

Abstracts

Thursday 11th April

Internet Cultures & Governance – LT1

A.Karanasiou

Occupy Cyberspace: DDoS as a Form of Protest

On 7th January 2013 the Anonymous hacking collective launched a White House petition asking the Obama administration to recognise DDoS attacks as a valid form of protest, similar to the Occupy protests. The recent hype of the ‘Occupy’ movement around the globe against financial inequality has stirred up the debate on the legal responses to acts of civil disobedience. At the same time, online attacks in the form of DDoS seem to be following a similar pattern, described as ‘a digital sit-in ... no different that physically occupying a space’. While the law generally acknowledges a certain level of protection for protesting as a manifestation of the rights to free speech and free assembly, it is still unclear whether DDoS attacks, a proscribed act in many jurisdictions, could qualify as free speech.

This paper examines the analogies between offline protesting and DDoS attacks, discusses legal responses in both cases and seeks to explore the scope for online free speech protection. For this purpose, the issue is approached from three different vantage points: a technical, philosophical and legal inquiry into DDoS attacks sets out the structure of this paper accordingly. First the link between DDoS and civil disobedience is sought to be established; regarded in isolation this may be of little significance to a legal evaluation of DDoS as civil disobedience itself embraces the idea of transgressing the law. This explains the additional evaluation of DDoS on the merits of their promotion of free speech. Ultimately this paper strives to further provide criteria for the legal definition and understanding of DDoS and inform the relevant literature.

N. van der Meulen and L. van der Holst

Freedom of Speech as a Legal Defence on the Internet: The Devaluation of a Fundamental Right?

The introduction of the Internet has changed how people experience their right to freedom of speech. This paper aims to reveal how the Internet, while commonly perceived as a tool to enhance freedom of speech, can simultaneously be its enemy. This occurs when users improperly invoke freedom of speech as a legal defence. We argue how such improper invocation leads to a devaluation of a fundamental right. Freedom of speech has, after a long historical struggle, become one of the most important cornerstones of our democratic society. It is in the first place an instrument with which the fragile individual can criticise the mighty government. Its ‘sidekick’ freedom to information relies on the same principle: the preservation of the individual – whether it is in relation to the government or in relation to the rest of the world. The arrival and integration of the internet, however, has altered this experience as users seem to perceive freedom of speech as an all-encompassing right, instead of a specific tool for the higher good of self-preservation. As a result, people invoke freedom of speech as a defence against nearly any restriction on the Internet. Familiar examples include restrictions on digital piracy and objections raised against the recently proposed right to be forgotten. But how suitable is freedom of speech as a defence in these situations?

The appropriateness of these defences deserves a closer look. We aim to set forth the argument that freedom of speech is subject to devaluation. If more and more restrictions on the Internet are accepted as breaches of freedom of speech, this right risks becoming a *passé-partout* and as a result it is in danger of devaluation. To develop this argument, we commence our paper with a historical description of the evolution of the right, including its philosophical roots and original intent. We return to the original meaning of freedom of speech to

identify its core elements to explore what this right is actually meant to protect. After having placed these core elements in a contemporary context, we investigate whether they are actually reflected in, amongst others, cases of digital piracy and the objections raised against the right to be forgotten, where the freedom of speech defence has been used. The approach compares the American and the European perspective with respect to the interpretation of the concept of freedom of speech, both historically and contemporary. As the geographical starting point for the development of the concept of freedom of speech, this comparison moreover serves to show that one concept, derived from the same principles, can be used differently. At the same time, they contain similar core elements and therefore, the comparison of these traditions is a trustworthy test to determine the devaluation of freedom of speech on the Internet.

S. Basu and C. Munna

Post NHS Information Revolution: Reverse Engineering the Missing Logic from 'Privacy' to 'Control'

This paper re-examines the concept that patient control of personal health data could replace the concept of privacy with progression of the 'Information Revolution.' It particularly examines how the necessary and important balance between 'individual privacy' and 'collective transparency' for society could be achieved in the light of recent government and EU initiatives such as the DH Information Strategy, the Government ICT Strategy, the (Caldicott) IG Review, the NHS Constitution and the proposed Data Protection Directive. It critically analyses whether the necessary reversal of respective roles of the NHS and the individual around the mindset, information and innovation - can be implemented within the emerging framework .

It asserts that by piecing the different initiatives together an ideal springboard for the replacement of individualised concepts of privacy with control emerges. However, disappointingly, this is still incidental. Individual 'control' of information has still not yet been acknowledged as a way to eradicate the individualistic concepts of privacy which hamper the real 'choice' promised in the Information Revolution. The paper therefore reverse engineers the missing logic which connects all of the recent initiatives to make the starting point of the Information Revolution the choice of control over information. It traces this through to a mindset where 'privacy' is accepted as a social concept to illustrate how 'individual privacy' and 'collective transparency' can co-exist as complementary concepts.

L. Siry

From Robin Hood's Soap Box: Review of the New DPP recommendations on Social Media Speech Prosecution

In a world where the use of social media has become more and more prevalent, forums such as Facebook and Twitter, are no longer recreational, but represent the cyber soapbox where ideas, no matter how seemingly trivial, are shared, debated, tweeted and re-tweeted. Politicians, prime ministers and presidents have Facebook pages. Jihadist tweet their demands, while Courts and even Parliament allow for real time tweeting of proceedings. This explosion of speech has led to abuse and regulation.

On December 2012, the DPP announced Interim guidelines on prosecuting cases involving communications sent via social media. Following a dramatic increase in prosecutions of social speech- from the racist tweets of footballers and fans to inopportune jokes at airports, prosecutions have become more prevalent and more controversial.

The new guidelines are an attempt to "give clear advice to prosecutors who have been asked either for a charging decision or for early advice to the police, as well as in reviewing those cases which have been charged by the police." Under the guidelines speech is divided into categories, and prioritized for the prosecution decision making process.

This paper will review the new guidelines to determine whether they offer any real difference, or protection to social media users, or society as a whole. The paper will ask the question: When should a state intervene into social speech? Are we freer or do they chill speech which would otherwise be protected?

Technologies, Innovation & Justice – LT3

J. Griffin

Copyright Reform

With the kind funding of BILETA, I have been undertaking interviews looking in to possible reforms of copyright law. Specifically, I have been looking at the views of right holders within the music and book publishing industries. The results thus far have been a combination of the entirely expectable and the completely unexpected!

The existing copyright regime is based on notions of property. Given changes in the technology of distribution, a major contemporary debate is whether ‘property’ is the most appropriate concept to use in the legal protection of copyright works. Alternative concepts have been suggested by inter alia C Anderson, for instance, cross subsidisation. This project will extend this further by exploring the opinions and suggestions for reform of people who are actively involved with copyright works as right holders. The study assesses whether granting a “property right” is something which a copyright owner requires. This empirical research will then be used to inform proposals for future reform.

Hitherto these questions of the relevance of the property concept have primarily been addressed theoretically. However, an empirical approach has the potential to introduce new ideas. The research comprises of two key research questions that enable assessment of whether various copyright holders:

- a) Desire property rights in copyright, and
- b) Whether they would like any reforms to take place to the notion of property within copyright, and if so, what those changes would be.

This research raises issues as to whether the concept of “property” as used in within copyright law is one that is appropriate in light of potential alternate economic models, such as non-monetary markets.

M. Jankowska

Ghostwriting - playing games with copyrights

Ghostwriting is a phenomenon defined as an act of creating a work for a client that is then publicly distributed not under the name of the actual author, but that of the client. It could be said that ghostwriting is as old as time, and it certainly existed back in ancient Rome. Back then, the owner of a manuscript would sell it for a specific price, though we have to understand that this situation was judged differently in the past, rather than by today’s standards. At a time there was no notion of intangible property and no concept of personal rights, there was a different approach to ties between the author and the work.

In fact, hundreds of years had to pass so that, at the time of the historic transformations of the 18th Century, the romantic concept of authorship could develop. And even though the law presently protects a much broader catalogue of work than the romantic concept of authorship would permit, this serves to illustrate the ratio legis behind making moral rights non-transferrable and irrevocable.

Over the centuries, authors have demonstrated their ties with their work by explicit manifestation. There is a well-known anecdote about Michelangelo who, upon finding out that his sculpture for the chapel at St. Peter’s Basilica had been attributed to his patron, sneaked up to the Basilica one night to secretly carve his name on the palm of the left hand of the Pieta. In its essence, the idea of ghostwriting resembles the relationship between an

artist and a patron from the Renaissance, though it seems that the Renaissance author suffered more from authorship being attributed to a different person than, in many instances, a contemporary author would. As Carroll notes, “Many Renaissance composers, in their dedications to their respective patrons, refer to their compositions as their “children” being sent alone into the world, and implore the patron to protect their work.”

In the theory of law, it is written that the law can only operate when it complies with commonly-approved moral and social norms. In fact, ghostwriting escapes this rule and, because of its practical significance, effectively casts a shadow over the principle of the non-transferability of the right to authorship. It is enough to notice its omnipresence using the example of the sister ghostwriting institutions, such as ghostcomposing or ghostpainting, the meaning of which needs no explanation. However, the existence of these concepts makes it evidently clear that this practice occurs in all areas of artistic work. Even a lawyer practicing copyright law must ask themselves on occasion, “if one party wants to sell and the other party needs to buy, what is the problem?” Well, the problem is much larger than it may at first seem, and lies in a completely different dimension to that we are inclined to look at.

The doubts concerning ghostwriting arose only at the beginning of the XX century, when the regulations concerning moral rights became an obstacle in such practice. Article 6 bis of the Berne Convention introducing the conventional protection of the author’s moral rights was accepted during the Conference in Rome in 1928. The final shape of this regulation went through a long way, but does not yet introduce neither inalienability nor non-waiverability of this moral right. That is why Adolf Dietz described article 6 ter of the Berne Convention as “minimalist approach”. However, as J.C. Ginsburg and S. Ricketson notice, the transferability of moral rights is contrary to the nature of these rights themselves.

With this legal and social context in mind, the speaker will try to find a legal explanation for the practice of ghostwriting. To this aim, she will introduce and explain the approaches taken in countries such as: Poland, France, Switzerland, Germany, Holland, Belgium, Greece, Sweden, the UK, the US, Australia, Canada and China, and will present her remarks.

N. Jondet

Disconnecting the Hadopi and the French graduated response?

The graduated response scheme, introduced in France in 2009, is a bold but controversial attempt to solve the problem of digital piracy. It is so controversial in fact, that it is currently under review and might be dramatically modified by the end of this year.

Under the graduated response scheme, suspected copyright infringers receive warnings urging them to stop their illegal activities. If they remain undeterred after three warnings, they can face prosecution before a criminal court where, if found guilty, they can be fined and disconnected from the internet. The warning phase of the graduated response is administered by a dedicated independent administrative authority, the “High Authority for the dissemination of works and the protection of rights on the internet” (in French: “Haute Autorité pour la Diffusion des Oeuvres et la Protection des droits sur Internet”) or HADOPI. The HADOPI, upon receiving a complaint from copyright holders, assesses it, decides whether to send a warning to the alleged infringer, and whether to forward the case to the courts if the internet user remains oblivious to its warnings.

So far, the Hadopi has sent hundreds of thousands of warnings and a few cases have been brought to court. The Hadopi claims that it has been successful in combatting file-sharing piracy. However, the Hadopi and the graduated response are under renewed attack. To critics, they are a disproportionate, privacy-threatening, costly and obsolete response to piracy. These arguments have been raised against the Hadopi since its inception. However, the Hadopi could always rely on the unflinching support of the conservative President Nicolas Sarkozy who spent a lot of political capital devising and supporting the scheme.

With the election of the socialist Francois Hollande as the new French President in May came a time of great uncertainty for the Hadopi. The socialist party has always been for its dismantlement whereas Hollande has always been more conflicted about the graduated response. That is why he commissioned a review which is likely to lead to legislative reform in the summer.

This paper will describe in detail the origins, rationale, functioning and fraught legislative history of this unique scheme which inspired other graduated response schemes around the world (such as the Digital Economy Act in the UK). The paper will then assess the effectiveness of the Hadopi in combating piracy. The paper will also try to predict the future of the Hadopi in light of the change in political personnel and of the work of the review commission.

H. Hammad

Role of originality in reviving copyright law

In order to encourage creativity and enhance culture we should returning shine and efficacy to copyright law and we argue that this can just be done through working on originality criteria. We proposed a new system of originality, and briefly it proposes two degrees of originality, we give higher level of copyright protection for the works with higher originality and lower degree of copyright protection for the works with lower originality. And this can be applied by several ways; one of them is the copyright office which have been established in most countries as a result of international obligations as it is proposed to be specified in degrading the works, those which have higher originality and those which has lower originality and those which won't be protected by any copyright protection because they are void of any originality.

We can add that the current proposition of secondary protection involves the adoption of higher criteria in originality and its strict implication; as if such criterion isn't present there is alternative way of protection for the cases of uncertain and unobvious originality.

As well, in this regard we should discuss the both criteria used for deciding the existence of originality, the lower criteria which relying on the skill, labour and judgement (in UK) or the sweat of the brow doctrine (in US), and the higher criteria which is the value of the work and its distinctiveness and the reflection of author personality (in the civil law doctrine).

And I suggest that the copyright protection takes the higher criteria of originality as its examination tool to decide whether the presented work has a significant level of literary, artistic or musical value which isn't repeated in other works or it is similar but has its distinctive character which author has gave to it, and then it deserves the protection of copyright. And the secondary protection takes the lower grade of originality criteria as a tool of deciding whether the work deserve the lowest grade of copyright protection or it doesn't consist of any effort or skill deserve such protection. So the application should be as gradually as shown from the higher protection to the lower protection.

In addition, I call for borrowing the French approach in this regard as a high criterion of originality, as not always the value of the work can be assessed, and may some scholars have criticisms on this criterion, so reflectance of the personality of the author is the stake here.

We argue that the criteria stipulated to be fulfilled in order to confer the copyright protection to a given work which is called in most jurisdictions originality is a vague and confusing term and surrounded by uncertainty whether in theory or implication, so legal scholarship in UK, as we will show, has expressed the need for an analyse and clarification of this condition's meaning and boundaries through studying its essence and nature, or even searching for a replacement concept to achieve the aims of its stipulating and solving its ambiguity.

On the other hand, we will show how the legislations studied here are stipulating some kind of so called originality but their judiciary and jurisprudence meant another thing like authenticity, creativity, or novelty, and, for instance.

But eventually, working on originality and retrieving its brilliance and importance will revive the importance to resort to copyright law as the balance of all works who will return the missed balance in the current era not that related to the conflicted right owners but which is related to the authenticity and commerciality of the intellectual works and titling the cultural value above the economic value of these works.

Technologies, Innovation & Justice - LT4

A. Leveringhaus and T. de Greef

Autonomous Robotic Weapons Systems: Protecting legal and moral responsibility via sound design

Recently the prospect of autonomous robotic weapons systems (ARWS) has received some attention in the NGO world, as well as in academia. Warning us of the dangers posed by ‘Killer Robots’, the international charity Human Rights Watch calls for a ban on the development of ARWS. These systems, HRW contends, are incapable of complying with key legal principles of international law, such as the principle of discrimination. Similarly, the Australian philosopher Robert Sparrow argues that the introduction of ARWS would equal an abdication from legal and moral responsibility since no one could be held responsible for their actions, especially in cases where these would result in violations of the laws of armed conflict. On the other hand, defenders of ARWS, such as the US roboticist Ronald Arkin, maintain that ARWS would increase compliance with legal principles. Humans are bad at decision-making, especially in stressful conditions, which partly accounts for violations of international legal codes. By contrast, machines are motivated by algorithms, not by fear or stress. Paradoxically, in order to make armed conflict more humane, the human should be cut out off the decision-making loop.

In the proposed paper, we subject these claims to critical scrutiny. The paper begins by disambiguating the concept of autonomy. The notion of autonomy is not straightforward, and one’s interpretation of the concept will account for how one approaches the aforementioned issues. The paper continues by probing the claim that ARWS are incapable of complying with central legal principles. This charge is not, the paper argues, entirely unjustified, though there may be instances where compliance is possible. Finally, the paper turns to the thorny issue of responsibility. It does so by offering an approach to ARWS that ensures a commitment to responsibility. The challenge faced by designers of ARWS is to design for responsibility. The best way to do this, the paper argues, is via an e-partnership in which autonomous systems are ‘teamed up’ with human operators in order to accomplish certain tasks. This approach follows HRW and Sparrow in rejecting full autonomy for robotic weapons systems in most cases. Nevertheless, it maintains that some autonomous elements within weapons systems may be desirable. Overall, the paper is keen to stress that the design of ARWS is not a value neutral process, but should always take into account relevant legal and moral frameworks.

