond the technology to produce a narrative about the common law itself. Technology cases, he notes, are by definition common law cases, because they present novel questions, often fall outside statutes, and invite reasoning by analogy. Thus, development of law online tracks the path of the common law elsewhere. Communities generate norms, which are adopted by judges, and finally codified by

legislatures. Lastowka's book offers a compelling and foundational narrative of how law is currently being formed at the very edge of cyberspace.

The End of the (Virtual) World, 112 WEST VIRGINIA LAW REVIEW 53 (2009) (*Digital Entrepreneurship* symposium contribution).

Top 10 SSRN Commercial Law Download; Top 10 SSRN Bankruptcy Law Download. This article attempts to take the lessons learned in the early-millennium dot-com bubble burst and apply them to the shakedown currently underway in virtual worlds. Specifically, the article argues that during the dot-com burst, creditors learned ways to get money out of intangible assets, because thinly-capitalized dot-coms had no other assets of value. The article extends this trend to virtual worlds. Assets in virtual worlds are often treated by the markets as personal property – for example, digital objects are bought and sold for real dollars. Therefore, such assets can in some cases be used as the basis for secured lending, and can form the basis for a creditor recovery in bankruptcy.

Virtual Parentalism, 66 WASHINGTON & LEE LAW REVIEW 1215 (2009) (*Protecting Virtual Playgrounds* symposium contribution).

Cited by Federal Trade Commission Report: VIRTUAL WORLDS AND KIDS: MAPPING THE RISKS**.** Parents, not laws, ultimately protect children both online and offline. If legislation places adult virtual world users at legal risk due to the risk of being overheard by children in virtual worlds, adults will exit those worlds, and children will be isolated into separate spaces. This will not improve safety for children. Instead, this article suggests that Congress enact measures that encourage filtering technology and parental tools that will both protect children in virtual worlds, and protect free speech online.

The Cost of Consent: Optimal Standardization in the Law of Contract, 58 EMORY LAW JOURNAL 1401 (2009).

This article argues that informed consent to contract terms is not a good to be maximized, but is rather an information cost that courts should minimize. Contract law therefore ought to minimize the cost-sum of information costs and contractual surprise. The article applies information cost theory to show that information-forcing rules are often inefficient at both the micro- and macroeconomic levels. Such rules also impose greater costs on third parties than the benefits they create for the contracting parties. When one consumer creates an idiosyncratic deal, the information-savings benefits of standardization are reduced for all other potential consumers. The article demonstrates that in some cases courts are already abandoning a rigid view of contractual consent where consent is too costly; but that under other doctrines courts insist on an inefficient level of informed contractual consent.

The God Paradox, 89 BOSTON UNIVERSITY LAW REVIEW 1017 (2009).

Virtual worlds combine social networking technologies with state-of-the-art game graphics. The result is a three-dimensional social software interface: the internet in

three dimensions. The companies that run virtual worlds—self-proclaimed "game gods"— exercise significant power over the environments that they create and the people who use them. Game gods believe that they must retain ownership of and control over every aspect of their creations because they fear liability. But their attempts will backfire.

This is the "God Paradox": the more control a game god keeps in order to avoid liability, the more responsibility it will bear. The article details the current types of control currently exercised by game gods; how that control can and will increase the risk of liability; and finally proposes several practicable solutions to the problem.

The Magic Circle, 11 VANDERBILT JOURNAL OF ENTERTAINMENT & TECHNOLOGY LAW 823 (2009) (symposium contribution).

This article examines the concept of the "magic circle," the metaphorical barrier that supposedly excludes real-world law from virtual worlds. The author argues that this metaphor fails because there is no "real" world as distinguished from "virtual" worlds. Instead of a magic circle, this article advocates a rule of consent: actions in a virtual world give rise to legal liability if they exceed the scope of consent given by other players within the game. The article concludes that although real-world law cannot reasonably be excluded from virtual worlds, game-gods and players can control the interface between law and virtual worlds through their agreements, customs, and practices.

Escape Into the Panopticon: Virtual Worlds and the Surveillance Society, 118 YALE LAW JOURNAL POCKET PART 131 (2009).

