Law, Innovation, and Society Conference
Abstracts

13 July 2018, Friday

Venue: The Mooting Room, Newcastle Law School

KEYNOTE

Implementation, Compliance and Planning: New Topics for a New Approach to Legal Scholarship

Prof Edward Rubin, Vanderbilt University, Vanderbilt Law School

I have argued, in previous work, that the advent of the administrative state has transformed the concept of law (Beyond Camelot, 20005). This transformation has been so profound and far-reaching that using the same term to describe the pre-administration and administrative systems may be misleading. If we refer to the rules backed by that government authority in the pre-administrative era as law, then we need to think of the rules backed by such authority at present in other terms. Obviously, the word "law" will not be eradicated from either ordinary language or scholarly discourse, but we should be aware that it exemplifies the common practice of adapting a familiar term for different purposes, just as the word "element" now refers to hydrogen, oxygen, sodium and beryllium, not to earth, water, air and fire.

In the centralizing monarchies of the Western World that preceded the modern, administrative era, law was seen as a set of rules governing individual conduct. Its purpose, like the purpose of domestic governance in general, was

to maintain social order within the boundaries to which the authority of the government extended. The rules that constituted the law were regarded as being derived from a coherent normative system, embodying basic principles of mandatory and desirable human behavior. A good jurisprudential account of this system is provided by H.L.A. Hart in *The Concept of Law*; it was written well into the administrative era, but like most jurisprudential accounts, it describes the previous system, not the current one. At present, and roughly since the end of the Eighteenth Century in Western Europe, law functions as a means of implementing government policy through general rules. It is no longer primarily customary or (as in pre-modern England) primarily declared by judges. It is positive law, the embodiment of conscious social policy. To be sure, its purposes include the maintenance of social order, and in that arena it continues to resemble the pre-administrative system. But they also include other basic functions, most notably the provision of benefits and services (welfare, disability, social security, medical), the creation of public institutions (schools, parks, hospitals, etc.), and the active management of the economy and the environment. These additional tasks reflect the essential transformation of society that resulted from the industrialization, urbanization and commercialization, and the insistent need for government to fulfill basic functions previously carried out by landlords, churches and other traditional structures. In response to popular demands in democratic regimes (and analogous pressures in dictatorial ones), the government now designs policies in each area, and uses general rules – which we describe as law --- as one means of implementing those policies. Thus, law is no longer derived from a coherent normative system, but rather serves specific policy purposes; its regularities, to the extent that they exist at all, are methodological rather than substantive.

To understand and analyze this new system of law, we need a new jurisprudence. Previously, the legal system could be analyzed by discerning its underlying principles. Specific legal decisions, whether legislative or adjudicatory, could be approved or criticized in terms of doctrine, that is, the decisions' comportment with those principles. Most scholarship continues to adopt that perspective, and American legal education continues to use it as the basis of instruction. As a result, both scholarship and pedagogy tends to be litigation-oriented, focusing on the way disputes are resolved in accordance with legal principles. The transformation of law in the administrative state,

however, suggests a different set of questions and a different mode of analysis. What we need to know is the way law works as a means of implementation: under what circumstances should policy be implemented by general rules; which types of rules produce the highest levels of compliance; which types of rules result in the fewest undesirable side effects; how should other government institutions assist, monitor or assess the effects of legal rules. This can be seen as a shift from doctrinal to empirical analysis, a process that is beginning to occur. It is crucial to recognize, however, that this shift is not merely a matter of academic fashion, or the result of differences in the way legal researchers are trained, but rather a reflection of the different character of law itself in the modern administrative state.

There is a further change in legal scholarship that the transformation of law in the administrative state suggests, a change that should also be reflected in the approach to legal education. This is a recognition and analysis of the role of the modern lawyer as planner. The emphasis on litigation that results from the pre-modern concept of law has obscured the fact that this was an important role for lawyers well before the advent of the administrative state. Transactional lawyers are planners; a contract, after all, is a type of private legislation governing the future course of action between the parties. It is a striking indication of the dispute and doctrine orientation of the legal academy that there is little research about this basic function, and that most law students study contracts by reading judicial decisions regarding contract disputes, and never draft, mock-negotiate or even read a single contract. The advent of the administrative state turns this lacuna into a gaping void. Because modern law can be understood as a means of implementing public policy, planning has moved to the forefront of the legal function. Positive law, the defining feature of an administrative legal system, is itself a plan. The administrative agencies that implement this law must interpret the statute and develop a plan to carry out their responsibilities. Lawyers for private companies, in addition to the significant roles they play in legislative and regulation drafting processes, must design a strategy for complying with the agency's requirements while avoiding negative impacts on their client's or employer's business. Their contractual planning, although a continuation of similar activities in the pre-modern era, has become substantially more complex as well with the elaboration and internationalization of commercial

practices -- developments that, after all, provided some of the initial motivation for administrative government.