D.Turns

The Use of Drones in Contemporary Armed Conflicts:

Implications for International Humanitarian Law

The use of unmanned aerial vehicles (UAVs) or “drones” has in the last decade become a notably prominent feature in the conduct of military operations by technologically advanced, mostly (but not exclusively) Western States: some 80 States around the world are believed to have drones already or to be in the process of building, developing or buying them. While they have been in use since as long ago as the early 1980s for reconnaissance and intelligence-gathering, and have antecedents that go back as far as the post-World War I period, it is the contemporary emphasis on using drones to carry out “targeted killings” of specific individuals, particularly in the context of military counter-terrorist operations, that has attracted enormous – and largely critical – attention from the media, international organisations, non-governmental organisations and even (recently) national courts.

Although drones are not per se illegal under the international law of armed conflict, the negative publicity tends to centre on three discrete legal issues within the jus in bello: (1) whether the individuals targeted in these strikes

are lawfully targeted as combatants; (2) whether the level of collateral damage to civilians and civilian objects that often attends drone strikes is excessive in terms of the law of targeting; and (3) whether the personnel authorising the strikes and actually operating the drones are properly characterised as combatants, or as civilians who are directly participating in hostilities.

A separate issue, unrelated to humanitarian law but exerting a malign influence on the discourse through the prism of the *jus ad bellum*, is the question of whether the use of drones in such operations can be legally justified on the territory of foreign sovereign States with which the operating State is not in a situation of international armed conflict. American drone operations in Pakistan and Yemen are commonly cited as an example of this type, with potential implications for the typology of armed conflicts or even the very existence as such fundamental concepts in international law as “war” and “peace”.

Beyond these issues, there are also broader implications that the policy of using drones as a “weapon of choice” has or might have for international humanitarian law generally. Possible (even likely) consequences of their use in today’s asymmetric conflicts include: (1) a vicious circle of escalation in the application of kinetic violence in which victory, in the military sense, will elude either side; (2) an expansion of the “grey space” between humanitarian law and human rights law, and between armed conflicts and law-enforcement operations; and (3) increasing identification and application of accountability and (eventually) individual criminal responsibility, including command responsibility, in appropriate cases where the use of drones has been in violation of the law.

The paper will take the view that, despite the inevitability of the use of fully-automated battlefield systems in the medium to longer term, the implications outlined in the chapter make it unlikely that the human element will be completely removed from the equation any time soon. It is also likely that, while there will be increasing international pressure for some sort of legal regulation to be introduced in respect of drones, which might take the form of soft law (e.g. informal, non-binding guidelines) or hard law (e.g. a general treaty), the use of drones in armed conflicts will continue to be governed at the very least by rules of customary international humanitarian law.

S. Stalla-Bourdillon, R. Moore & C. Beamish

On trust and trustworthiness attributes...

How can the law support the development of the Internet of things?

While trust is a “complex and multi-faceted phenomenon”¹ with different research areas taking different views on what is necessary for trust, some begin to draw a clear distinction between trust and trustworthiness². For many, trust comprises an expectation that the trustee will adopt certain behaviour. At least two drivers can explain such an expectation: first, decisions to rely can be taken because of the trustor’s trust propensity; second the trustor may try to determine whether the trustee is trustworthy by examining the latter’s inherent characteristics (such as his/her abilities and his/her character). Trustworthiness is thus an attribute of the trustee, while trust is an attribute of the trustor. The development of trusted computing³ definitely confirms the need to distinguish both trust and trustworthiness. Generally speaking, the aim of trusted computing is to create a trustworthy platform by defining, developing, and promoting standards to achieve higher security levels for the IT Infrastructure comprising of platforms, networks and devices interacting together, ultimately increasing the overall level of trust within the user population.

Although distinguishing trust from trustworthiness helps to better understand the relationship or antagonism that potentially exists between the law and trust, little has been said on how the law can help transform trustworthiness attributes into trust attributes. More precisely, it is often assumed that it is enough to increase the quality and accessibility of information provided to the trustor to make sure the latter includes relevant trustworthiness attributes in his cost/benefit analysis. By way of example, the concept of “consumer empowerment” in the field of e-commerce relies upon the fundamental principle that “appropriate information should be presented to consumers in a clear and accessible manner”⁴ to promote consumer confidence.

While it is certainly crucial to make sure that e-consumers, and more broadly Internet users, are aware of the essential characteristics of the goods or services they are buying online, it is about time to overcome the paradigm of online shopping in order to fully comprehend the process whereby trustworthiness attributes are transformed into trust attributes and the potentialities of the law for the purpose. Such an enterprise is justified at least for one fundamental reason: whatever one's vision of the Internet of things (be it "simply" a "layer of digital connectivity on top of existing infrastructure and things" or a "disruptive convergence that is unmanageable with current tools"⁵) the multiplication of complex ICT platforms available to users to perform a wide range of different functions require a more sophisticated approach to trust and its interaction with the law.

Assuming one is ready to adopt a cognitive approach to trust and set aside an approach centred on the notion of affective trust,⁶ which is a better way to try to identify the optimal level of trust among the user population, a two-step methodology is necessary. First, it is crucial to accurately identify the trustworthiness attributes of an ICT platform going beyond privacy and security attributes. Second, it is essential to determine whether the trustor is able to detect breaches of trustworthiness and claim for a remedying actions and whether it is appropriate to make him investigate whether the platform is trustworthy. Providing the trustor with information about some trustworthiness attributes is vain when the latter is incapable of adequately monitoring the trustworthiness of the platform and when making the trustor investigate whether the platform is trustworthy is too costly. The role of the law will vary depending upon the monitoring capabilities of the trustor. The aim of this paper is thus twofold: to identify the key trustworthiness attributes with which ICT platforms meant to be "trusted" should comply; taking into account a broad range of legal requirements and clarify the role of the law to help transform relevant trustworthiness attributes into trust attributes.

J. Lombard & L. O'Brien

The use of a legal ontology to support governance, risk and compliance in the financial services industry.

In the past number of years there has been considerable change in the financial services industry. Developments were brought about with the advent of US and EU economic and financial stabilisation schemes, changes in the regulatory frameworks which include major revisions of existing concepts (e.g. capital adequacy), introduction of new concepts (e.g. novel regulatory pathways), and constraints on existing concepts/practices (e.g. sub-prime loans). This highlights how the financial crisis precipitated an increase in financial regulation. In turn, this has led to greater demands being placed on governance, risk and compliance in the financial services industry. For example, the Dodd-Frank Act in the United States is several thousand pages long and it has been estimated that private sector compliance with the Act will take 24 million hours every year. This is a considerable burden on financial entities which will also have to comply with regulations in other jurisdictions in which they operate. Consequently, it is necessary to look for tools which can assist in easing the burden of compliance and associated costs. This paper will advance the argument that one of the ways in which this can be achieved is through the development and use of an appropriate regulatory ontology. This practical tool can enable efficient access to the wide and complex spectrum of regulations by relying on formal semantics.

This paper will be divided into three sections in order to effectively advance the argument that regulatory ontologies are an effective and appropriate tool to support governance, risk and compliance in the financial services industry. The first section will be largely doctrinal in outlining the developments in financial regulation since the time of the global financial crisis. Due to time constraints and word limits it is necessary to clearly demarcate the parameters of this discussion. The focus will be placed on the major regulations which have emerged from the European Union and the United States. Furthermore, regulations impacting on capital adequacy requirements will be given greatest attention due to their scope of applicability and their importance in strengthening the global financial sector. In short, this section will highlight the international scale of the compliance challenge faced by financial entities.

Education – SR2

J. Savelka

Libraries Connected: Can Open Definition Help in Creating Universal Library Catalogue?

This paper discusses legal issues related to the specific part of Open Data initiative that is usually referred to as Open Bibliographic Data. Legal issues related to the use of free licences to share bibliographic data are introduced and analyzed. The idea of universal library catalogue is introduced as a tantalizing goal that is worth pursuing. The main emphasis is put on the connection between free licences and such a catalogue - the licences are understood as a mean to reach that goal.

The body of available knowledge has grown beyond the point at which an accessibility has been the main issue to the point at which other aspects have to be considered as well. There is little difference between the situation at which no information at all is available and the situation at which an unmanageable magnitude of information is at our disposal. Imagine how difficult would it be to navigate through the Internet in absence of Google search engine and other related services. It is important to note that these tools do not primarily bring in new information as their purpose is to organize existing pieces of information so that they can be accessed with comfort and ease.

An important part (perhaps the most important part) of human knowledge is still contained in books. The book publishing, selling and lending industry has gone through wild changes quite recently. At least an emergence of Google Books service and eBook readers have posed great challenges as well as opportunities for the industry. Libraries seem to be aware of the fundamental changes and struggle hard to keep up with the pace. Apart from the traditional services they look for ways to offer some added value, e.g. access to commercial databases, electronic copies of books libraries have in their collections or lending of eBooks. Long ago libraries have also started to offer their catalogues online. Since then a huge amount of bibliographic data has been created. Currently, these data are scattered in a large number of separate locations. Can this be changed? Can we expect an emergence of universal library catalogue? If we imagine what services could arise on top of such a catalogue we would like to answer these questions in positive.

In this paper, first, the context of the Open Bibliographic Data initiative is investigated with special emphasis on its goals and the possible benefits that could be gained if they are reached. Secondly, the mechanism of free licensing is introduced with special emphasis on Open Data Commons Public Domain Dedication and Licence (PDDL). The main part of this paper explains how can PDDL or similar licence be used to eliminate legal obstacles that could prevent libraries from offering their data to the public. Consequently, the idea of a universal library catalogue is explored with special emphasis on the benefits such a source of information could bring about. In conclusion specific recommendations as regards what needs to be done in order to create such a catalogue are formulated.

E. Hoorn

Libraries, Copyright and Open Access

A shift towards Open Access is possible without new barriers for authors in the form of an Article Processing Charge. When all roles in the publication process are done voluntarily this opens the Diamond road to Open Access. University libraries can support this road which suits better with the epistemic culture of legal communication. This also opens possibilities for copyright librarians to raise awareness on a broad array of copyright issues strengthening the public domain on the internet.

R. Deazley & V. Stobo

Archives and Copyright: Risk and Reform

This paper considers the place of the archive sector within the copyright regime, and how copyright impacts upon the preservation, access to, and the use of archival collections. It will begin with a critical assessment of the current parameters of the UK copyright regime as it applies to the work of librarians and archivists, including the recommendations for reform that have followed in the wake of the Gowers Review of Intellectual Property (2006-2010), the Hargreaves Review of Intellectual Property and Growth (2010-2011), and the recent Consultation on Modernising Copyright (2011-12). It considers the various problems the copyright regime presents for archives undertaking mass digitisation projects as well as recent European and UK initiatives in this domain. It argues that the UK copyright regime, even when read in conjunction with current national and regional recommendations for reform, falls short of delivering a legal framework that would enable archivists to realise the full potential that comprehensive, universal online access to the country's archival holdings would contribute to local and national democracy and accountability, to education, learning, and culture, and to the sense of identity and place for local people, communities and organisations. Ultimately, a case is made for the differential treatment of archives within the copyright regime – different, that is, from libraries and other related institutions operating within the cultural sector. The paper concludes with a policy recommendation that would greatly enhance the ability of archives to provide online access to their holdings, while at the same time safeguarding the economic interests of the authors and owners of copyright-protected work.

Internet Cultures & Governance - SR124

M. Al-Janabi & M. Maganaris

The Concept of Fundamental Breach in International Commercial Contracts

The United Nations Convention on Contracts for The International Sale of Goods 1980 (hereinafter CISG) is one of the most successful instruments of uniform commercial law, gaining worldwide acceptance. As of early 2013 the CISG had 79 member countries from a variety of legal backgrounds. The drafters of CISG were faced with a sizable challenge as they considered the various legal systems, which could be broadly categorised as Common and Civil law. With the number of countries involved in preparing the CISG, it is difficult to reconcile the different interests regarding the meaning and content of the provisions, especially considering the variety of different legal systems involved in the process. Compromises might subsequently create ambiguities and controversy concerning the interpretation of such provisions.

One of the central concepts in CISG is the concept of fundamental breach, which may give rise to uncertainties to parties in international sales contracts. Nevertheless, these uncertainties may be avoided with the inclusion of specific provisions within the contract. Art.25 of the (CISG) entitles the aggrieved party to declare the contract avoided when the breach is fundamental. The consequences of fundamental breach are more serious than those of the simple breach, the origin of which stems from Hague Convention which, in turn, was adopted from the traditional 'condition/warranty' dichotomy of contract terms in English law.

The purpose of this study is to provide legal practitioners, academics and the judiciary with a better understanding of the applicability and implementation of fundamental breach by comparing different legal systems. Through the use of both comparative and analytical methods, this work aims to analyse and examine the rules and conceptual differences of fundamental breach within three legal systems; namely the CISG, English Law and Egyptian Law. With growing pressures to manage the costs of uncertainty and risks of litigation, lawyers need to be at the forefront of developing strategies that help promote prudent trust promoting reputation enhancing norms and practices. The Paper will identify areas where such legal interventions may facilitate international contracts of sale exchanges which are efficient and fair. Furthermore, it is expected to have direct relevance in determining strategy when analysing a case of breach in international contracts of sale between the international business partners.

P. Cortés

Recommendations for the Design of the European Online Dispute Resolution Platform

The expansion of e-commerce is constrained by consumers' mistrust of traders. A main concern is the lack of mechanisms for resolving grievances as courts cannot resolve low-value disputes in an inexpensive manner. Indeed, the expansion of e-commerce is limited by the default channels for resolving problems, the courts, which are unable to resolve the high numbers of low-value disputes that arise from the online market. Against this backdrop, the United Nations Commission for International Trade Law (UNCITRAL) and the EU have recently recognized the need to promote the use of online dispute resolution (ODR) methods to enhance consumer redress in cross-border trade. While UNCITRAL is developing a model law that can be contractually chosen by the parties, the EU is about to adopt an ODR Regulation that creates an ODR Platform with the role of coordinating the resolution of consumer complaints within the EU.

The paper will examine two specific and original issues which have been largely neglected by policy makers and the literature in the field: (i) the functions that the pan European ODR Platform should have; and (ii) the provision of incentives to encourage parties' participation, the early settlement of meritorious complaints, and out-of-court enforcement. This research will employ a mixed methodology: a doctrinal approach when analysing legislation and revising the literature on dispute system design; a comparative methodology when contrasting the UNCITRAL's view on global ODR platforms against the approach taken by the European Commission; and lastly, a socio-legal method in identifying the needs of stakeholders.

A. Alajaji

Electronic contracting: The EU and Saudi Arabia's approaches

Saudi Arabia is witnessing a marked increase in the number of businesses using the Internet. Internet penetration rates have grown rapidly in recent years, rising from 5% in 2001 to about 52% by the end of 2012.

What is more, a report issued by the Boston Consulting Group on the impact of Internet use on the global and local economy of the G-20 major economies, reveals that the Internet economy in Saudi Arabia was contributing to the Kingdom's economy at 37 billion Riyals in the year 2010. The report predicts the arrival of this figure at 107 billion riyals by 2016, equivalent to 3.8% of gross domestic product.

Increasing certainty in electronic commercial transactions is one of the significant legal functions of electronic contracts in order to protect the rights of all parties; however, despite the issuance of Saudi e-transactions law 2007 and its ministerial executive regulation 2008, there is a hypothesis that this law and regulation are insufficient for enhancing the trust of electronic consumers and building confidence in e-contracts; and the country lags behind modern legislation in terms of e-commerce regulation.

The purpose of this article is to analyse the Saudi approach in the formation of electronic contracts and to compare it with EU regulations. This article will discuss the key points which are directly relevant to electronic contracting such as the requirement of prior information, formation of electronic contracts, offers and acceptance, unfair contract terms, and mistakes and error.

This paper seeks to reflect the best practices of the EU electronic commerce directive, which could be-to some extent- used by Saudi legislative authorities to improve the legislation and overcome weaknesses.

