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# Law 3.0: Technology and Law in the Entertainment Industry – The Case of Ticket Touting

# Recht 3.0: Technologie und Recht in der Unterhaltungsindustrie – der Fall illegaler Ticketverkäufe

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**Abstract:** This article examines the evolution of the law's attempts to regulate technological advancements in the entertainment industry in general, and the sale and resale of event tickets in particular. Drawing on the analytical framework developed by Roger Brownsword, where he identifies three stages in the evolution of the law's regulation of technology, we begin by tracing the key legal interventions in the entertainment industry to demonstrate how there is an increasing dissonance between the development of new technologies and their effective regulation by the law. As a result of this dissonance, a more effective approach could be to use technological developments as a means of regulation, instead of being the subject of regulation. The article then moves on to evaluate how advances in ticketing technology can be used to regulate the unlawful resale of event tickets, known as ticket touting or ticket scalping. It concludes by arguing that although technological developments often shape legal and regulatory environments, law is only ever part of the answer, and that technology should be used as a way of regulating the resale of event tickets.

**Zusammenfassung:** Dieser Artikel untersucht die Entwicklung der Versuche des Gesetzgebers, den technologischen Fortschritt in der Unterhaltungsindustrie im Allgemeinen und den Verkauf und Wiederverkauf von Eintrittskarten für Veran-

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staltungen im Besonderen zu regulieren. Auf der Grundlage des von Roger Brownsword entwickelten analytischen Rahmens, in dem er drei Phasen der Entwicklung der rechtlichen Regulierung von Technologie identifiziert, zeichnen wir zunächst die wichtigsten rechtlichen Interventionen in der Unterhaltungsindustrie nach, um zu zeigen, dass es eine zunehmende Dissonanz zwischen der Entwicklung neuer Technologien und ihrer wirksamen rechtlichen Regulierung gibt. Infolge dieser Dissonanz könnte ein effektiverer Ansatz darin bestehen, technologische Entwicklungen als Mittel zur Regulierung zu nutzen, anstatt sie zum Gegenstand der Regulierung zu machen. In dem Artikel wird untersucht, wie Fortschritte in der Ticketing-Technologie genutzt werden können, um den illegalen Weiterverkauf von Veranstaltungstickets, das so genannte Ticket-Topping oder Ticket-Scalping, zu regulieren. Abschließend wird argumentiert, dass technologische Entwicklungen zwar häufig das rechtliche und regulatorische Umfeld prägen, das Recht aber immer nur ein Teil der Antwort ist und dass die Technologie als Mittel zur Regulierung des Weiterverkaufs von Veranstaltungstickets genutzt werden sollte.

**Keywords:** Ticket touting, entertainment law, technology

This article was inspired, in part, by an interaction between one of the authors and Prof Joserramon Bengoetxea, a fine scholar from the University of the Basque Country. This took place at the workshop, 'The influence of Media and the influence of New Technologies on Law: Socio-Legal Approaches' at the Oñati International Institute for the Sociology of Law (IISL) in May 2023. The workshop itself was concerned with the impact of new technologies on law and in his keynote Bengoetxea posited that "technology shapes the law" to which our author's response was, "but law is not necessarily the answer". This provoked an animated debate on the relationship between law and technology, and, as all good workshops should, allowed us to rethink the paper that we had delivered. Our paper, 'Regulating Ticket Touting' had examined the problematic legal understanding of ticket touting and examined possible strategies for tackling the unauthorised resale of event tickets. The animated discussion persuaded us that a deeper interrogation of the relationship between ticketing and technology was required, particularly given the challenges presented by current technological changes in the resale market.

As luck would have it, Roger Brownsword had recently produced a book, *Rethinking Law, Regulation, and Technology* (2022), building on his earlier intervention in the area (Brownsword 2020). His work provides much food for thought. Brownsword's 2022 book promised to rethink the relationship between law, regulation, and technology, noting that after years of gradual technological development, the acceleration had 'gone into a different gear' and that '... our legal and regulatory

preparedness for emerging technologies is hopelessly inadequate' (Brownsword 2022: 20). It is an ambitious and wide-ranging project that embraces rethinking the regulation of technology in broad terms and from a multitude of perspectives. He starts from what he calls the traditional Westphalian perspective, where law is seen as a narrow construct, but argues that there is a need for a radical rethinking, a quantum leap, which triangulates law, regulatory frameworks, and technology. An important part of his thinking is to decentralise law. Decentralisation is not necessarily a new concept, but it is important when considering regulatory frameworks. Foster and Osborn (2012: 6) argue in their article on multidisciplinary approaches to sport and law that, following Bourdieu and using sport as field, there is a need to de-privilege law:

'A further move away from formal law was to decentre law, in both its ideological and its practical forms, and to argue that the proper socio-legal approach was to reverse the polarities and study society as the prime object. Only then, it was argued, could we understand law's role in society. This approach leads to the sociology of law with the central object of study being society, and thus sociological theory as the main route to knowledge.'