How do we describe law as planning, or “planful” activity? What roles do law-trained people play in various planning functions? What norms should be imposed on the functions and on the lawyers. What is the general theory of legal planning? How does that relate to legal activity in other areas, and how does it affect our theories of law in general? These are questions that are eminently worth exploring.

SESSION I

Beyond Regulation: Commodity Derivatives and Contractual Innovation

Dr Anna Chadwick

University of Glasgow, School of Law

Speculation in commodity derivative markets has been linked to the causation of the 2007-11 global food crisis. Derivatives have also been implicated in the causation of the global financial crisis. Overwhelmingly, legal scholarship on derivatives is concerned with how best to regulate their use. What is missing in this scholarship is an account of how the norms of contract law have been altered, extended, and even distorted to create a new generation of financial assets linked to food prices. In this presentation I explore the significance of contractual innovation in the development of commodity derivatives markets. More broadly, I reflect on the tension between the 'regulatory' and 'constitutive' dimensions of the law to underline the need for the development of innovative legal solutions that go beyond traditional regulatory models to address complex social problems.

Regulating Intelligence: The Challenge of Consciousness and Competence in New Forms of Life

Dr Sarah Morley & Dr David Lawrence
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One forthcoming challenge for regulation is the potential emergence of new types of being, both sapient and not, through advances in germline gene editing, synthetic genome technologies and the development of artificial intelligences (AI). It seems likely that these technologies will be the product of public companies and in particular multinational corporations. The main source of regulation for these bodies at present derives from company law, which is ill-equipped to handle the particular issues raised by these technologies. It may be that answers can be found in existing medical regulations; including whether the beings they might produce should be accorded legal personality.

Firstly, the granting of electronic personhood as they propose does not go far enough- corporate persons as they presently exist are a creation of commercial convenience and in no way possess any kind of 'human' or moral qualities. In certain circumstances and with particular technologies this may be an appropriate approach, however emerging bio- and cyber- technologies may occasion rights more akin to those of natural persons.

Secondly, regulators have reacted in a piecemeal fashion. It is imperative to first identify categories of morally significant products that would be subject to regulation and to what extent positive or negative rights might apply. We must therefore develop legal boundaries that might be used to determine between these products – a distinction which the authors term conscious and non-conscious beings.

This too may be overly simplistic a division. Not only are there degrees within consciousness of both sentience and sapience, there is the important point that consciousness does not equal competence (Gillick v West Norfolk). The technologies in question may have similar cognitive capacity to a human, but much in the way that children are not seen as competent to give consent to medical procedures it does not follow that a conscious synthetic being would be cognitively equal to an adult. Moreover, as with children, the technology in question may 'mature' and gain in sapience as it ages. Incorporating subtleties such as this into the development of definitions will help us assess the extent to which a given technology should be liable under or protected by the law.

The paper will highlight the difficulties in this interplay between consciousness, responsibility, and liability, and attempt to provide a basis for developing workable legal definitions that may be applicable in many fields of law: including medical, company, human rights, employment, criminal and tort, amongst others. This goes far beyond the existing regulatory proposals and academic literature in seeking to move the focus from reacting to piecemeal issues (albeit important, such as negligence and automated cars) onto a more holistic and broad approach. Thus we ensure our readiness to keep pace with technologies that develop ever faster.

SESSION II

‘Emerging Biotechnologies, Morality and Overlapping Supra-national frameworks in the ‘European Patent System’: Too many cooks?’