K. Rogers

Consent in the online environment – principles before form?

Consumers are being presented with an increasing range of instances where their consent is required online. Whether within the arenas of data protection, incorporation of contractual terms, opting in to the use of cookies or engaging with social media, consumers are required to indicate in a variety of forms whether they have

agreed to inter alia the processing of personal data, contractual terms and conditions or that a cookie can be placed on their hard drive.

While many consumers may be willing to consent with a view to attaining the intended end product, the playing field is muddled by different approaches to ensuring consent in terms of definition, approach and practice. The use of aged case law authorities, various legislations and recent judicial decisions demonstrating the struggle for law-makers to keep pace with technology means that this area of law is shrouded in uncertainty and requires firm principles to be established to allow e-commerce to continue to flourish and the importance of data security to be safeguarded. Coupled with this are the variety of approaches taken by websites to try to ascertain consent and a broad spectrum of views as to which methods are valid means of securing consent. For instance, Jan-Philipp Albrecht, a rapporteur for the European Parliament's Civil Liberties, Justice and Home Affairs Committee on the proposed EU data protection reforms went as far to suggest that 'pre-ticked boxes' do not indicate free consent, while case law presented a variety of differing approaches.

Consent in the data protection context also needs clarification, with the general definition with Directive 95/46/EC requiring consent to be 'freely given, specific and informed' before then presenting two different levels of consent required for processing personal data and sensitive personal data. In addition, the Article 29 Working Party provide an almost bewildering range of consent 'levels' for cookie usage in Opinion 4/2012 on the Cookie Consent Exemption depending upon the type of cookie that is being employed.

This paper suggests that far from continuing with a fragmented approach to consent, to enhance consumer protection a unified set of principles is required to oversee online consent in both the privacy and commercial sectors. Seen within headings such as 'privacy' or 'commerce' or 'cookie exception' does not assist the development of online services as consumers are either challenged by the variety of forms to consent or simply baffled to lead them to simply 'volunteer' consent in order to progress. It is argued that the development of principles would then be able to provide a platform allowing websites to construct their approach to ensure that the appropriate level of consent is achieved for its purposes.

Friday 12th April

Internet Cultures & Governance – LT1

Y. Harn Lee

Setting and maintaining boundaries:

Fan communities and the self-regulation of digital creative space

The Internet and its associated technologies have given rise to a wide range of tools and platforms which make it easier for users to create, share and distribute content online. Due to the ready availability of these technologies and their seemingly boundless potential, it is all too easy to imagine the Internet being transformed into a space of complete anarchy, where users feel free to download and distribute all types of content without regard for any intellectual property rights that might attach to such content. This makes it all the more noteworthy that certain sectors of the user community have chosen to impose some degree of order on this potentially chaotic space through the adoption of norms that determine the circumstances under which potentially infringing uses of works protected by copyright are permissible. This paper focuses on two such communities, namely the ones surrounding the creation of fan fiction and videogame modifications respectively, and examines the common norms which both have developed to help their members navigate the theoretically boundless creative space resulting from the advancement of digital technologies. Five distinct though inter-related norms are identified: the norm of encouraging fan creativity, which reflects the belief prevalent among fan communities that the creation of derivative works by fans is, in general, a praiseworthy social practice, and is demonstrated through the implementation of mechanisms that facilitate fan creativity; the norm of attribution, which requires fan-creators both to disclaim any ownership interest in the aspects taken from the original work (such as the characters, setting and so forth) and to clearly attribute any elements borrowed from the works of other fan-

creators to their respective authors; the norm against commercialization, which strongly prohibits fan-creators from seeking to profit financially from their works; the norm of added value, reworking or transformation, which requires fan-creators to distribute only works which they have transformed, expanded or otherwise provided additional creative input into, rather than direct, unaltered copies of protected works; and the norm of respect for the integrity of the original work, under which fan creations that maintain some level of coherence and consistency with the characterisation, setting, themes and rules of the original work are preferred to those that deviate wildly from them.

The paper elaborates upon each of these norms, examines the motivations – both ethical and pragmatic – which underlie its development and adoption, and gives examples of its application within the two communities studied. It then assesses the extent to which these norms reflect, and are aligned to, values found in established principles of copyright law, and also discusses the extent to which these norms are capable of assuaging authors' and publishers' concerns that the proliferation of fan-created derivative works will have a negative impact on their ability to exploit and to retain authorial control over their own works. It goes on to describe the different ways in which the norms that have evolved within these user communities can assist copyright owners in drawing a line between outright piracy and (arguably permissible) creative uses in making decisions concerning the enforcement of their rights, as well as informing the development of new business models, particularly within the creative industries. The paper concludes by considering the possibility of these norms functioning as a starting point for the reform of copyright law in a manner that would permit and promote the creation of derivative works by fans within reasonable boundaries that take into account both the practices and expectations of fans as well as the interests of authors and publishers, and situating this within the wider debate on copyright and user-generated content currently taking place at the European level.

K. Barker

Virtual Worlds, Online Games and IP –

From Battle of the forms to Social Norms – where do the boundaries lie?

Online games and virtual worlds have become an integral part of leisure activity in our digital, networked society. These interactive online spaces generate vast revenues, and regularly attract users in the millions. However, they are not without their problems, and pose problematic from the perspective of the law.

Each online game or virtual world is different from another, and whilst they may share some of the same characteristics, there are distinctions between each which range from the subtle to the extreme. These contrasts and the resulting divergent approaches of controlling these spaces pose complex challenges to established offline systems of control and governance.

Online interactive environments like World of Warcraft, Second Life, Habbo and The Sims Online are international entities, attracting users across the globe. They have one common regulatory mechanism; the End User License Agreement. This contractual document forms the cornerstone of the regulatory and governing system within each of these distinct spaces. Yet the EULA is regularly contravened by users and the game provider alike, suggesting it is neither fit for purpose, nor adequately designed for these online spaces. The EULA forms not only the contractual relationship between the service provider and the end-user, but is also intended to control the behaviour of the users in the relevant online environment. To this end, the EULA is frequently attached to other contractual agreements such as Rules of Play, Terms of Use and Codes of Conduct. These are very often the only forms of control or regulation that are present in online environments, and therefore control more than user behaviour. They also set out the provisions for dispute resolution, and property rights.

Increasingly, disputes relating to virtual spaces are becoming apparent. These disputes are not just related to property and intellectual property rights; they now concern child protection and criminal offences too. The recent Habbo debacle of 2012 is just one example of how a seemingly safe, controlled environment can spiral out of control if there are few proper checks and balances in place.

Lessig has argued that code is law, whereas Brownsword suggests that there are different modes of regulatory method, some more successful than others. Similarly, Alemi has suggested it would be possible to implement a system of virtual court rooms whereas Reed has advocated a return to the use of social norms to control these online environments, much like the approach during the mid-1990s in LambdaMOO. There are a number of different suggested methods for controlling and regulating online environments such as online games and virtual worlds; the developers of Second Life, World of Warcraft and EverQuest have attempted to introduce their own systems of control and regulation that are distinct from the approaches considered in our offline existences.

How does user A prevent user B from stealing his virtual sword? If he cannot prevent it, can user B report the theft to someone? Who would that someone be? If user C has created his own weapon, can he protect it, or can the game provider make it a part of the game or world? What can user C do about it?

There is no system of 'law' as we know it in these online environments yet the disputes arising from these environments are becoming increasingly common. There are online / offline boundaries – critically, one's avatar cannot yet make the transition into the real world. However, the income generated from online item sales and activities can be, meaning that these environments attract value for users as well as the developers. These boundaries are only one dimension of the control required in these spaces. Cyberspace has, after all, been described as lawless. As such, perhaps it is time to consider the next frontier in intellectual property, gaming and our digital future? This paper will consider some of the respective approaches to controlling online games and virtual worlds, and critically consider whether there is a consensus of opinion as to the most appropriate approach.

A. Giannopoulou

The Creative Commons licenses through moral rights provisions in French law

With the open content licenses incessantly gaining ground, Creative Commons licenses continue to evolve in order to better suit their purpose of “build(ing) a layer of reasonable, flexible copyright in the face of increasingly restrictive default rules”. Over the course of ten years, the Creative Commons organization has (along with an international community network) built a set of open content licenses and a web interface that allows rights owners to review and choose the license that best fits their needs through a set of “yes” or “no” questions. The first license set was published on December 2002, having reached by now version 4.0 of the licenses.

The crucial element underlined since the launch of the Creative Commons licenses is the fact that choice lies in the hands of the author. This has been a decisive tool that determined the way in which the licenses were conceived. The limits of this choice are however constantly challenged, not only by opponents of the open content licenses but also by national intellectual property laws.

During the evolution of the Creative Commons licenses by the issuing of new and improved versions, the issue of the respect of moral rights is always highlighted. The importance of the wording of the licenses regarding moral rights was not perceived until the porting process started in civil law countries with strong moral rights protection such as France, in 2003.

When dealing with moral rights issues it is difficult not to refer to the French perception seeing it is one of the most restrictive and dominant in the civil law jurisdictions along with the German one. The four branches of moral rights protected by the droit d'auteur law in France is the right of paternity (paternité), right of publication (divulgateion), right to respect of the work (intégrité) and the right of withdrawal (retrait et repentir). Their main common characteristic is the fact that they are inalienable and perpetual.

This article will examine each element of the moral rights in the French system in order to verify their compatibility with the Creative Commons licenses. Our research will first address the question of whether moral rights are expressly handled by a specific clause in the licenses. We will be examining both the international

(unported) version and the French ported licenses. We will then continue to verify the compatibility of different license clauses with the moral rights provisions in France.

Since the Creative Commons licenses are not created in order to replace intellectual property laws but are instead destined to be enforced on top of the applicable law, this article will demonstrate the ways in which the licenses are elaborated in a manner respectful of moral rights. Finally, we will point out the incompatibility issues raised between certain license clauses and moral rights provisions in French law on a theoretical as well as on a practical level.

H. Hammad

The dispute over authors' moral rights between DRM, contract, human rights and copyright law jurisprudences

It's always questioned in the recent decade under the spread of internet based works that accompanied the technological revolution what is the role or situation of copyright law concerning DRM technologies, and its relationship with contract law, and which one is going to defeat the other.

The uncertainty or probably the inefficacy of copyright law in defending the users' exceptions and moral rights of authors, wherein owners (producers, publishers and distributors) are the first and approximately the only beneficiaries on the deterrent of authors and end-users, has led to lots of negative consequences.

This paper argues that the starting point should be revisiting DRM technology, and it proposes that it betray the natural rights and human rights, and instead of focusing on financial rights of producers copyright law and the related legislations should work on achieving three kinds of rights, authors rights, users rights and producers right not just tilting to the benefit of the latter part only.

The current interaction between copyright law, contract law and the DRM technologies have resulted in several disadvantages whether on creativity level (or originality) of the produced works, and on the availability of materials to student or educational institutions in general, and on development countries which these practices have deprived them from coping with culture and information change in the world.

The proposed solutions can be briefed in challenging the DRM technology functions and manifesting its controversial with human rights pacts (art. 27 of Universal Declaration of Human Rights, and art. 15 of the International Covenant on Economic, Social and Cultural Rights), and proposing amendments to be done in national legislations and international agreements; and proposing an online system to increase creativity of works through stimulating authors and encouraging aspiring authors through online charts of users as a new and efficient method to know the public views regarding the new works, and finally working on enforcing moral rights as a component of natural rights which should be inalienable.

D. Mac Sithigh

Tabloids, Top Gear and tasters:

The Authority for Television on Demand and the scope of broadcasting regulation

This year's conference takes place three years after the new co-regulatory system for on-demand AV media services came into force in the UK. In that period, hundreds of service providers have come into contact with the relaunched Authority for Television on Demand (ATVOD). Many of them have notified ATVOD of their services and are now regulated by it. Others have challenged the idea that they fall within the scope of the amended Communications Act and the Audiovisual Media Services Directive; Ofcom, as the overall authority, has heard appeals on issues including the status of AV material on newspaper websites, editorial responsibility, conditional access and the protection of minors, and interpreting the Directive's tests on 'TV-like' content and user expectations. A small number of cases on violations of the substantive regulatory requirements also exist.

This paper is a comprehensive review of every ATVOD determination and Ofcom appeal to date. It compares the actual determinations and appeals with political and academic speculation from the period of the drafting and negotiation of the Directive. It also considers how the proposal for press regulation included in the report of the Leveson Inquiry might be modified or developed so as to take account of the lessons learned over during the introduction of the on-demand regulatory system, particularly as regards the ‘scope’ of regulation.

M. Jankowska

Open authorship - using the example of Wikipedia

In the theory of law, it is written that the law can only operate when it complies with commonly-approved moral and social norms, In fact, copyright law escapes this rule. Copyright is often charged with a complaint that many factors lead to a lack of coherence between the norms of law and its use in practice. These factors include: the development of the internet, the digitalisation of works of authorship, and fast access to works, e.g. via the Google Books site. The development of Wikipedia has also forced the copyright doctrine to gain a deeper understanding of these types of changes, and take a closer look at the concept of authorship. V. Rieble used the term “Entindividualisierung der Autorschaft” in order to show what kind of changes authorship and the right of authorship have to face in XXI century. The open possibilities of the internet mean that we must pay close attention to the closed character of copyright legal norms. This phenomenon is sometimes summarised as “open architecture vs. closed law”. As a matter of fact, while it is possible to undertake many actions that are allowed from a technical point of view, one has to envisage the legality of them. A change involving the conversion of “authorship” into “the function of authorship”, as foreshadowed by Foucault, is coming in the digital environment, giving shape to what is termed “digital authorship”. According to J. Reyman, the creativity taking place in the internet lacks certainty, stability and isolation, which G. L. Landow said that “the author is reconfigured in several ways by the internet: first, the figures of the author and the reader ‘become more deeply entwined’; second, the author becomes a text him- or herself, a ‘node among other nodes’; and third, the author is revealed as a ‘de-centered self’.” Therefore, the status of being the author is becoming more unstable, even dynamic and interactive.

One of these situations is taking place at Wikipedia, which is based on wiki, being a software that creates a public text forum that can be edited and added to by anyone with access to the internet.

The aforementioned scheme of text creation raises questions about the text’s authorship, which appears to be a matter of prime importance when trying to solve any copyright issue. Therefore, the main topic of the speech and the paper is the authorship issue arising from these new ways of creating texts, using the example of Wikipedia.

On the basis of the literature’s theoretical approach, Wikipedia could be seen as an example of Barthes postmodernist model of authorship, appearing as an interaction between the writer and the reader. Given that, in March 2008, Wikipedia had more than 75 000 registered creators (let alone the unregistered ones), it is perhaps unsurprising that the authorship of Wikipedia is described as “collective” or “open”. It must be denied, however, that Wikipedia has no author. In order to consider the copyright grounds, the analysis of the work of the Wikipedia creators has been brought to the forefront. This approach leads us further to ask questions like: how copyrightable should the creators’ work be? or what kind of work of authorship is Wikipedia considered to be? This analysis also attempts to bring closer the reality of creating Wikipedia, in order to indicate the guidelines for finding the author of Wikipedia

As J. Reyman indicates, accepting “digital authorship” brings us to the next level of the “authorship code”. At this level, digital technology is used to control authorship through devices (e.g. watermarks) giving the information on the author, the distributor of the work, the uploader of the text and the conditions of uploading. This approach will also be discussed using several examples, for instance of embedding a “watermark” in the work.

A. Brown

Dance, Disability and the Law: an interdisciplinary approach to creativity

Background: This paper will introduce “InVisible Difference”. This is a 3 year project, starting in January 2013, which is funded by the Arts and Humanities Research Council. A key part of this project explores the existing and potential contribution which copyright and human rights law can make to the reward and respect of dance practitioners with disabilities. The wider project will engage with empirical work involving dance practitioners with disabilities and dance scholars, and will contribute to proposals for a new form of engagement with cultural industries and policymakers.

Framework: This paper will explore the extent to which copyright and human rights regimes engage with disability and laws relating to it. It will discuss human rights in respect of the protection of the moral and material interests of the author, sharing in cultural life, freedom of expression and prevention from discrimination, building on rights in international and European instruments.