Brownsword's decentring is slightly different, and in Part I of his book he starts from the premise of (2022: 3):

'... rethinking, respectively, law, regulation, and technology. In each case, our rethinking involves 'de-centring' those features that are taken to be focal or characteristic in traditional thinking. In each case, new paradigms (of law, of regulation, and of technology) evolve which, as a set, generate a radically different appreciation of the legal landscape.'

He identifies one aspect of this as the way that transnational lawyers decentre the law and discusses the 'double disruption' of technology: first recalibrating the idea that law is found only in the courts and secondly challenging the idea that law is in fact the central instrument of social order. This aligns with our previous work on the legal framework that the International Olympic Committee has operationalised in its regulatory approaches to the governance of the Olympic Movement. This uses a range of internal legal norms that are not usually found in the courts (*lex Olympica*), and the more traditional legal norms (Olympic law), that are (James & Osborn 2023, 2016). Thus, *law is just one element* of the regulatory environment and, we argue, provides further support for a holistic approach to the interactions between law and technology. This is something we have argued previously in terms of approaches to ticket touting (James & Osborn 2023), and to which we return below.

Of particular relevance for us is Brownsword's identification of three iterations of the law-technology-regulation interface, which he categorises as Law 1.0, Law 2.0 and Law 3.0. Law 1.0 denotes a traditional 'black letter' approach where legal prin-

ciples are applied to novel factual scenarios, so the technology in question would merely be the subject to which the law is applied. Law 2.0 is more developed, and more policy and regulatory focussed, rather than solely legal, so it may involve stress testing the law and assessing its impact and efficacy rather than simply its application. If this was seen through the lens of contract theory, Law 1.0 might be seen as classical contract theory and Law 2.0 as neo-classical (Greenfield & Osborn 2008). Law 3.0 is more radical, more contextual, more relational, and decentres the law and asks whether the answer might be more purposefully found by looking at solutions *outside* the legal, and that technology itself might provide an effective solution, instead of being the problem that is in need of regulating:

Technology is viewed as more than part of the context, even a particularly salient part of the context; it is now a tool that can be employed for legal and regulatory purposes. From a Law 3.0 perspective, technology presents as a potential solution to regulatory problems' (Brownsword 2022: 6).

Our approach here is to place ticket touting within the context of technological change and the state's regulatory responses to that change. It maps how technology has impacted upon the entertainment industry and the legal interventions that this has prompted. The theoretical underpinning of this excavation uses, in part, Brownsword's three paradigms for landscapes of law and technology. Whilst this article takes a slightly different point of departure to Brownsword, it draws on his work's conceptual and theoretical richness, by examining the law-technology interface within the context of the entertainment industry through these lenses of Law 1.0, Law 2.0, and Law 3.0, before mapping responses to tickets and ticket touting using this framework. By doing so, it offers a response to this article's inspiration and the question as to whether technology shapes the law and whether law is the answer.

## Law 1.0: Law, Technology, and Entertainment

Whilst Brownsword discusses the technology-law interface and notes that lawyers and technologists would historically have had little to say to each other, law has nevertheless always *responded* to technology, and '[t]he cultural impact of intellectual property has been stoked, and in part driven, by developments in technology' (Jones, 2009: 110). An overused example is the statutory response to the creation of the printing press with the enactment of the Statute of Anne 1709 (Rose 2010; Morris 1961). More specifically *legislation* has always been used as a tool with which to try and harness, and regulate, technology within the entertainment industry. This is

essentially the notion of Brownsword's Law 1.0. For him, Law 1.0 reflects the question that lawyers would traditionally ask when confronted by a novel situation: how do existing laws and principles apply to this new phenomenon. Within a Law 1.0 mindset, there is 'a good deal of nervousness about stretching legal principles, or creating ad hoc exceptions, in order to accommodate a hard case' (Brownsword 2022: 47).

During the 19th century, technological developments in the entertainment sector accelerated, creating problems for the Law 1.0 approach. The Lumiere Brothers presented film for the first time in 1896 (Rossel 1995; Hunninger et al. 2015). The development of this new technology led to a reappraisal of the suitability of existing IP laws that had been developed before these technologies existed, and whilst case law may have tried to ameliorate the effect of these lacunae, the legislation was updated in the early 20th century in the Copyright Act 1909 (Alexander 2010). Further innovations, including adding synchronised spoken word to film and the birth of the 'talkies' necessitated another rethinking, specifically in terms of bringing the voice within the purview of film star contracts (Gaines 1991), again illustrating the legal challenges presented by technological advancement. In music, ground-breaking developments such as Edison's invention of the phonograph in 1875 (Edison 1878; Hull 2004; De Graaf 1995), resulted in the Copyright Act 1911 providing record companies with the right to prevent unauthorised copying of their recordings (Jones 2009). Whilst law has always responded to technology, this response has often been piecemeal and slow. As Greenfield and Osborn (1997: 80) put it:

The law is notoriously slow to respond to technological advance and often by the time that it does act events have been superseded or overtaken. Such problems have been exacerbated in the recent past as the pace of change has become more pronounced creating a number of problems regarding exploitation of rights within the context of changing cultural, geographical, philosophical and electronic boundaries. At the heart of this debate lies the role and function of copyright and perhaps even the issue of whether it can survive the digital challenge.'