The irony of virtual worlds is that populations seeking to build new lives away from the public eye are moving into virtual worlds that are subject to constant surveillance. Virtual worlds follow the model of Jeremy Bentham's Panopticon Prison: all of the inhabitants of a virtual world can be monitored by the game god. Virtual worlds are gigantic cameras, and the recordings can be handed over to police or the intelligence community. This short essay encourages government to protect personal privacy in virtual worlds by taking constitutional restraints on surveillance seriously.

Anti-Social Contracts: The Contractual Governance of Virtual Worlds, 53 MCGILL LAW JOURNAL 427 (2008).

Top 10 *SSRN Law & Society Download; Top 10 Private Law Download; Top Ten Public Law & Legal Theory Download; Top 10 Law School Research Papers—Legal Studies.* By 2011, researchers predict that a majority of internet users will work or play in virtual worlds. World of Warcraft and Second Life have seized the imagination of millions. These and many other online communities are ruled nearly exclusively by contract law: End User License Agreements, Terms of Service, or Codes of Conduct. But all is not well. Contracts are private law. Communities need public law. Contracts are a critical means of helping two (or a few) people negotiate their preferences. But online communities are made up of enormous and shifting populations that have no time or ability to negotiate agreements with every other

community member. Thus, although contracts are important, the use of contracts – alone – to govern communities of millions of people threatens investment in online communities, as well as their creative output. The article further demonstrates that contracts cannot, by their very nature, provide for every legal need of large and shifting online communities. The article finally shows how courts can use basic common law principles to provide online communities with the private property, dignitary and personal protections, and freedom of speech that communities need to thrive.

The Search Interest in Contract, 92 IOWA LAW REVIEW 1237 (2007).

Parties often do not negotiate for contract terms. Instead, parties search for the products, terms, and contractual counterparties they desire. The traditional negotiation centered view of contract continues to lead courts to try to construe the meaning of the parties where no meaning was negotiated, and to waste time determining the benefits of bargains that were never struck. Further, while courts have ample tools to validate specifically negotiated contract terms, courts lack the tools to respond to searched-for terms. Although the law and literature have long recognized that there is a disconnect between the legal fictions of negotiation and the reality of contracting practice, no theory has emerged to replace fictional negotiation. Therefore, this article develops a new search-oriented theory of contract, and shows that search theory can explain contracting behavior where the fictions of negotiation fail. The article then applies this theory to the common law of contract, the Uniform Commercial Code, and the growing world of internet searches and electronic contracting.

Virtual Property, 85 BOSTON UNIVERSITY LAW REVIEW 1047 (2005).

Top 10 *SSRN Overall Quarterly Download.* The article explores three new concepts in property law. First, the article defines an emergent property form – virtual property – that is not intellectual property, but would more efficiently govern rivalrous, persistent, and interconnected online resources. Second, the article demonstrates that the threat to high-value uses of internet resources is not the traditional tragedy of the commons that results in overuse. Rather, the naturally layered nature of the internet leads to overlapping rights of exclusion that cause *under*use of internet resources: a tragedy of the anticommons. And finally, the article shows that property law should act to limit the costs of an internet anticommons.

Cracks in the Foundation: The New Internet Regulation's Hidden Threat to Privacy and Commerce, 36 ARIZONA STATE LAW JOURNAL 1193 (2004).

Scholarship to date has focused on the legal significance of the novelty of the internet. This scholarship does not describe or predict actual internet legislation. Instead of asking whether the internet is so new as to merit new law, legislators and academics should re-evaluate the role of government in orchestrating collective action, and change the relative weight of enforcement, deterrence, and incentives in internet regulations. A perfect example of the need for this new approach is the recent CAN-SPAM Act of 2003, which was intended to protect personal privacy and

legitimate businesses. However, the statute threatens both of these interests, because it does not recognize either the limits of enforceability, or the enhanced possibilities for incentives offered by the decentralized architecture of the internet.

To Err is Human: The Judicial Conundrum of Curing Apprendi Error, 55 BAYLOR LAW REVIEW 891 (2003).

Cited in Wyoming Supreme Court opinion Brown v. State, *99 P.3d 489, 494 (Wyo. 2004).* Under new Supreme Court precedent, courts of appeals may disregard a trial court's failure to submit an essential element of a crime to the jury if the evidence establishing that point is "uncontroverted" and "overwhelming." Unfortunately, courts are using this standard primarily to affirm conceded error without examining whether the evidence is truly uncontroverted or overwhelming. A proper application of the standard would lead to a different result in certain cases.