Argument: The paper will explore the extent to which opportunities or impediments might be presented by arguments based on the right to property. Further, what is the relationship between dance and copyright? What arguments can and should be made regarding authorship and control of dance? Should a different approach be taken to the work of dancers who are able bodied and those who have a disability? And can a human rights based approach enhance the prospects of this coming about?

The paper will present initial research findings and looks forward to a stimulating discussion as to how the work might proceed, and to establish links with those who may be interested in forming part of the wider research network of the project.

To contextualize the research, the presentation will begin with a showing of a film from YouTube “A Casting Exploration”. This shows, in parallel, two performances of the dance “Love Games; a duet involving in one performance a female dancer with disabilities and the other a female dancer with no disabilities, accompanied by the same male dancer.

Z. Alexin

Does Fair Anonymization Exist?

Anonymised databases are frequently used in health industry for business modeling, efficiency analysis, quality control and medical research. The advantage of these databases that data cannot be linked to natural persons, so they are not considered personal data in legal sense. Therefore they are not protected by national and international data protection legal rulings. Anonymous databases can be freely transferred, can be commercialized without harming anyone’s interests.

On the other hand the word anonymous has to be used cautiously. Originally, anonymous meant: without one’s personal name. Even today, the word anonymous is used in this sense: whenever a database does not contain personal names it is right now counted as an anonymous database. In the era of modern computer electronics such data cannot be considered ab ovo unidentifiable without further investigation. From several for the first glance anonymous databases it has been revealed that those are actually suitable for identification. Paul Ohm (University of Colorado Law School, professor of law) in his work: “Broken Promises of Privacy: Responding to the Surprising Failure of Anonymization” mentioned three cases when anonymous databases were broken and many natural persons were successfully identified. In an “anonymous” medical database even William Weld, the Governor of Massachusetts was identified by combining the medical database with the publicly available voter’s database. A university student proved that the voter’s registry correlated 87% with the medical database when considering birth date, gender and ZIP code. This allowed computerized re-identification of the medical database.

The author of this paper began to repeat similar research on Hungarian population data. He got contacted with the Hungarian population registry, the Central Office for Administrative and Electronic Public Services and obtained the database containing birth date, gender and ZIP code about 10 million actually registered citizens.

The first quick results showed that 78,4% of the population can be uniquely identified using only these three data items, including children and adults. If we can always choose from two people the one we would like to identify then the rate is 94%. Further analysis revealed that if we exclude the most populated 13 ZIP districts of the country (not the capital) then 82% of the population can be uniquely identified, and the rate is 96,8% when we always can select the desired person from the given one or two.

The Hungarian health government maintains the so called TEA (Tételes Egészségügyi Adattár), the Itemized Medical Database, in which they collect all care provision events, drug prescriptions from 1998 happened in the national health insurance system about the whole population. The database is “anonymous” because it does not contain the personal names and the national health ID, but it contains a pseudonym, the gender, the birth date and the ZIP code. The Decree No 76/2004 of the health minister declared the database “anonymous” therefore the usage of the database is not supervised by an ethics committee and a data protection public body. In the light of the forthcoming research this cannot be upheld and the protection of the database shall be strengthened. What makes the things more serious is that many civil servants have to publicize their biographies and declarations of assets, by which they have to disclose keys unintentionally to their medical history as well.

L. Edwards

Names have Power: Real name policies and social media

Requiring real names on social media networks has become a surprisingly controversial policy. When Google + was launched with the more or less explicit selling point of not being Facebook, supporters were dismayed by the fledgling network’s demand that real names be used, and more still by the search giant’s attempts to then link real name use across various Google accounts (eg YouTube). Facebook’s real name policy meanwhile has been attacked and widely contravened by users. In December 2012, the data protection regulator of Schleswig-Holstein in Germany issued a ruling that FB’s real name policy contravened German DP law and must be dropped. In China however, the state has mandated real name use on the Internet and according to blogger TJ McIntyre the Irish government is considering a similar measure, despite the fact that the Korean government has just abandoned a similar “real names” law.

The advantages to governments of compulsory real names online are obvious in a world of post 9/11 security, ubiquitous surveillance and the perception of the Internet as a happy hunting ground for terrorists, pedophiles and organised crime. For private organisations such as Google and Facebook, the justifications follow a similar pattern: playing to the agenda of the need to cut down on cyberbullying, online stalking and trolling. Google also claims that in the real world people connect via their real names and this is something the online world should emulate, ignoring the long tradition of the Internet as a popular place for multiple roleplaying, often involving change of gender, age and nationality as well as mere name. Facebook combine the two agendas in their statement: “Facebook is a community where people use their real identities. We require everyone to provide their real names, so you always know who you're connecting with. This helps keep our community safe.”

Neither company comments that the driving force behind real names policies may be as much the commercial difficulty of selling targeted adverts without complete identifying profile data, as the desire to achieve online safety and civility. Nor do the public regulators advocating real names policies, ostensibly to protect the vulnerable online, seem to note the many reasons why real names are as likely to imperil these users, eg by removing the protection of pseudonymity for political speech; exposing victims of domestic violence to stalking by ex-partners; LGBT people exploring their community online; and so forth. For children and young persons already suffering lockdown on their personal lives, Boyd observes that online is where they feel some safety and freedom – something a real names policy may endanger. Other problems associated with forced real name use include the massive use of social networks by employers and universities to vet potential hires and students

(“workplace surveillance 2.0”) which bar an isolated case of German legislation remains largely unrestricted by law; the growing rash of cases of employee dismissal for blogging or other use of social media; and the growing trend of courts demanding social media passwords as part of litigation disclosure with associated privacy invasion .

This paper seeks to explore these issues of privacy, identity and association, asking if real name policies are justified, and if not, whether solutions may lie in the current legal proposals in the draft Data Protection Regulation to give users more rights over their data via the rights to forget and to data portability; or in code developments such as distributed social networks along the lines of Diaspora.

S. Schmitz

Facebook’s real name policy – Can Joe Do and Max Mustermann legitimately be banned?

More than the world’s largest social network, Facebook is a huge data mining machine that captures and processes every click and interaction on its platform. The harvested data becomes more valuable if it can be linked to real persons with real names. Facebook has been advocating the use of real names in the online world for a while. Facebook officials have stated that they do so in the interest of their users. Advocates of a real name policy and an abolishment of the pseudonymous and anonymous usage of web services are presenting such a real name policy as a fix for bad behaviour, in particular cyber bullying, trolls and illegal activities. However, so far there seems to be no reliable evidence that people will refrain from bullying if their name is attached to a posting.

Nevertheless, Facebook requires all members to use their real names and email addresses when joining the social network. Not only does the policy seem to be difficult to enforce (as the prevalence of accounts with people’s pets or fake names suggests), but it may also interfere with European data protection laws.

A German Data Protection Commissioner has now taken action and ordered Facebook to permit pseudonymous accounts. Facebook has filed an objection before a German court arguing that instead of German data protection laws and Irish data protection laws apply. According to Facebook, its European Ireland-based company Facebook Ltd. fully complies with Irish data protection laws which also implement the European data protection laws completely. In contrast, the Office of the Data Protection Commissioner of the German state of Schleswig-Holstein argues that German data protection law applies for German consumers and that Facebook infringes § 13 VI of the German Tele Media Act. The latter requires telemedia providers to allow for an anonymous or pseudonymous use of their services.

Following an analysis of the different positions on the pseudonymous usage of web services, this paper will examine whether § 13 of the German Tele Media Act applies to Facebook Inc. or its European subsidiary Facebook Ltd and if so, whether the provision requires them to allow German users an anonymous use of Facebook. The paper will also look at the audit reports of the Irish Data Protection Authority in relation to Facebook’s compliance with Irish data protection laws.

Finally, I will explore whether Joe Do and Max Mustermann can be legitimately banned or whether we only have to say goodbye to Joe Do while Max Mustermann will survive.

M. Jones

Beyond the Mask: Anonymity and the Law in the Public Space

“We live in a surveillance society. It is pointless to talk about surveillance society in the future tense. In all the rich countries of the world everyday life is suffused with surveillance encounters, not merely from dawn to dusk but 24/7.”¹

In the context of the UK, there is some dispute as to the number of CCTV cameras in operation, with estimates ranging from between 1.85 and 4.2 million². In many respects the precise figure is irrelevant as it is an

immutable truth that the author's image will have been captured many times by cameras from both the public and private sectors during his commute to work. This does not take into account the potential increase in mobile forms of CCTV in the guise of new technology such as Google's Glass which will soon become mass marketed. Likewise, fixed camera technology is also improving with the quality of the captured images now reaching a high definition capability of as much as 29 megapixels. As image clarity increases, so does the efficiency of any facial recognition software.

Against such a backdrop it is not surprising that some individuals would wish to deploy counter surveillance technologies in an effort to promote privacy in the public space. This might take the form of a simple mask or more recently prototype wearable technology such as the privacy visor has begun to emerge.³

The question which this paper will examine is the extent to which those who wish to use anonymity enhancing technologies will be free to do so within the public space. It will survey existing laws from a number of jurisdictions and chart recent developments such as the Canadian Bill C-309.

1. A Report on the Surveillance Society (2006) <http://www.ico.gov.uk>
2. <http://www.guardian.co.uk/uk/2011/mar/02/cctv-cameras-watching-surveillance>
3. <http://www.bbc.co.uk/news/technology-21143017>

Technologies, Innovation & Justice – LT2

K. Choong & M. Chandia

Technology at the End of Life: "Medical Futility" and the Muslim PVS Patient

Technology has played an increasingly important role in the health care setting since the Second World War. This has ranged from sophisticated assisted reproductive technology at one end of the spectrum to technological interventions offered in intensive care units (ICUs). Whilst these have helped resolve many medical problems, they have also given rise to new dilemmas, particularly ethical dilemmas. This paper focuses on those relating to the care of patients in a persistent vegetative state (PVS) where the "merger of body and machine" can now prolong the lives of those who would have otherwise died just a few decades ago. But where the assistance rendered is not expected to yield any improvements, they are considered "futile" from a medical perspective. English law, in such a scenario, has taken the view that it is not in the "best interests" of the patient to continue to receive medical intervention. This makes it lawful to discontinue all life-sustaining treatment and medical support measures including the termination of ventilation, nutrition and hydration by artificial means. The withdrawal of such apparatus, which is classified as "medical treatment", is deemed an omission rather than deprivation or negligence. In light of this, the Law holds that doctors are only allowing such patients to die a natural death rather than causing them to die. In short, the medical debate on the matter is underpinned by a series of intertwined medico-legal concepts which justify the English Law position.

The Court of Protection was nevertheless recently asked to resolve a conflict between the family of a Muslim PVS patient and his doctors. The family objected to the doctors' intention to withhold resuscitation or ventilation should there be a life-threatening event. They insisted that "all steps" should be taken to preserve the patient's life. As devout Muslims, they argued, that Muslims in general "believe that you prolong life as far as you can go and that you actively take every step to so do". This paper seeks to discuss how such "medical futility" or at least the semantic conceptual landscape (which also includes "best interests", "omissions", etc.) which determines the legal position is dealt with under Islamic Law with a view to assess its compatibility with English Law and to what extent such patient approaches can be accommodated. Some of the key questions this paper will consider as part of the above will be: does Islam allow all medical interventions, including clinically assisted nutrition and hydration (CANH) to be withdrawn when these are not expected, by medics, to bring any medical benefit? Or does it instead deem the withdrawal of life-sustaining medical treatment from such patients, who may still be able to breathe naturally, as an activity which is tantamount to killing? And, to what extent is it

helpful to frame the debate in such dichotomous terms? By consulting primary and secondary sources of Islamic Law, and the range of opinions articulated by Muslim scholars on the issue, this paper will also seek to explore the experience of the Muslim patient in the UK and will consider the implications of such treatment in Islamic countries and countries with a Muslim-majority population. As this issue has clear implications for those from other faith traditions as well, it is anticipated that the findings would point to the need for more religiously and culturally sensitive discussions to take place between doctors and patients in an age where end-of-life care is delivered in such highly technical environments. Ultimately, this paper aims to question whether end of life medical technology should be without boundaries and conversely, should patient-related ethical (external) considerations impact the administration of such medical technology?

P. Li & P. Hoon Lim

Intellectual Property and Access to Medical Technology A precautionary approach to compulsory licensing and tempering the data exclusivity obstacle for access to medicines

This article takes up further on a framework developed for a precautionary approach (PA) which developing countries should adopt for granting compulsory licences in a national health emergency. Working within the legal mechanism of the precautionary framework developed from the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) under the World Trade Organization (WTO) and the Agreement on Trade-Related Intellectual Property (TRIPS), the PA redefines a framework for compulsory licensing based on an adequate margin of safety when there are reasonable grounds for concern about uncertain risks that significant harm to human life and health may occur. The rationale adopted is based on legitimate differential treatment, precaution and risk management for a prescriptive, moderate and least restrictive measure to trade to enable access to medicines.

Compulsory licensing under the TRIPS Agreement was developed as a buffer for tempering patent protection and health to “allow for other use of the subject matter of a patent without the authorisation of the right holder” subject to certain conditions. The August 2003 Doha Declaration and subsequent TRIPS amendments for all member countries to be eligible to import provided a breakthrough for access by poorer countries to cheaper generic drugs. The chilling effect of the waiver is shrouded by obvious reticence on the part of developing countries to adopt the WTO language of “national emergency” and “extreme urgency” as a condition for compulsory licensing. The bold efforts by Thailand and Brazil in issuing compulsory licences in 2007 were adopted on grounds of “public non-commercial use” and “public interest”. An objective mechanism to trigger the grant of compulsory licensing would not leave developing member countries at the mercy of possible trade retaliation and sanctions that results only in price reduction bargains instead of a proper use of the inbuilt flexibilities under Article 31(f) of the TRIPS Agreement.

In addition to the patent obstacle, data exclusivity under the ambiguous Article 39.3 of the TRIPS Agreement poses another obstacle for access to medicines and the production of generic drugs even under compulsory licensing. Such regulatory protection of undisclosed pharmaceutical test data and the application of confidentiality to test data submitted by pharmaceutical companies so as to be able to obtain marketing approval of the products creates a data monopoly. It prevents the marketing of generic drugs even though the patent licences may have been granted by the government as generic drug manufacturers are unable to access the data. The authors query the obligation set out under Article 39.3 and consider the question of an implicit data exclusivity exception. The authors further argue holistically from a human rights perspective that a wider application of the precautionary approach to temper data exclusivity as a justification for disclosure in a public health emergency would enhance its prescriptive value. This article contemplates a parallel approach to overcome the issue of data exclusivity in the international trade and intellectual property regimes once a precautionary approach is adopted for compulsory licensing.

M. Myska

Creative Commons 4.0: Reflecting Legal Boundaries in the Borderless Digital Environment

Creative Commons Licences are by far the most popular licences for non-software content online. By providing a set of standardized variable licences they provide for an easy way to retain some rights and license the rest (hence the motto “Some rights reserved”). However, by implementing the licensing modules NonCommercial that disallows further use of the licensed work for commercial purposes and NoDerivatives that forbids building upon the licensed work, the Creative Commons allegedly do in fact constrain the creative spread of cultural works (Hagedorn, 2011; Elkin-Koren, 2005). The main aim of this paper to explore the role and actual contribution of the Creative Commons licences in promoting of the “Free Culture”. The possible legal challenges are therefore identified and discussed, namely the nature of ND and NC clauses, their role in re-use of the content and the compatibility issues of various free culture licences.

In order to achieve that, the introductory part provides the needed background information on the “open content” movement and on the role of Creative Commons therein. The basic terminology like “free culture”, “free/open license” as well as the philosophical underpinnings are explained and thus the basic theoretical framework established.

The second part focuses on the two main “restrictive” licensing modules, namely the NoDerivatives clause and NonCommercial clauses in the current version 3.0. Firstly their definitions and functioning are explained. Next their role in “blocking” of creative re-use of content is explained on practical examples. Also the compatibility issues within the Creative Commons licensing system as well with other free/open licenses are discussed.

The next part briefly introduces the upcoming version 4.0 of the Creative Commons licensing suite. Thus the reasons for and the aims foreseen to be achieved by the new version are introduced. Next, the proposed changes are briefly presented, i.e. Attribution and marking; Disclaimer of warranties and related issues; Internationalization of the licensing suite; License subject matter; Treatment of Moral rights. The main attention is logically paid to the new definitions and scope of the NonCommercial, NoDerivatives and ShareAlike conditions of the licences and whether these address the identified problematic issues and thus provide for an adequate instrument in a borderless digital environment.