Dr Aisling McMahon, Durham University, Durham Law School

This year marks the 20th anniversary of the Biotechnology Directive which proved highly controversial primarily due to the ethical issues surrounding patents and biotechnology. In this context, this paper focuses on the development of the morality provisions under Article 6 of the Directive. The general morality provision states that patents shall not be granted to inventions whose commercial exploitation is against morality/ordre public. Whilst Article 6(2) introduced four specific exclusions from patentability, namely, for processes related to human cloning, modification of the germ line, uses of embryos for industrial and commercial purposes, and processes for modifying the genetic identity of animals causing suffering without substantial benefit.

The paper focuses on how these provisions have kept pace with scientific development, looking specifically at cases involving human embryonic stem cells, parthenotes (embryos stimulated to replicate development of embryos), and gene editing. Emerging technologies give rise to complex interpretative questions for the judicial/quasi-judicial of the European Patent Organisation (EPOrg) the EU called upon to interpret the morality provisions. The EPOrg’s role here stems from the fact that the Directive is supplementary interpretation for the European Patent Convention.

The paper is particularly interested in the overlapping roles of the Court of Justice of the EU (CJEU) and Boards of the EPOrg, and the extent to which these interpretative bodies apply the morality provisions to address broader ethical concerns set out in the Directive, e.g. relating to fundamental rights, dignity etc. Using institutional theories, the paper argues that the Boards of the EPOrg and CJEU are predisposed to give institutionally-tailored interpretations of the morality provisions which aligns with the respective purposes/final causes, competences and characteristics of the institutions within which the decision-making bodies are situated. Accordingly, they may be speaking past each other when called upon to interpret the morality provisions.

Gene editing: Issues, Options and Challenges in Governing Contested Biotechnologies

Dr Michael Morrison

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'Genome editing' describes a novel scientific technique for modifying the DNA inside a living cell. There are a number of molecular 'tools' which can be used to carry out genome editing. Some, like the 'zinc finger' proteins have been available for over a decade, but it is the more recent development of CRISPR-Cas9 genome editing systems which has made genome editing a major topic of discussion for scientists, media commentators, and policymakers alike. Like recombinant DNA before it, CRISPR and the other genome editing tools are 'platform' technologies; they allow scientists to manipulate elements common to all living organisms, and therefore open up diverse experimental possibilities. Potential areas of application include human health, fertility and reproduction, animal breeding, agriculture and aquaculture, environmental and industrial biotechnology, and food production among other areas. Many of these uses promise improved health, economic growth and productivity, and a better environment. They also evoke fears of potential physical, environmental, social and moral harms. In the face of such socio-technical contestation, regulation is often called for to mitigate the harms while allowing the benefits to be realised. In order to explicate the challenges of responsible regulation of gene editing technologies, I will situate CRISPR in the wider context of biotechnology research, offer an explanation as to why biotechnologies inherently provoke public concern, and elaborate on the different kinds of harms that regulation is expected to address. The final section of the talk will discuss potential approaches to governance of gene editing and present their advantages and limitations. It is intended that this will serve as a point of departure for further discussion with the symposium audience.

SESSION III

A Public health doctor's perspective on the importance of working with legal experts

Prof Allyson Pollock

Institute of Health and Society, Newcastle University

Abstract : N/A

Bioethical Utopias: What the Future of Medicine Says About Our Present

Richard Ashcroft
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Abstract

At a time when politics are uncertain many people are choosing to focus their dreams and aspirations on their bodily and mental health. We may not be able to have better societies; but we can certainly have better bodies. Medicine and biotechnology take up these aspirations and project them into the future, with ideas of human enhancement and "the posthuman". In this way society will achieve Utopia, one body at a time. But what kind of Utopia? To whose benefit?

In this paper I draw on work on "socio-technical imaginaries" in the Science, Technology and Society literature, on the philosophical work of Ernst Bloch on utopia and the utopian imagination, and on recent work by John Harrington on the rhetoric of utopia in medical law. I argue that bioethics, and the normative aspects of healthcare law, can be understood as utopian discourses, in their orientation towards the future, in their mobilisation of emotions of hope and fear in respect of the future. I argue that bioethics and health law can also be understood as utopian practices, in the ways in which they attempt to practice an "unpolitical politics" of consensus and common values. I will explore this form of the twenty first century imagination, which cuts across science, medicine, and technology. It may not tell us much about the future - but it tells us a lot about the present. We can read bioethics and health law "diagnostically" and critically as commentaries on the way we live now, as much as normative discourses projecting images of the ways we might want to live otherwise.