ERISA Preemption and the Case for a Federal Common Law of Agency Governing Employer-Administrators, Comment, 68 UNIVERSITY OF CHICAGO LAW REVIEW 223 (2001).

When employers act as plan administrators on behalf of insurers, state laws often deem them agents of the insurers. Preempting these state laws creates a void where employees who have paid their premiums are left without health insurance if the employer fails to pass the premiums on to the insurer. Precedent and legislative history establish that federal courts have the authority to develop a federal common law under ERISA under precisely these conditions. Federal courts should exercise this authority to hold that employers who act as administrators are the agents of the insurers, not the insured.

SELECTED PRESENTATIONS

- *Privacy as a Public Good*, Telecommunications Policy Research Conference, Washington DC (2014)

- *Bitcoin in Regulatory Context*, Conference of State Bank Supervisors Annual Meeting, San Diego (2014)

- *BitProperty*, Neo-Technological Theories of Property, Southeastern Association of Law Schools (SEALS), Amelia Island, Florida (2014)

- *The Full-Take Fourth Amendment,* PATRIOT Games & Whistleblowers? NSA Cybersurveillance, WikiLeaks, & The National Security State, Southeastern Association of Law Schools (SEALS), Amelia Island, Florida (2014)

- *Bitcoin and Consumer Protection*, Virtual and Digital Currency and Payment Systems, American Conference Institute, Chicago (2014)

- *Bitcoin and Consumer Protection,* Digital Asset Transfer Authority (DATA) Annual Meeting, International Monetary Fund, Washington, D.C. (2014)

- *Privacy as a Public Good* , Fourth Internet Law Work-in-Progress Symposium, New York Law School, New York City (2014)

- *Mixed Reality Reloaded*, Fulbright Visiting Lecture, Ionian University, Corfu, Greece (2013)

- *Little Brother: An Experiment on Social Networks*, Max Planck Institute, Bonn, Germany (2013)

- "*Do Not Track as Default: Transaction Costs in U.S. Consumer Privacy*", Privacy from Birth to Death and Beyond Conference, University of Galway, Ireland (2013)

- *Virtual Gravity: The Path and Velocity of Virtual Property*, Stanford University – Peking University Internet Law and Public Policy Conference, Menlo Park (2013)

- *"Big Real Problems: Growing Challenges in Human Subjects Research in Virtual Worlds,"* featured panel presentation, Second Annual International Symposium on Digital Ethics, Chicago (2012)

- *"Big Brother is Watching Because Little Brother Has Opened the Door,"* featured workshop presentation, Max Planck Institute for Research on Collective Goods, Bonn, Germany (2012)

- *"Avatar Experimentation Evolved: Emerging Ethical Issues in the Study of Virtual Worlds,"* Panel Presentation, White House Office of Science and Technology Policy, Washington D.C. (2012)

- "*Panopticon Plus: Privacy and Modern Surveillance,"* Panel Presentation, Department of Homeland Security Privacy Office, Washington D.C. (2012)

- "*Gamer Privacy After Sony,"* Featured Presentation, Privacy Coalition, Electronic Privacy Information Center (EPIC) (2011)

- *EMA v. Brown: Violence, Videogames, and the First Amendment,* Panel Discussion, ACS, Washington & Lee School of Law (2011)

- "*Virtually Social: Virtual Worlds, Social Networks, and the New System,*" Panel Presentation, Telecommunications Policy Research Conference (2011)

- *"Avatar Experimentation: Human Subjects Research in Virtual Worlds,"* Panel Presentation, Ethical Inquiry through Video Game Play and Design Conference, DePauw University (2011)

- *"Virtually Social: Virtual Worlds, Social Networks, and the New System,"* Panel Presentation, Governance of Social Media Conference (2011)

- *"Avatar Experimentation: Human Subjects Research in Virtual Worlds,"* Protecting Online Privacy: First-Level and Second-Level Privacy Issues Panel, SEALS Annual Conference (2011)

- *"Avatar Experimentation: Human Subjects Research in Virtual Worlds"* Presentation at the University of California, School of Law, Irvine, *Governing the Magic Circle: Regulation of Virtual Worlds* Irvine, California (2011)