The paper concludes with a general assessment of the new licensing scheme and its impact on the creative re-usability of the licensed content. Finally the new licences should be subject to critical review from the point of mere of comprehensibility to the intended user (Myška et al, 2012).

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M.Jozwiak

Changing Notion of Freedom of Expression in the Digital Context

G. Broadbent & L. Collingwood

To scalp or scold? Choice mechanisms and UGC

Hardly a week goes by without media reports of some controversy generated by postings on Twitter, Facebook or other social media or blogs. The consequences of inappropriate postings may be various. Such consequences may involve adverse effects on relationships, careers (see, for example, L. Gray, “Christian demoted for views on gay weddings”, The Telegraph, 24 October 2011.

Available at <http://www.telegraph.co.uk/earth/earthnews/8844445/Christian-demoted-for-views-on-gay-weddings.html>) or reputations. The ease with which material may be made available has been one of the hallmarks of the network society (see Manuel Castells, *The Rise of the Network Society*), though the implications of this are still not fully appreciated. In particular, users may not fully appreciate the possible consequences of posting online and this perhaps militates against measured consideration of the appropriateness of content.

More serious consequences of online material may be the involvement of the criminal law (for example, “Christian wrongly called a paedophile on Facebook after row with neighbours”, The Telegraph, 17 February 2010. Available at <http://www.telegraph.co.uk/news/uknews/crime/7256500/Christian-wrongly-called-a-paedophile-on-Facebook-after-row-with-neighbours.html> ; “Tom Daley Twitter abuse: Boy given warning and bailed” available at <http://www.bbc.co.uk/news/uk-england-19072301>) to deal with the more serious forms of undesirable content. If prosecution is to be instituted, there is an issue as to the choice of offence which has further consequences for sentencing depending on the maximum and tariff for the particular offence. The offence chosen will largely determine the outcome and may account for the often criticised inconsistencies of treatment, especially with regard to sentencing.

This paper will address these issues drawing on literature from psychology and the social sciences to try to identify the characteristics of those posting material online in order to assess the appropriateness of current legal responses through the criminal law to undesirable behaviour. In particular, the reach of criminal provisions contained in legislation such as the Protection from Harassment Act 1997, the Malicious Communications Act 1988 and the Communications Act 2003 will be examined.

More fundamentally, it will argue for coherent strategies that allow for differentiation to be made between those who deserve criminal sanctions and those, such as Paul Chambers (*Chambers v DPP* [2012] EWHC 2157), who naively stumble into them following an ill-advised posting. Where the criminal law does intervene, then it will argue for a more holistic and consistent approach to replace the current fragmented practices both within the law itself and in practice, particularly with regard to charge and sentence. Ultimately, it will be argued that, in relation to the online or cyber environment, these are important issues that require to be addressed so that the law in this area can be better understood and applied.

S. Omarjee

The Right of Sharing: Why Should Copyright Law Change Into a New Economic Model

Should copyright legal concepts change its fundamentals focused on the protection of work and authors, to move on toward recognition of more user’s rights like the right of freely accessing any content and share it?

If asked years ago, this question for sure could have been considered as provoking, denying copyright owners legitimacy for protecting their work. Does it still now?

During years, the battle against online piracy has raged around the world with multiple legal assaults from majors companies and numerous condemnations of Internet users. Whether in USA, Australia, France... law and case law have drawn a frontier between what can be a lawful use of a copyrighted content and what is not. The European Union Copyright Directive of 2001 has provided new legal tools to lock mediums and prevent users from doing copies, removing the lock being an infringement. More recently, the sensitive debates on the US bill known as SOPA and PIPA have raised the point to know if protecting copyright allows attempting to privacy and civil liberties in order to identify every infringer.

However, despite of the ongoing battle, the shape of the Internet and the behaviours of users have never stopped moving and escaping legal restrictions. MP3 files still exist and continue to be used to share music and the same goes for films with Divx file: they have not been eradicated by copyright owners. Surprisingly, they are even included in home or personal devices like DVD or CD players... Years ago Napster was facing important legal issues for being the first Internet file swapping system; today users have choice between many other technologies and platforms: peer to peer, bittorent or streaming! In other words, all legal issues and trials raised by unlawful access to copyrighted work with the Internet did not terminate the technological evolution, nor did it terminate the user's habit to copy and paste!

At the current time of tablets, smartphones, cloud computing and social networks, nowadays users 's expectations consist more than ever in accessing any digital content anywhere, anytime ! The complete construction of a web page has changed as it now offers specific buttons to share any accessed content to your tweeter, facebook or linkedin account, whether it is text, images or videos! Yes, sharing has now become a complete functionality of web pages, allowing endless possibilities of broadcasting any information on any portable devices! It has become impossible to control the spread of information on the Internet: as soon as content is on line, everyone can access it and share it which means unlimited copies.

We are in the middle of a permanent revolution with the abandon of medium for digital file. Should we worry when the sell of mediums like CD or DVD are falling, whereas the sell of digital file are increasing at an exponential level, as Apple proved it by launching his appstore and itunes?

It is therefore important to understand the shift our cultural industries are facing and help copyright law to acknowledge the existence of the right of sharing, by finding a new balance between two opposite interests: the user's interest to access and share a digital content, and the interest of the creator of that content to be recognised as such and get paid for his contribution.

In fact the question is no longer about how stopping and condemning users from sharing copyrighted content, but how to ensure a fair compensation for copyright owner.

This paper offers a careful study of the right of sharing and why copyright law should no longer ignore its existence. It explores the possible foundation of this notion into the mechanisms of "copy left" suggested by Mr Richard Stallman's Free Software Licence, the similar mechanisms of Open Source software licence, and finally the Creative Commons licence for any non-software contents.

The paper underlines the interest for copyright owner to use the digital technology to broadcast their work but also the need of ensuring a legitimate compensation. Only then will legal disputes for online piracy be able to cease.

On this last point, the article makes a proposition with the concept of Global Licence as a mean to ensure the expected compensation.

D. Mccallig

Dealing with Digital Remains: Is Recognising Digital Assets as Probate Property the Solution?

Through the use of social media, e-mail and other online accounts our lives and social interactions are increasingly mediated by digital service providers. As the volume of these interactions increases and displaces

traditional physical forms of communication questions regarding access to and control over the digital remains of deceased relatives and friends contained in online accounts takes on greater significance.

This new phenomenon of the digital age raises many novel legal questions, such as, what rights, if any, do surviving family members or heirs have with respect to the online accounts of their loved ones? Can one bequeath social media, e-mail or other online accounts? In an attempt to address some of these issues the Uniform Law Commission (ULC), in the United States, has begun work on recognising digital remains as probate property and is drafting legislation that will vest fiduciaries with the authority to manage and distribute a decedent's digital assets.

Following a brief description of the current responses of users (password sharing), surviving family members, online service providers and legislators to this issue, this paper questions whether the proposed solution of recognising digital remains as probate property provides an adequate response. Firstly, it is argued that seeking to transpose real world succession rules and norms to digital remains fails to properly conceptualise what a decedent leaves behind in digital media and why these remains are important. Digital remains are not suited to a one size fits all solution. For example, the community and relational aspects of the decedent's digital persona may be lost in the transmission of social media accounts as mere probate property.

Secondly, the current proposals from the Uniform Law Commission raise further legal issues which require deeper analysis. The proposals do not resolve issues with respect to situations where a service provider's terms of service, which a decedent agreed to while alive, conflict with the proposed legislation. The range of powers which a personal representative will gain under the proposed legislation is too broad and could have unintended consequences. Neither is the extent of liability of a personal representative for a devastavit (wasting of the assets) clearly established or defined.

Finally, it is argued that even with such legislation many online service providers cannot be compelled to disclose the contents of accounts due to other statutory protections. Seeking to enforce such a solution upon service providers, without their cooperation, is likely to fail. The most practical method to deal with this issue is for online service providers to offer the choice to users of whether, or not, they wish to assign their online accounts to beneficiaries. Such service provider engagement resolves many of the legal obstacles and provides for tailored solutions more suited to the diverse range of digital remains and their contexts. Therefore, the solution is to create a regulatory framework or environment that encourages the required service provider cooperation.

A. Nicholson

Old Habits Die Hard?

A study of *Used Soft v Oracle* as a preservation of exhaustion as an establishment of a second-hand market for digital consumer content through the medium of online and offline equivalence.

In September 2012, Bruce Willis unwittingly caused society to question the ownership status of their digital content, whether it was the music on their iPods or the eBooks on their Kindles. While claims that the actor was suing Apple over his inability to bequeath his iTunes collection to his children were probably untrue, the engrossing ownership questions remained. The Willis debacle brought such questions into the collective consciousness of a public who had until then been content to click "I agree" on licence agreements without any intention of ever reading or appreciating just what they were agreeing to.

For those in European legal and technical circles, such questions rose to the forefront of consideration in July 2012, when the Grand Chamber issued its decision on *UsedSoft GmbH v Oracle International Corp*. The decision declared that those who download large-scale, enterprise-wide commercial software in fact own it, and thus its author's distribution right under the Software Directive is "exhausted". Many commentators welcomed the decision as the definitive establishment of a second-hand trade in download-only software. The implications of the decision are also potentially massive for the future of the second-hand trade in eBooks, computer games

and other digital content, despite UsedSoft relating to the Software Directive, and other content generally being governed by the InfoSoc Directive.

This essay seeks to pull the second-hand market in digital consumer content from the “legal black hole” within which it is said to exist and attempt to make predictions about its future. It will be demonstrated that the deeply purposive and principled nature of UsedSoft means that the decision is an extremely strong indicator of how the ECJ would react if requested to make a ruling on this market. There exists very clear jurisprudential intent in UsedSoft, built upon foundations of the principle of “online and offline equivalence” discussed most clearly by Chris Reed. While the principle is not directly referred to by the ECJ, it is argued that there is enough evidence of its presence to conclude that it strongly influenced its reasoning, and that appreciating its fidelity to the principle makes it possible to predict the future in a relatively assured manner.

This is explained in three sections. The first seeks to summarise the principles which were foundational to the Court’s decision. The second section of the essay looks at the decision itself through the lens of these principles, homing in on the parts of the decision that are most relevant to the future of the second-hand market for consumer content. The final part of the essay looks to the future, examining whether and how the established principles might survive in the face of new technology and business models deployed by content providers to evade the more consumer-friendly principles of UsedSoft. The essay concludes that while it is relatively simple to envisage the impact on the second-hand market for consumer content that the decision immediately implies, whether this market can survive long-term in reality is far less clear.

D. Mendis

“The Clone Wars”: The Rise of 3D Printing and its Implications for Intellectual Property Law – Learning lessons from the past?

3D (three-dimensional) printing or additive manufacturing has the ability to print almost anything – from shoes, bicycle parts, chocolates to toys – and is expected to transform our lives. At present its use is confined mainly to hobbyists with some interest being shown in certain commercial sectors (such as medical, automobile, food industries). The main barrier at present lies in the price of such printers which prevents it from being a consumable. However, the fact that it is being used more and more in different industries resembles the early days of the personal computer revolution and in many ways, the 3D printing movement is on its way towards its ‘Microsoft/Macintosh moment’. We are on the cusp of having personal 3D printers in our homes – and on the cusp of fresh challenges for copyright, design, trademark and patent holders. The problems, although minimal have already begun to emerge.

A case – although settled out of court – between Games Workshop a British games production and retailing company and Thingiverse an online platform which allows for the sharing and downloading of 3D printed objects, brought to the forefront implications for intellectual property law. The introduction of a ‘physibles’ section by illegal downloading site Pirate Bay raised further concerns in relation to 3D printing and illegal downloading. As such, parallels with the entertainment industry can be drawn and lessons can be learned.

This paper will outline the rise of 3D printing in recent times, particularly its inroads into the domestic market and focus on intellectual property (IP) implications following on from the Games Workshop-Thingiverse case. What are the advantages and disadvantages of 3D printing and particularly what are the Intellectual Property implications of this emerging technology? The paper will draw a line through the challenges faced by IP law as a result of this technology.

In looking to the future and in drawing parallels with the entertainment industry and the download culture, the paper will consider whether any lessons can be learned from the Napster revolution and if so, how they can be applied to this new type of technology which will most certainly challenge IP laws. The paper also suggests that rather than focusing on stringent IP laws the future lies in adopting new business models in adapting to this new technology. In conclusion the paper will present some thoughts for the future in taking this suggestion forward.

M. Gillen

The Software Proteus – usedSoft changing our understanding of software as “saleable goods”.

The decision in CJEU Case C-128/11 (Oracle v usedSoft) on a reference from the Bundesgerichtshof (Germany) decided 3 July 2012 is essentially a tale of the interpretation of two Directives. On the one hand the Information Society Directive 2001/29/EC which states that: “(Recital 28) Copyright protection under this Directive includes the exclusive right to control distribution of the work incorporated in a tangible article. The first sale in the Community of the original of a work or copies thereof by the rightholder or with his consent exhausts the right to control resale of that object in the Community. This right should not be exhausted in respect of the original or of copies thereof sold by the right holder or with his consent outside the Community... (Recital 29) The question of exhaustion does not arise in the case of services and on-line services in particular. This also applies with regard to a material copy of a work or other subject-matter made by a user of such a service with the consent of the right holder...” Furthermore, the Information Society Directive also makes it clear that the rights to communication cannot be exhausted and the right of distribution cannot be exhausted except by first sale with consent.

On the other hand the Software Directive 2009/24/EC clearly states: “2. The first sale in the Community of a copy of a program by the right holder or with his consent shall exhaust the distribution right within the Community of that copy, with the exception of the right to control further rental of the program or a copy thereof.” Thus the question becomes is software licensed for use when it is downloaded by a subscriber for use or is it sold. The traditional response based, in part at least, upon the intangible nature of the product is that it is licensed not sold and therefore right exhaustion cannot apply and the licensee will be bound by the conditions laid down by the licensor.

In usedSoft however the CJEU takes a step away from this situation. They assert that Article 4(2) of the Software Directive is an autonomous concept creating a special and distinct meaning which they then apply to the facts of this case to find that a transfer of use for value for an unlimited period constitutes a sale. Furthermore, “47. It makes no difference, in a situation such as that at issue in the main proceedings, whether the copy of the computer program was made available to the customer by the rightholder concerned by means of a download from the rightholder's website or by means of a material medium such as a CD-ROM or DVD.”

Finally, they echo the opinion of the Advocate General in asserting that: “...if the term 'sale' within the meaning of art 4(2) of Directive 2009/24 were not given a broad interpretation as encompassing all forms of product marketing characterised by the grant of a right to use a copy of a computer program, for an unlimited period, in return for payment of a fee designed to enable the copyright holder to obtain a remuneration corresponding to the economic value of the copy of the work of which he is the proprietor, the effectiveness of that provision would be undermined, since suppliers would merely have to call the contract a 'licence' rather than a 'sale' in order to circumvent the rule of exhaustion and divest it of all scope.”

This then clearly raises questions about the future business model software developers will have to use to constrain the resale of their goods and future liability relating to it. This paper will explore these broader economic implications of the case and the legal/policy shifts it may signal.

S. Basu & A. Nair

India's Dilemma: Political Sensitivity and Freedom of Expression

The meaning as well as the scope of freedom of expression, which is protected under the Constitution of India, has been tested in recent history, due in large part to heightened political sensitivity and a culture of appeasement. In a significant number of recent cases, attempts were made to regulate and censor social media on the grounds of ‘offensiveness’ and ‘objectionable’ through the application of Section 66A of the Amended Information Technology Act, 2008 of India. Whilst legislations with myopic provisions are nothing new in

India, the aim of this paper is to critically analyse whether it is the application of the law – and not the law itself which is responsible for threatening freedom of expression.

The right to freedom of speech and expression is highly qualified, and is subject to what the State deems to be “reasonable” restrictions. However, prohibition of expression on the grounds of “offensiveness” has undesirable consequences for liberal democracies. We argue that the “freedom to criticise” should be protected to ensure that the diverse opinions are sincerely held within society, and this should apply equally to social media. Instead, the recent cases in this context highlight a culture of intolerance among the paranoid political elite towards criticism as they fail to distinguish between forms of criticisms that do and do not actually threaten public order, decency or morality.

Education – LT3

Y. Mansour

Teaching Electronic/IT law modules – Comparing both the Jordanian & British Teaching Systems.