- *"Privacy in Governmental Development Contracts,"* Panel Discussion, Games & Business Conference (2011)

- *Mobile Mayhem: Designing an E-Commerce Regime to Regulate Dangerous Behavior in Mobile Markets*, presentation to representatives of the Federal Trade Commission, the World Bank, and member representatives of the African Dialogue on Consumer Protection, Tanzania (2010)

- *"Escape Into the Panopticon: Virtual Worlds and the Surveillance Society,"* Presentation for Lebanon Valley College, *Wired Colloquium*, Lebanon, Pennsylvania (2009)

- *"Anti-Social Contracts,"* Virtual World Seminar Series, National University of Singapore, Singapore (2009)

- *"Efficient Breach in Supply Chains,"* Southeastern Association of Law Schools panel on Disgorgement and Efficient Breach (2009)

- Contributing Author, OFFICE OF DIRECTOR OF NATIONAL INTELLIGENCE Summer Hard Problem, *"Mixed Reality: When Virtual Plus Real Equals One."* Prepared analytic product for use by the intelligence community (2009)

- *"The End of the (Virtual) World, or What the End of Worlds Can Tell Us About Their Beginnings*," presented for the West Virginia Law Review *Digital Entrepreneurship* Symposium, Morgantown (2009)

- *"The Magic Circle,"* presented for the Vanderbilt Intellectual Property Roundtable, Nashville (2008)

- *"Order Without Law(yers): Law and Norms in Virtual Worlds*, presented for Washington & Lee Law Review *Protecting Virtual Playgrounds: Children, Law, and Play Online* Symposium, Lexington, Virginia (2008)

- Contributing Author, OFFICE OF DIRECTOR OF NATIONAL INTELLIGENCE Summer Hard Problem Program, *"3D Cyber Space Spillover: Where Virtual Worlds Get Real*." Prepared analytic product for use by the intelligence community (2008)

- *"The God Paradox,"* presented for the Hans-Bredow-Institut and Freidrich-Ebert-Stiftung (Foundation) at Virtual Worlds and Law conference, Berlin (2008)

- *"End User License Agreements: Pitfalls and Best Practices,"* panel presentation, VirtualWorlds08 Conference, New York (2008)

- "*The God Paradox,*" presented at virtual worlds roundtable, Arizona State University (2008)

- "*Anti-Social Contracts: The Contractual Governance of Virtual Worlds,*" Communications Law Section Panel, American Association of Law Schools (2008)

- "*Virtually Hidden: Illicit Activities in Virtual Worlds,*" "Veni, Vidi, Vegas: Enclosed Influence Environments and Mobile Entertainment and Gaming," sponsored by Department of Defense / Central Intelligence Agency, Las Vegas (2007)

- "*The Magic Circle Reborn,*" Canadian I-Tech Law Society, Vancouver (2007)

- *"Anti-Social Contracts in Virtual Worlds,"* Cornell / Metanomics Presentation in Second Life (2007)

- *"Anti-Social Contracts,"* Digital Governance Panel, State of Play V, Singapore (2007)

- *"Anti-Social Contracts,"* Big 10 UnTENured Conference (2007)

- Virtual Tax Panel, SEALS Annual Conference (2007)

- *"The Magic Circle,"* Chicago I-Techlaw Society (2007)

- "*Virtual Worlds and Digital Governance,"* Digital Government Society Annual Meeting (2007)

- "*Social Contracts,"* Law and Virtual Worlds Panel, State of Play: Terra Nova (2006)

- "*The Search Interest in Contract,"* Big 10 UnTENured Conference (2006)

- "*The Search Interest in Contract,"* Midwest Law and Economics Association Annual Meeting (2006)

- "*Virtual Property, Electronic Contract,"* American Association for the Advancement of Science, Annual Meeting (2006)

- *"The Search Interest in Contract,"* University of Illinois Faculty Workshop (2006)

- *"Expanded Rationality,"* Games & Learning Conference (2006)

- *"Virtual Worlds as Academic Research Testbeds,"* Keynote Speaker, EDUCAUSE EDUCAR (2005)

- State of Play II Conference, *"Digital Property,"* co-chair, New York (2005)

- *"What is Real in a Virtual World?"* Algotek Department of Defense Colloquium (2005)