In 2009 the Jordanian Ministry of Higher Education declared that all law departments must teach at least 3 electronic law modules at undergraduate level for the purposes of recognizing the law degree the universities award. Therefore, since the academic year 2010/2011 all Jordanian law departments have revised their undergraduate law curriculum and have included three new law modules, namely: Electronic Commerce Law, Electronic Crimes and Electronic Administrative Law & E-Government.

This paper looks into the many problems that arose from the implementation of the new modules, from lack of academic resources, the high repetition among the three new e-modules and, maybe more importantly, the difficulties faced by law students and lectures. Furthermore, for finding solutions to the problems, the paper compares the Jordanian system with some of the British universities systems in teaching electronic/IT law and considers the advantages and disadvantages of both.

A. Brown

This paper will introduce an interdisciplinary course “The Digital Society” offered to first year students at the University of Aberdeen.

Method this is offered to around 200 students from throughout the University, with teaching from experts in Computer Science and Law. Teaching is based on problem based team learning (for example debates and posters) with an element of peer review, supplemented by introductory lectures, and demonstrator led workshops.

Argument the paper will share the experiences of the teaching team and explore possible lessons for teaching and learning in law in the future.

S. Woodhouse, M. Waite, J. Marshall

The development of pro-bono clinical legal assessment in response to intersecting agendas: legal aid, professionalisation, and evolving legal advice paradigms.

THEORETICAL FRAMEWORK

In 1996 Richard Susskind (Susskind (1996)) plotted a technology -inspired trajectory for the legal profession in which he saw significant shifts from reactive advice towards a more interventionist model of integrated risk management and more open access to legal advice. Susskind’s model extolled the social virtues of a system which would open up effective legal advice channels to users who would not otherwise access it or who would defer access until it was necessary - after a dispute had arisen. A “virtuous circle” of better general access to legal advice, leading to reduced litigation, but being fulfilled by more intelligent legal profession intervening

more economically but far more broadly than in earlier times seemed to promise a promising future for the role of IT in the law.

This paper will explore how University based pro-bono work may play a role in the future of the legal advice sector, and as with Susskind's attempt to draw together multiple connected technologies, social expectations, and professional imperatives we too will consider the complex relationship between the legal advice sector, government legal aid policy, emerging themes in higher education for lawyers and finally the role of technology both for those "inside" and "outside" of the Law School.

We will argue that a further dimension to Susskind's pressurised legal market has been brought about by the increase of pro bono work conducted by University-operated Law Clinics in England & Wales. We will outline the way in which pressures within the legal market have impacted on the trajectory of the Liverpool University Law Clinic, both in terms of priorities for legal advice topics and the adoption of IT to generate and promulgate advice to a wider audience. We will also discuss overlapping agendas relating to the professionalisation higher education, the development of professional practice in clinical legal education, and the need to ensure adequate oversight of students engaged in clinical work to explain the evolution of a new method of legal advice management operated by the Liverpool Law Clinic - the use of wikis to support the drafting of web-ready advice leaflets on housing law topics to reach a growing latent legal market. Our own use of wikis will be discussed in the context of comparative work on supporting collaborative writing (Judd et al (2010)) and developing professional skills (Varga Atkins et al (2010)) in university students.

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A. Muntjewerff

Learning and Instruction in the Digital Age

To become a legal professional a person has to acquire certain knowledge and skills. The transfer of the knowledge and skills is organized and accredited within an institution as a school or a university. So law students go to university to learn to become a legal professional, and the universities organize that this learning takes place.

How people learn and what institutions can do to enhance learning is the major focus of research in the field of learning and instruction. There are many theories on learning and many theories on instruction . However, one of the main statements made is that the major goal of instruction is to enhance efficient and effective learning. The design of processes and resources for facilitating learning is the object of research of instructional technology or educational technology . We might say that 'the Digital Age' requires changes in the processes and resources for facilitating learning. However, what changes should be made and on what ground? Merrill (2007) being in the field of instructional technology for forty years and founding father of computer assisted instruction, states that the first principles of instruction are and remain: activation, demonstration, application and integration. A major meta-analysis of instructional research outcomes by Hattie (2008, 2012) shows that one of the major factors in effective learning is related to feedback.

In this article we will describe a methodology for the design of resources for effective learning in the Digital Age which takes into account the first principles of instruction and the importance of (immediate) feedback. We will illustrate the methodology by describing the design of coaching systems for learning legal tasks.

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How people learn and what institutions can do to enhance learning is the major focus of research in the field of learning and instruction. There are many theories on learning and many theories on instruction . However, one of the main statements made is that the major goal of instruction is to enhance efficient and effective learning. The design of processes and resources for facilitating learning is the object of research of instructional technology or educational technology. We might say that ‘the Digital Age’ requires changes in the processes and resources for facilitating learning. However, what changes should be made and on what ground? Merrill (2007) being in the field of instructional technology for forty years and founding father of computer assisted instruction, states that the first principles of instruction are and remain: activation, demonstration, application and integration. A major meta-analysis of instructional research outcomes by Hattie (2008, 2012) shows that one of the major factors in effective learning is related to feedback.

In this article we will describe a methodology for the design of resources for effective learning in the Digital Age which takes into account the first principles of instruction and the importance of (immediate) feedback. We will illustrate the methodology by describing the design of coaching systems for learning legal tasks.

F. Grealy, J. Bainbridge, P. Maharg, R. Mitchell, J. Mills, F. Grealy, R. O’Boyle & K. Counsell

iLEGALL (iPads and Legal Learning): mobile legal learning

This project in its second year set out to gather information about the potential use of mobile technologies in legal education. This presentation proposes to provide an update on progress so far. The project is based in three law schools in three jurisdictions (Northumbria (England), Glamorgan (Wales) and the Law Society of Ireland, in Dublin), and with different categories of user groups. We are therefore continuing to research (bearing in mind the as yet largely descriptive literature around the use of iPads in law firms) how different user groups use the mobile environment for legal learning.

The main hypothesis of our project is that the barriers to an understanding and adoption of mobile technology in legal education, as in higher education generally, are not technical only but also social. We further hypothesise that there are two causes: staff are uncertain how to design and implement such technologies; and there is currently too much institutional investment in replication of conventional modes of teaching through the unimaginative use of technologies such as institutional VLEs. Whilst the innovative use of technology may be encouraged; insufficient institutional planning and support that is not necessarily geared to deal with unique issues such as downloading applications at the outset created challenges in some law schools.

Our project therefore has two aims:

1. Preliminary investigation of the inscriptions, conversations and social environment that result from use of a mobile device.

This involved the use of iPads on a pilot project with students on a Business Law & Practice module on the LPC at Northumbria University. Devices were issued to students and their use was tracked over the course of the module. Some aspects of content were rewritten to adapt to a mobile environment and module structure will also be re-designed to align with transactional learning principles. The Diploma Programme at the Law Society of Ireland uses iPads on a number continuing professional education courses and has evaluated the student experience both from an educational point of view in terms of mobile professional learning and also from the point of view of integrating the iPad device into daily professional practice. The Legal Practice Course (LPC) at the Department for Law, Accounting and Finance, in Glamorgan has evaluated the use of iPads for trainee solicitors.

2. Comparison of the functionality that students use in the mobile environment with the functionality of the environment currently available to them in the university VLE, Blackboard.

Currently, VLEs such as Blackboard afford very little interaction between students, except on highly constrained applications. There is also little opportunity for students to use PIMs on a professional basis. We shall compare student responses generally to the two environments.

I. King & C. Edwards

Adapting to the New Legal Services Market: Can Law Firms Avoid Becoming a Comet?

In *The Future of Law* (1996), Richard Susskind predicted that new technologies would change beyond recognition the way in which the legal marketplace would operate and how legal services would be delivered. In *The End of Lawyers? Rethinking the Nature of Legal Services* (2008), Susskind expanded on and developed his theme by arguing that the position of traditional lawyers would be eroded if not displaced by the twin pressures of a demand for greater legal commoditisation and the ever increasing uptake of new legal technologies. We can see clear evidence from the High Street that traditional retailers such as Comet, Jessops and Blockbuster who fail to adapt to the changing nature of the consumer market have gone under, whilst new businesses such as Amazon, Netflix and Love Film have prospered. If there is encouragement for traditional law firms, perhaps it lies in the experience of traditional retailers like Argos and Next who have managed to survive by adapting their business model to embrace the increasing consumer demand for “click and collect”.

So how will the traditional legal market respond, and what impetus for change will be provided by the introduction of the Alternative Business Structure (ABS)? Ever since the concept of the ABS was introduced by the Legal Services Act 2007, opinions within the legal community have been sharply divided. Some see them as revolutionising the legal market and the way in which legal services are delivered, introducing big brands such as the Co-Op, Direct Line and the AA to the market for the first time. For many this is not viewed in a positive light; the Law Society has conducted an advertising campaign extolling the virtues of the traditional high street solicitors practice; Quality Solicitors, a network of independent solicitors, has recently conducted a viral advertising campaign contrasting “Faceless legal advice from supermarkets” with their own solicitors who “know their onions”. Recent research by The College of Law suggests that only 1% of law students would choose to work for an ABS over a traditional law firm. For others change has to be positive, and the introduction of greater competition and choice to the market can only be a good thing, with consumers being the big winners. In his latest book, *Tomorrow’s Lawyers: An Introduction to Your Future* (2013), Susskind encourages new and aspiring lawyers to embrace change if they are to succeed in this new legal landscape.

It is certain that some big players will enter the market; indeed, the Co-Op has been in the legal services market since 2006 and already has an ABS licence; others will certainly follow. These new players will surely provide legal services in a very different way to traditional law firms. However, many ABS applications have come from existing law firms, so in fact the greatest impact may be to encourage traditional firms with entrepreneurial foresight to grasp the opportunity to provide better, more competitive and more relevant services to their clients. Are law firms now recognising the need to adapt their business model?

This survey will attempt to answer this question by analysing the limited evidence so far from the applications received by the Solicitors Regulation Authority, and the relatively small number of licenses issued to date. It will in particular consider the views of local and regional law firms, some that have either already applied to convert or are actively considering doing so, looking at their motivations, hopes and fears. How do they view the future? Do they recognise a need to adapt, or can they survive and prosper using traditional models? If they fail to adapt, will they become a Comet?

Technologies, Innovation & Justice – SR124

J. Carr

The internet and children - still in the foothills with all the big battalions occupying the high ground

On the one hand the big businesses which operate largely or solely over the internet want to maintain maximum flexibility of action. They want a minimum of regulation and the fewest possible technical or other controls. They rarely rejoice at the idea of having to spend money re-engineering their systems if such expenditure is not more or less directly tied in with the prospects of increased profits. Elements of civil society who see the internet primarily as a technology of liberation frequently find themselves aligned with internet business owners in wanting the fewest possible controls or restraints. In relation to children's position as internet users their almost unvarying message is it's all the responsibility of schools and parents in particular to teach children how to behave when they go online or they should closely supervise their children's use of the new technologies.

In the world of ubiquitous internet access through multiple devices, in a world where a vast range of families and children are regular users of the internet these arguments seem increasingly thin.

How and where do we draw a line? How do we strike a proper balance? How high a priority do we rate online child protection against other social goals? Do we have the right institutional framework for tackling these issues?

S. Dempsey & R. O'Shea

Promoting Legal Fairness Through Data Analysis

We propose a discussion stream which would seek to identify how data collection, aggregation and analysis, nationally and inter-jurisdictionally, could increase the fairness of the civil justice system. The stream will consist of a presentation about our research activities; collecting and analysing data from the "in camera" family law hearings in Irish courts. The presentation will show how quantitative analysis of case data may be used to identify bias in judicial rulings and even systemic bias in the court system. We will then identify how sharing anonymised information about family law hearings inter-jurisdictionally may be used to identify differences in efficiency, case progression and ruling consistency between jurisdictions.

During the participatory discussion we will invite the audience to identify other branches of law and case studies where inter-jurisdictional hearing information sharing and analysis would be beneficial in promoting fairness of legal outcomes.

A. Garde & E. Boyland

The Regulation of Unfair Commercial Practices and Children's Health - A Case Study on the Marketing of Food to Children

This paper proposes to discuss the extent to which unhealthy food marketing impacts negatively on children's health and the extent to which it should therefore be regulated.

Emma Boyland (School of Psychology) will present the evidence base supporting the regulation of food marketing to children, whilst Amandine Garde (School of Law) will discuss how food marketing has been regulated in Europe and how much more remains to be done in this field. In particular, the paper will address the three main arguments which industry operators have put forward when opposing the adoption of regulatory standards in this field:

1. The argument that marketing is a form of speech and is therefore constitutionally protected;
2. The argument that regulation is paternalistic (the "nanny state" argument); and

3. The argument that self-regulation is a far more effective form of intervention than State regulation.

J. Bryce

Young People and Social Media: Users, Consumers, Commodities?

Social media are an increasingly integral part of everyday life in contemporary society. The ability to comment and interact using these technologies poses a number of regulatory and legal challenges which reflect shifting conceptualisations of privacy and identity, as well as the commercial and non-commercial use of personal data. This is particularly important given that many of the risks to which young people are potentially exposed online (e.g., online sexual exploitation, cyber bullying) are associated with disclosure of personal information. Public discourse about internet safety focuses on issues of vulnerability, protection and regulation of online contact and content. There has, however, been less empirical and policy related attention on the commercial exploitation of the data generated by young peoples' use of social networking sites, search engines etc.

This paper will examine a number of key issues which relate to the commercial and privacy dimensions of young peoples' online behaviour and interactions. It will consider the developmental functions of privacy and adolescent understanding of both its commercial and interpersonal aspects. This includes awareness of the business models which underpin social networking sites, the associated commercial exploitation of their personal information, contractual capacity and consent. Consideration of these issues will form the basis of specifying a research agenda for understanding the commercial dynamics of online privacy in the context of young peoples' online behaviour, rights and responsibilities.

The paper will argue for greater consideration of these issues to be given at the empirical, legal and policy related level, with specific focus on addressing the need to balance the rights and responsibilities of young people and service providers. Framing this discussion in the context of rights and responsibilities represents a shift away from discourses focusing on the protection of young people in digital environments, and recognises the need to increase their agency in the control and management of their online identities and data. This approach also highlights the need for greater action by service providers to move beyond articulating a commitment to young peoples' rights to the implementation of systems which recognise the importance of privacy and data protection for younger users. This research agenda should take a child-focused and evidence-based approach to understanding the dynamics of the commercial and data protection dimensions of young peoples' online behaviour. This emphasises the need for qualitative and quantitative research which examines their concerns about these issues, and engages with them as active stakeholders within the digital environment.

Y. Mansour

Children as Mobile Content Consumers

Children form a significant minority amongst mobile content consumers. Mobile commerce is particularly attractive to children because of the personal nature of the mobile phone, because of the type of products available via m-commerce (e.g. music, music videos, games, jokes and pornographic material) and their low value and because of the payment mechanism used and the relative privacy of mobile communications, i.e. freedom from parental supervision.

This paper examines some of the key regulatory issues arising from m-commerce involving minors. It discusses why children m-content consumers' protection is a particular and possibly unprecedented challenge for regulators and, as one that is much more urgent in m-commerce transactions than other forms of electronic transactions. Also, in particular, it considers the foundational question of whether m-contracts with minors are in fact valid and the consequences of their invalidity. Finally, it examines the effectiveness of the protective measures, if any, in place to protect minors from overspending and from harmful material.

J. Hornle

Hardcore porn on the internet - the regulators response?

The recent arrest of the German porn baron Thylmann in Belgium by an European Arrest Warrant and his extradition to Germany has brought his online porn empire under the spotlight. His sites are reported to generate 16 billion visits a month and 8 of the 15 most popular porn sites are linked to Thylmann. Many of his sites, including YouPorn contain no effective age-verification and contain content which involve harmful practices such as fisting which would be regarded as obscene under the laws of Germany and the UK. This paper will look at the jurisdictional issues in regulating online porn and analyse the scope of regulatory responses.

A. Nair

Protecting children: Internet pornography and regulation

Whilst there is some degree of consensus internationally with respect to illegalising child pornography, legislative attempts to protect children from exposure to adult pornography have had relatively very little success. For instance, legislative attempts in the United States such as the Communications Decency Act 1996 and the Child Online Protection Act 1998, which were aimed at protecting children from internet pornography, were unsuccessful following the courts striking down the relevant provisions as unconstitutional. More recently, the UK government decided against implementing a scheme where users have to opt-in in order to access pornography on the internet. The State does have a compelling interest in the protection of children, but to balance this with other conflicting rights such as free expression and privacy has proved to be a delicate act. Recent reports that suggest that children are easily accessing pornography resulting in a negative impact on their attitudes to sex and relationships have reinvigorated the debate of how best to protect children from inappropriate content on the internet, and will be the focus of this discussion.

A. Brown

“Energy, innovation and technology - without (legal) boundaries”

Background: What is the relationship between energy and innovation, and between innovation and intellectual property? And how do these relate to other forms of regulation which are relevant to energy, for example the Kyoto Protocol and attempts by the UK and Scottish Governments to ensure energy security and protection of the environment? As the Kyoto Protocol has been extended, as the Scottish Government sets new targets for energy and innovation for 2020, as activists challenge the power of large companies, it is timely to consider these questions.

Framework: This paper will explore a project funded by the Carnegie Trust “Could new approaches to innovation in the energy sector be acceptable in Scotland?” It will present the results of a pilot set of empirical interviews carried out in this project, including with experts from the fields of intellectual property, oil and gas, investment on the energy sector, policy making, government and industry bodies and university technology transfer.

Argument: The paper will evaluate lessons from these interviews regarding innovation and energy, and the importance of IP and other factors in encouraging (and preventing) greater innovation and wider dissemination of it. It will also consider the extent to which issues such as compliance with TRIPS, Kyoto Protocol and human rights obligations are being ignored by those engaged in innovation in the energy industry, and the possible problems which could arise in the future. The paper will then explore further avenues for research and engagement.

N. Webber

Law, culture and massively multiplayer online games

In recent years, massively multiplayer online games (MMOGs) have become an international phenomenon. Millions of people can now play together and, by means of the internet, can readily navigate the boundaries

between nations, languages and, of course, legal jurisdictions. In cultural terms, MMOGs with persistent world environments are of particular interest: these are typically played on servers with capacities of thousands of players, and when players stop playing – for the night, perhaps, or to go on holiday – the game does not stop with them, continuing to run whether or not anyone is there to play. The communities around some of these games are huge – World of Warcraft, for example, could boast some 12 million subscribers at its peak – and in some games all subscribers play together, creating a people-rich environment of a size equivalent to a large city or small nation.

In this paper, I will explore three themes. Firstly, I will talk about the idea that games of this kind are legal spaces. It is readily apparent that they are cultural spaces, where playing and interacting take place; that they are social spaces, where communities are formed and consensus arise; and that they are economic spaces, where resources are obtained, traded and consumed. Yet within and around these other practices, the interactions, consensus building, and trade, we can see a dimension which in an offline world is articulated through law: regulation, the codification of complex political, social and economic agreements, and the identification and punishment of deviance.

Secondly, I will explore the idea that games need law and legal expertise. Games are traditionally rule-based, videogames even more so than others: in a videogame, you not only have rules which you ought not to break, but you also have many rules that you cannot break, due to the nature of the system under which you play. I will argue for the importance of culture in these spaces, and the corresponding importance of careful and thoughtful regulation. Much as in the offline world, players may act in ways that may seem disruptive or unpleasant but are not necessarily negative, and we must interrogate broad-brush treatments of player activities when considering regulation, in order to avoid stifling culturally valuable practices. Furthermore, the skills of those with a clear understanding of the subtleties of lawmaking are perhaps even more essential in an environment where regulation is often not a matter of may or may not but, indeed, can or cannot.

Lastly, I will argue that law, and legal experts, need games. From games of this kind we can learn an enormous amount, knowledge that is applicable beyond games, perhaps most importantly with regard to regulation of the internet. Recent political and legal processes seem to indicate that this is something we continue to do poorly. It is, for perfectly good reasons, difficult to readily understand the implications of implementing laws which affect virtual spaces; but in the world of online games, we are presented with a host of different regulatory environments, and potential partners who are willing to experiment. Using the case study of EVE Online, a game ostensibly about space battles but more realistically about free market economics, it is possible to see not how we might gamify law as such, but rather how we might lawify games. In so doing, we have the opportunity to learn rapidly how people might respond to different kinds of present and future online environments: for just as in games, on the internet more generally it is possible to set rules which cannot readily be broken, threatening to compromise not only cultural activities but the careful balance of power between citizens and their nominated lawmakers.

N. Scharf

Digital Rights Management: The Phantom Menace

This paper will analyse the role of Digital Rights Management (DRM) in the digital age as it affects the consumption choices of users. Recent developments in digital technology and content distribution necessitate a reconsideration of the operation and potential impact of DRM on users in relation to evolving, streaming-based, methods of content dissemination. Sites such as YouTube and Spotify have contributed to ‘distracting’ users from downloading content; familiarising them with on-demand streaming and allowing them to consume the content in ‘real time’. This has now become a major standard in the online distribution of digital works. It is crucial to appreciate that digital technology and the market for digital content share a close relationship and as such, the focus by rightsholders has primarily been in relation to these areas in order to maintain their rights. Specifically, copyright has been deployed to regulate the operation of digital technology and consequently, the market for digital content as a result of legal action against peer-to-peer (p2p) networks; the outcomes of which have negated this technology as a viable distribution mechanism. In addition, copyright has also served to

regulate the market for digital content, through the operation of DRM. DRM is now strongly interlinked with new and developing methods of streaming-based content distribution and has, in the past, been criticised for limiting the usability of content, failing to be able to distinguish between fair and unfair copying, and for (potentially) being perpetual.

Now however, it may also operate now as an ‘omnipresent connectivity’ and is an inescapable necessity for streaming-based content distribution mechanisms. The interconnected nature between products and content (even if the content is DRM-free) further highlights the importance of rightsholder-controlled digital distribution networks. In this respect, copyright law has increasingly moved away from regulating content itself, to regulating new and emerging content distribution technologies which in the current context, it is argued, raise important tensions with the Internet’s design architecture; notably, the end-to-end (e2e) principle.

Ultimately, it is asserted the operation of copyright in these areas has been to detrimental to the user, through negating the opportunity for new distribution mechanisms to emerge and forcing consumers into choosing between rightsholder-controlled market outlets. Users are interested in the content that gives them greater levels of freedom and in this sense, DRM relieves users of the ability to choose between content and perhaps even content providers. Usage rules should, in theory, result from a bargaining process in which users are involved, but this has not been the case; with the user left beholden to the outcome of unilateral, or bilateral decisions (by, or between, rightsholders) made regarding content distribution services which users are dependent on in order to access and engage, and create new content.

F. Moreno

The Incompatibility of the Digital Economy Act 2010 Subscriber Appeal Process Provisions with Article 6 of the Convention

Through case-law research, this paper examines the compatibility of the Digital Economy Act 2010 (DEA) subscriber appeal process provisions (section 13 of the DEA) with Article 6 of the European Convention on Human Rights (ECHR or Convention). It addresses the following research question: could the DEA subscriber appeal process provisions be tantamount to a violation of subscribers’ right to a fair trial, under Article 6 of the ECHR?

Article 6 is to be interpreted broadly and without being subject to exceptions. Furthermore, it has been developed through case-law and has an “autonomous” meaning – i.e. it is not restricted to criminal but may also include civil and administrative law, such as, Ofcom’s Initial Obligations Code (the Code).

The European Court of Human Rights (ECtHR or Strasbourg Court) case-law observes that in court cases, principles- (such as- equality of arms, adversarial proceedings and admissibility of evidence) must always be satisfied. Therefore, since section 13 of the DEA is intrinsically connected with such principles, this paper examines three core elements:

- The ECtHR’s principle of equality of arms.
- The ECtHR’s principle of adversarial proceedings.
- The ECtHR’s principle of admissibility of evidence.

In the judicial review decision of the DEA, namely, *BT v State*, the Court of Appeal found Parker J’s ruling at first instance, “extremely thorough, clear and cogent”. Thus, drawing, among other things, on the ECtHR’s case-law, the Code’s provisions, *BT v State* (at first instance and on appeal), the Explanatory Notes to DEA, the European Data Protection Supervisor’s (EDPS) opinion, independent expert evidence, and academic law

journals, this paper assesses the compatibility of section 13 of the DEA with the ECtHR's principles of equality of arms, adversarial proceedings, and admissibility of evidence.

It concludes that in light of Article 6 of the ECHR, taken as a whole, the DEA subscriber appeal process provisions could infringe the above three principles of the Strasbourg Court, thus being tantamount to a violation of subscribers' right to a fair trial.

Technologies, Innovation & Justice – SR125

L. Evans

The right to be forgotten against the possibility: forgetting the user in the digital media age.

At present, the E.U. Directive 95/46/EC grants individuals the right to access their personal data from third parties that hold and control their personal data (such as websites and employers). New proposals extend that right by requiring an organisation that controls personal data about users (a "data controller") to delete all such data and abstain from further disseminating it, if an individual requests the execution of this activity. This new right is a response to concerns about personal data stored on by companies that operate through Internet and web-based portals, including social networking sites. Given that Article 17 of the EU Data Protection Directive provides the data subject's "right to be forgotten" and to erasure it goes further: it elaborates and specifies the right of erasure provided for in Article 12(b) of Directive 95/46/EC and provides the conditions of the "right to be forgotten", including "the obligation of the controller which has made the personal data public to inform third parties on the data subject's request to erase any links to, or copy or replication of that personal data." This instance of the "right to be forgotten" presupposes a separation between the law/legal rights of man and the material conditions of being in a world of computational devices and digital storage. The provision of the right for data to be forgotten is a response to a technological environment where there is a small, manageable amount of data about the person collected by a manageable number of agents and organisations. The kind of data production and collection environment anticipated in the legislation is now an anachronism as the modern individual embraces computational devices that produce and submit information to databases on location, activity and individual choices such as internet sites visited at all times of the day, often beyond the conscious awareness of the user as devices execute computational code in a manner withdrawn from circumspection and the graphical user database, and have continual connectivity to other devices and databases through 3G/4G networks and wi-fi. The legislature has neither anticipated nor reacted to the presence of computation in every aspect of modern life and the encoding of life through devices appropriately. The technological/computational mode of existence where users exist with computational devices and services as a part of their everyday functioning results in two particular conditions which make the execution of the legislation difficult: firstly, there is the possibility (and probability) that the users are either unaware or have forgotten the extent of their own digital data footprint as they engage with a multitude of services in their everyday use of computational devices; secondly, the legislation does not take into account fully the geographically distributed nature of data storage as the movement of data electronically, between device and server and across distributed storage networks. The idea of a "right to be forgotten" that can be clearly defined and enforced may have rhetorical purchase but it comes with some practical problems. Consider the enforcement of such a right in an environment where individuals are immersed in information and use communication technologies extensively. One should be mindful that individuals use communication tools as often as they can for convenience. One can only hazard a guess the sheer scale of the cognitive load, not only in terms of individuals' daily activities (their computational mode of existence) but also the amount of data collected on us or about users in the world today. The paper challenges the political and legal rhetoric and calls for an urgent reassessment of the relationship between users and device and to reposition the user as a "digital citizen" rather than a "data-producing agent". To the extent that such an argument is well-founded the paper offers some insights on how legislation may re-approach this new entity of "digital citizen". One benefit of framing the "right to be forgotten" in this way is that it makes explicit the assumptions policymakers make about digital technology and digital processes that do not match the use of current devices or near-future advances. These assumptions only persist as long as the "right to be forgotten" continues to ignore the phenomenological and material conditions of existence in the digital age.

E. Kosta

The way to Luxemburg: national court decisions on the compatibility of the Data Retention Directive with the rights to privacy and data protection

The present paper, which is work in progress, aims at evaluating the compatibility of the Data Retention Directive with the rights to privacy and to data protection, in light of the upcoming decision(s) of the Court of Justice of the European Union. In order to achieve its goal, the paper will present and analyse the arguments of the national courts in the aforementioned cases on the compatibility of the national transpositions of the Directive with the rights to privacy and data protection.

A. Gniewek

Privacy Policy for the Cloud service - need for more clarity.

Cloud Computing is a business model that facilitates usage of computing in scalable and flexible manner thanks to the better management of computing resources. It targets not only companies and public sector but also ordinary users. The users look in the Internet for an entertainment (YouTube), socializing (Facebook), tool of communication (Gmail) and many more services. Such services are predominantly based on the Cloud Computing paradigm. Therefore equipping the ordinary users with the knowledge and understanding of the Cloud is indispensable.

From the safety point of view knowledge how the offline computer works is not essential for a user. In the worst-case scenario he will lose his data due to the software or hardware failure. Understanding how the computer connected to the Internet works is much more important for a user. A reasonable user decides with whom he shares his data and on which conditions. He uses firewalls and antivirus programs. And finally appears a new development - Cloud Computing. In Cloud Computing data is processed and stored outside the private environment of home or office. The user has only the preliminary choice of accessing a Cloud. After this decision user's data and/or his "behavior" is often registered and stored by a service. For that reason users should be adequately informed how the technology works.

In order to use a Cloud Computing service offered by means of the Internet Browser, an ordinary user should give his consent to the terms and conditions of the service. Terms and conditions often refer to the privacy policy of the service. The latter was designed to improve the communication between the service company and the user. The paper argues that the core characteristics of the Cloud Computing technology that support the service should be explained in its privacy policy. Argument that the user should not be informed about the shift in the technology as far as it does not change his experience with the service is a controversial one. The Cloud Computing paradigm faces so many different IT (security!) and legal challenges that at least informing the user about the risks is essential.

The privacy policy of the Cloud Computing service should consist of at least four elements: user's control over the data, architecture of the Cloud Computing system, data access and finally the risks associated and the prevention. First of all a user should be informed to what extent does he control his data— ex. rights to the data (ownership), data access and data removal (procedure, format and complete erasure of the data). The second element is the data architecture (ex. data storage, data sharing between different data centers, storage of the backup copies). Finally the 3rd party's access to the data should be clearly explained. Finally the user should be informed about the potential risks associated with processing of his data and the company's attempts to reduce such kind of risks (e.g. built-in mechanisms such as privacy by design, data minimization, erasure procedures).

Many Cloud Computing companies argue that this kind of information constitute a valuable trade secret. It is not the case when the explanation in a privacy policy is general but still applicable to the given service. There is no need to breach the security by exposing the security measures undertaken in the data center but user should be informed that the data is expected to be transferred to the different data centers in different countries. The ordinary user does not negotiate any complex and demanding contract that states the terms of privacy and the

place of processing. Therefore he should be at least informed in the form of the privacy policy about the core elements of the technology in the plain, non-technical language. The visual media like videos, photos and graphs are strongly required in order to facilitate the understanding of the complex IT matters.

Finally the paper compares several Cloud Computing services available over the Internet (Google Privacy Policy, Facebook Privacy Policy, Pinterest Privacy Policy, Instagram Privacy Policy). This example shows the contrast between the claimed in this paper need for more information about underlying Cloud Computing paradigm in the privacy policies and the current practice.

C. Bowden

*Don't Put Your Data in the Cloud, Mrs.Reding**

This multidisciplinary paper assesses the privacy situation of European citizens when their personal data is transferred to Cloud computing systems under United States jurisdiction, with particular reference to the FISA Amendment Act of 2008 (FISAAA). The technical varieties of Cloud computing are analysed in terms of the 1995 EU Data Protection Directive and the proposed new Regulation, and the mechanisms envisaged for legitimating transfers examined, together with the origins of these “derogations” in the Council of Europe's Convention 108.

The analysis of the United States position begins with precedent rulings on the inapplicability of 4th Amendment protections for non-US persons located outside the US, in the light of political and media controversy attending the “warrantless wiretapping” affair and whistle-blower allegations of mass-surveillance programs illegally impacting US persons. The terms of FISAAA §1881 (now also known as FISA section 702) are reviewed with particular attention to the inclusion of obligations on providers of “remote computing services” (absent from the interim Protect America Act 2007), the definition of “foreign intelligence information”, and the concept of ex post facto “minimization” of the privacy consequences for US persons. A pattern of bipartisan secrecy and redaction of documents and court rulings around the time of FISAAA's passage in 2008 and renewal in 2012 is scrutinized together with propaganda efforts by US government and industry to neutralize foreign concerns over Cloud surveillance powers, which strongly indicate a covert policy of concealment by omission, misdirection, and specious reasoning. Alternative technical means of conducting very large scale surveillance of the Cloud are reviewed, as well as architectural specifications emerging from standards bodies. Specific modalities of Cloud surveillance are distinguished from ordinary interception of communications, and brief comparisons made with what can be inferred about “secret interpretations” of section 215 of the USA PATRIOT Act. The EU/US Safe Harbour Agreement of 2000, and in particular the new notion in the EU Regulation of “Binding Corporate Rules for data processors” which was ostensibly devised to be suitable for Cloud transfers, are then critiqued as vulnerable to foreseeable relevant risks, and anomalies in the Opinions of regulatory authorities are highlighted.

Finally the jurisprudence of the European Court of Human Rights is reviewed to locate certain lacunae in the tests for lawfulness of secret strategic communications surveillance thus far, arising from universal versus nationality based conceptions of human rights. Nevertheless there are obligations on signatory states to provide effective measures to protect the rights of those within their jurisdiction, irrespective of unresolved conflicts of international public law. The conclusion is that transfers of Europeans' data to US controlled Clouds are impermissible, at the very least absent repeal of certain clauses of FISAAA, and new binding treaties offering explicit guarantees. Recommendations are offered to the European Parliament for measures which could have some mitigating dissuasive and deterrent effects, with reflections on the fractured governance of EU privacy by institutions which either failed to detect, or acquiesced in the construction of complex legal antinomies over several years.

(* With apologies to <http://www.leoslyrics.com/noel-coward/dont-put-your-daughter-on-the-stage-mrs-worthington-lyrics/>)

P. Bernal

A privacy friendly future?

Is it really possible to build a 'privacy-friendly' internet?

It seems that almost every time measures are proposed to preserve individuals' privacy against intrusive or surveillance technologies or activities that they are met with two swift responses. Industry bodies, their supporters and advocates for laissez-fair ideologies shout out that the core internet values will be undermined, and that the internet will be destroyed, while others, proclaiming themselves to be pragmatists, echo Scott McNealy's aphorism and state that it is far too late to do anything in practice, or that the idea is simply unworkable.

Most recently, this has happened with the idea of a 'right to be forgotten', and with the idea of a 'do not track' system with tracking off by default. Both are currently proposed, both are currently being attacked as both unworkable and somehow likely to 'destroy' the internet – the former by undermining free speech, the latter by making the economic model that supports the 'free' internet unsustainable. The upshot of these kinds of argument is that, ultimately, a 'privacy friendly' internet is impossible – but is that really true?

This concept paper will suggest that it is not – and will try to paint a picture of what a privacy-friendly internet might actually look like in practice. It will post a series of internet privacy rights – rights that are both theoretical and actualisable – and look at how the implementation of those rights might impact upon the internet.

These rights will include:

- A right to roam the internet with privacy
- A right to monitor those monitoring us
- A right to delete personal data
- A right to identity, comprising rights to create, assert and protect that identity
- Rights to anonymity and pseudonymity

The paper will provide a sketch of how businesses might function within a privacy-friendly internet – a series of possible new business models will be proposed, including an account of search and navigation mechanisms, social networking platforms and online retail activities which embed privacy norms and values. Crucially, this privacy-friendly environment does not absolve governments of their regulatory responsibilities. The paper will shed some light on the governance challenges for governments and their role in designing legal mechanisms that not only overcomes the shortcomings in the current privacy framework but paves the way for creating mechanisms that incentivise industry to regard privacy respecting values as a legitimate business goal.

The paper will conclude with an assessment of how such a privacy-friendly internet might come about – and also anticipates some serious and significant barriers to the creation of a privacy-friendly internet, in particular the vested interests of both industry and government in blocking some of its implications. The paper will suggest that there are some signs that suggest that people might be beginning to both want such a future and to be willing to make personal decisions to help bring it about.

O. Lynskey

Property Rights in Personal Data: Added Peril or Protection?

The EU data protection regime was enacted in 1995. This regime imposes obligations on the actors engaged in data processing and grants rights to individuals vis-à-vis these actors. While this scheme of rights and obligations may have constituted an appropriate response to the personal data processing phenomenon in the 1990s, the exponential increase in personal data processing since has put pressure on this system and its failings are now becoming apparent. For instance it seems naïve to believe that, in accordance with Articles 10 and 11 of

the Directive, individuals are provided with the relevant information regarding their personal data in every instance when they are processed. Furthermore, given this lack of individual awareness regarding when their personal data are processed, by whom, and for which purposes, it is extremely difficult for individuals to exercise the other rights they are granted, such as the right of access to personal data or the right to have their personal data amended. The current reform process for the EU data protection regime presents the EU Institutions with an opportunity to depart from the status quo. However, the proposed reform package opts to retain the current system of rights and obligations, making the obligations imposed on data processing actors more prescriptive while seeking to render the rights granted to individuals more effective.

There are however alternative legal responses to the personal data processing phenomenon. One such alternative response is to grant individuals property rights over their personal data. This solution has received strong support in the United States where it has been the subject of academic debate for decades. Moreover, property rights discourse is becoming more prominent in the EU. Indeed, the EU data protection regime seeks to liberalise trade in personal data by ensuring its free movement in the European internal market. Implicit in this objective is the idea that personal data is a commodity which can be traded.

The aim of this paper is twofold. It sets out to determine, first, whether the introduction of a property rights regime for personal data is feasible from a legal perspective in the EU. Secondly, it considers whether the introduction of such a regime is desirable. It argues that whilst the EU legal framework does not prohibit the introduction of such a regime – therefore it is feasible – this particular major reform is not desirable.

N. Ismail

A mirror with different faces; Similarities and differences of the Malaysian Personal Data Protection Act (PDPA) 2010 and the Singaporean Personal Data Protection Act (PDPA) 2012

This presentation analyses selected similarities and differences between PDPA 2010 and PDPA 2012. The similarities addressed are: non-application to the Government; comprehensiveness of the legislation; principle-based approach; and data protection principles relating to disclosure, access, collection and correction. The differences are: consent; international data transfer; enforcement; Do Not Call registry; and governance.

Upon analysing these, the presentation attempts to link and relate how the European Data Protection Directive (DPD) 95/46/EC influences the legislative making of these laws. It also asserts that some of the PDPA 2010 and PDPA 2012's principles are partly derived from the Asia Pacific Economic Cooperation Privacy principles and the Organisation Economic Co-operation Development Guidelines on the Protection of Privacy and Transborder Flows of Personal Data.

In between the analysis, this presentation argues that although the existing sector specific legislation tends to complement with, and provides extra protection to, the data subjects and marketplace. Nonetheless, a major potential challenge that may arise in practice shall be the inconsistency of application (between the PDPA 2010, PDPA 2012 and other sector specific legislation). This presentation will also provide key highlights of 3 submitted public consultations to the Personal Data Protection Department, Ministry of Information, Communications and Culture Malaysia; and the Ministry of Communications and Information Singapore.

K. Mc Cullagh

Data Protection: regulatory (in)adequacy?

Almost thirty years have passed since a Conservative government enacted legislation establishing an independent regulator tasked with oversight of data protection law in the UK. This paper traces the development of the regulator through four distinct phases: firstly, the period 1984-1998, when the Data Protection Registrar was first created and derived its powers from the Data Protection Act 1984; secondly, the period 1998-2008 when the Data Protection Registrar transformed into the Information Commissioner (ICO) and gained enhanced powers under the Data Protection Act 1998; thirdly the period 2008 to the present, since the ICO's investigatory

and enforcement powers were increased through the enactment of the Criminal Justice and Immigration Act 2008 and the Coroners and Justice Act 2009; and, fourthly, an analysis of the of changes in the proposed EU regulation, which are tentatively scheduled to come into force in 2014, in order to assess the adequacy and effectiveness of the regulator to date, and predict its future potential.

This paper will demonstrate that structural and operational weaknesses have impeded its effectiveness. Also, the regulator's investigatory and enforcement powers have, in the past, and continue to be, lamentably weak and ineffective. This paper concludes by reviewing the much lauded enhanced powers for regulators in the proposed EU data protection regulation in order to demonstrate that there is a real risk that the ICO will remain an ineffective regulator in the future if the UK government does not take measures to create an adequately funded and properly staffed regulatory office, with appropriate investigatory and enforcement powers.

Education Plenary – LT3

C. Easton

Public Services and Big Data: Regulatory Challenges and Ethics

The term big data has become a buzzword in the information management industry, with a frenzy of commercial and governmental interest in its potential. While a number of definitions exist, the concept relates to the use of analytical data processing techniques to process disparate data sets over a number of platforms. In March 2012 the Obama Government announced the “Big Data Research and Development Initiative” with an aim of improving national security, supporting scientific research and nurturing teaching and learning. Similarly, the UK Government is seeking to harness the opportunities of big data to achieve a “smarter public sector and a stronger society”. The ability to integrate data collected from across the Internet, sensors and information systems has and does raise a number of legal, regulatory and ethical questions. This paper will initially analyse the term big data to determine whether it actually is a novel concept and why it has attracted so much interest. It will then analyse plans to utilise big data in the provision of public services, building upon existing e-government frameworks. Attempts will be made to place “the human” into the debate while evaluating the opportunities but also the dangers and threats inherent in the public sector use of sophisticated data analytics.

Master class Jam – SR125

C. Easton

MOOCs: Too Connected for Effective Interaction?

The on-going commercialisation of MOOCs, which initially developed from open, connectivist roots has heralded a new era for distance learning and the higher education sector as a whole. While MOOCs are merely one of the developments in the evolving digital education sphere, they have quickly gained a high-profile presence with a key developing issue being their potential to attract credit.

Notwithstanding the wider structural issues relating to MOOCs and their impact on the higher education sector, there is a need to position these courses within existing pedagogy relating to distance learning in order to determine their educational potential. The MOOC platform allows for sophisticated access-any-time digital resources to be combined with interactive features which allow for student-facilitated learning, networking and peer review. An attractive feature of MOOCs is their potential for scalability in order to reach large numbers of students with a relatively low level of tutor input. However, it is tutor-led feedback and participation which can give an educational tool its value. Indeed, it has been argued that too much autonomy and self-directed learning can detract from the open, connectivist qualities promoted by proponents of MOOCs.

MOOCs merely represent one of the latest developments in the evolution of online learning and should not be approached as an entirely new phenomenon. This paper seeks to assess MOOCs from a pedagogical standpoint, examining the nature of interaction in an immersive environment and drawing it back to their potential in

relation to legal education. Prior work on the use of interactive classroom technology will be built upon with an aim of assessing the nature of interaction in a distance learning environment and the true value of the connectivism associated with MOOCs. The use of formative questions and the community building features of MOOCs provide the focal points for this work.

This research has been carried out with the aid of a Higher Education Academy International Scholarship which supported collaborative work at Vanderbilt University, USA.

J. Knox

Platform Games: playing with the boundaries of data collection in the Massive Open Online Course (MOOC).

While the MOOC began as a radical experiment in networked and distributed course design (see Siemens and Downes 2008; McAuley et al 2010), new high-profile organisations – principally Udacity, Coursera and edX - have emerged to reconstitute the format for established institutions. Top-ranking universities, predominantly in the US, have rushed to form partnerships and offer courses using the online platforms supplied by these organisations.

These new ventures have attracted considerable media attention, which has often predicted a radical disruption for the future of higher education (see Adams, 2012 and Marginson, 2012). Such forecasts are largely predicated on the free enrolment offered by MOOCs; there is no financial cost for students participating in these courses, and no prerequisite qualifications are required. In this sense, MOOCs challenge the established socio-economic and geographical boundaries that have traditionally limited access to higher education.

However, this widening of participation has been achieved with the promotion of a single web-based platform for delivering the MOOC. Udacity, Courera and edX all utilise a similar online space, in which a typical MOOC is comprised of a linear sequence of video lectures, interspersed multiple choice questions, and concluded with an automated assessment. This stands in stark contrast to the early experimental MOOCs, which took place in public spaces on the web, and privileged a model of distributed activity, networked relationships and social interactions (see Mackness, Sui Fai Mak & Williams, 2010). While the singular platform of the later MOOCs has opened educational experiences to far greater numbers than the distributed model, it also raises questions about the way that learning is being defined in this emerging but prominent education space.

This presentation will highlight two important issues for the future of MOOC provision:

1. The MOOC platform is an intentional strategy to contain participant activity within a single space for the purposes of data collection. Important questions of privacy and ownership therefore arise in these spaces, concerning what kind of data is being gathered, and whether participants should have a voice in this process. While all three of the MOOC players have been explicit about the fact that they are collecting user data, Coursera and edX in particular have expressed the desire to use this information for educational research. Thus MOOCs have become of considerable interest to the burgeoning field of 'learning analytics' (for example Society for Learning Analytics Research, 2013). Crucially, this strategy will involve feeding participant data back into the MOOC platform, altering the student experience based on prior activity. It will be suggested that this has significant implications for the formation of identity in the learning space.

2. A commitment to the statistical analysis of participant activity in MOOCs has considerable implications for the way that learning itself is being perceived in this new digitised educational space. In focussing attention exclusively on data gleaned from the MOOC platform, this research is necessarily predefining and delimiting what is can be measured as 'learning'. For example, the activities involved in watching a video lecture or answering a quiz become the only things that can be quantified, and subsequently considered representative of learning. In response to this potentially restrictive strategy for data collection, a number of experimental methodologies for capturing the contextual experience of MOOC participation will be introduced. Drawing on Actor-Network Theory and the Sociomaterial (see Fenwick & Edwards, 2010; Edwards, Fenwick, & Sawchuk,

2011), this presentation will outline the use of various web-enabled sensors to record spatial and environmental data concurrent with MOOC participation. This approach is intended as a playful critique of data capture, questioning what kind of data can be representative of learning activity, and troubling the boundaries of the MOOC platform as a centralised educational space.

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J. Marshall

Revisiting podcasting in the age of MOOCS – understanding student engagement with self-running learning resources in different educational contexts

Theoretical framework

Research into the use of podcasts to teach law has often focussed on three broad themes: the effectiveness of podcasts in improving student grades (see Hew and Cheung (2013)); the impact of podcasts on class attendance and the nature of the University teaching environment (see Kinlaw et al (2012)); and varieties of podcasting technologies and options for implementing these options within taught courses. In many studies these themes overlap. At the same time the very definition of a podcast is unstable in the context of higher education, and probably beyond (see Watkins (2010)). Originally coined to refer to a specific method of distributing audio files, the term podcast has evolved to cover mixed audio and video files which may or may not be subscribed to using RSS.

This paper asks whether we need to revisit our understanding of the “value” of podcasting in the context of the basic changes in definitions, changes in available technology and the burgeoning growth of the ‘MOOC’. The Massive Online Open Course often relies on “podcasting” of lectures in a number of different formats. Whilst

some courses deploy newer technologies which support a greater level of interaction with participants a dominant characteristic of these course is their reliance on self-running learning resources as a substitute for attendance in the conventional lecture or classroom. The improvement of academic grades and impact on class attendance are arguably not relevant variables when measuring the value of the technology used on MOOCs. In the context of free online courses the attractiveness rather than the relative effectiveness of our online toolbox compared to traditional teaching methods becomes more relevant.

Student perceptions of the value of podcasts used in campus-based teaching has often been relegated as secondary to measurable effects on grades, attendance etc. Whilst some work identifies that “podcasts” can be created and deployed in a variety of different ways (see McGarr (2009)) and that different groups of students use podcasts in different ways (Leadbeater et al (2013)) there is little research examining the potentially complex interaction by students in one class or cohort with different varieties of podcast use. We argue that for on-campus teaching the lessons learned from MOOCs should lead us to focus on the perceived student value of the podcast and that the perceived value may be influenced by multiple and often overlapping factors including the quality of the resource, the context in which it is deployed, and the learning preferences and personal circumstances of the student. We will argue against the earlier emphasis on measurable outcomes attributable to podcasts (especially those which argue general conclusions from specific studies) and that the most valid measure of the value of podcasts, as with the attraction of the MOOC, is in the value placed on it by students.

Proposed empirical research

This paper will aim to analyse evidence from 1st year undergraduate students about their perceived value of podcasts used in different formats and for different purposes in year 1 of the LLB (Hons) Law degree. The empirical stage of this research is subject to faculty ethics approval and must be considered as work in progress.