The law has difficulties responding to technology which are exacerbated when technologies develop at pace. Initially, whilst there was a lag between the development of technology and the legislative response, it was *relatively* short. The UK's legislative process involves recommendations being made, perhaps by the Law Commission, Green Paper and White Papers being drafted and debated and, eventually, a bill processing through both Houses of Parliament. It is not quick, with attempts to subvert the process and create law as a quick fix response proving problematic. Redhead's concept of panic law (1995: 112) describes 'the frensied [sic] but simulated state of law and justice at the end of the [20th] century'. We have refined this concept to tie more explicitly into a response to what Cohen called moral panics and how the law responds to them. Cohen's idea of moral panic was outlined in his seminal

text (1972) that explored how 'folk devils' who were perceived as being a threat to society and/or its values were the impetus for 'moral panics'. These moral panics create the circumstances in which the government of the time feels impelled to legislate to curtail by criminalisation the folk devils' behaviour.

Cohen's thesis attempted to explain the exaggerated societal reaction to perceived threats to its moral values (King 2003). Our interest, and where Redhead's analysis comes in, is how the law reacts to these moral panics. As Gur-Arye puts it: once a moral panic mobilises the public, pressure on both the legislature and the courts intensifies to do something ...' (2017: 316). This 'something' is what is often problematic. The political desire to be seen to be doing something to address the activities of the folk devil, rather than taking the time to consider the root causes of the underlying problem, is what leads to the ill-considered, reactive legislative interventions that are the paradigm of panic law. Panic law is how the law responds to various stimuli, be they video nasties (Barker 2020), dangerous dogs (Allcock & Campbell 2021) or football fans (Greenfield & Osborn 1998). These loose and unfocussed legislative provisions are little or no use in practice, although they may have some symbolic political and legal value. Panic law is essentially a form of Law 1.0, and as will be seen below, these kneejerk responses are neither nuanced nor do they address the bigger picture.

The Law 1.0 period is epitomised by a fairly consistent lag between the emergence of a new technology and its regulation, resulting in law and technology developing in parallel. The regulatory lag may be significant, but is perhaps legitimate given the need for due diligence to develop laws that deal adequately with specific problems. However, Brownsword notes that Law 1.0 is unstable and subject to disruption, where new technologies disrupt its application and encourage the emergence of a more nuanced Law 2.0 approach.

# Law 2.0: Digital Year Zero and Accelerating Dissonance

Copying in the analogue world was problematic. Jones (2009) notes that it was costly, time-consuming and came with a degradation of quality. In the digital world, many of these problems disappeared, a development that was pregnant with possibilities. Technology problematised further the issue of copying, with the prevailing Law 1.0 approach proving to be increasingly unsuitable. Instead of approaching the regulation of emergent technologies holistically, a lack of legislative creativity saw new protected categories added to later Copyright Acts. Essentially, the Law 1.0 approach

becomes increasingly reactive, which in turn increases the dissonance between the law and its ability to regulate technology effectively.

Technological development is rarely linear and accelerates at a faster pace than legislative interventions can accommodate. Nowhere is this more apparent than in the music industry. The shift from recorded sound being analogue to being comprised of ones and zeros (digitised) created many problems for the music industry. Even the most recent significant legislative intervention, the Copyright Designs and Patents Act 1988 failed to deal specifically with many technology-driven issues. For example, sound sampling, a practice inspired by the Jamaican practice of 'toasting' over records and initiated via the creation of computers and the ability to digitise music, which had been common practice for many years and had created all sorts of discussions and allegations of possible infringements and philosophical debate, was not addressed by the 1988 Act. Whilst not the subject of this article, similar issues can also be seen in the technological challenges of streaming Napster and Bit Torrent for example.

Brownsword gives a neat explanation of how Law 2.0 operates. He cites the example of crime dramas and their use of an evidence board or 'crazy wall'. In cinematic terms perhaps this reaches its apotheosis with Tom Cruise's character in "Minority Report" (USA 2002), but it refers to the practice of the board used by detectives to pin photos of suspects and crime scenes and make notes about possible motives, create links, and hypothesise about the case. The way that regulators look at a new technology under Law 2.0 resembles, to Brownsword (2020: 33), how detectives sift and evaluate their cases:

In the same way, regulators addressing a new technology in a Law 2.0 frame might also start by using a crazy wall to focus their thoughts ... the challenge of getting the regulatory environment right is a multidimensional one; a Law 2.0 conversation can range across questions of legitimacy, effectiveness, and connection, and it is not just a matter of getting the rules right – the institutional apparatus that stands behind the rules must also be fit for purpose'.

The emergence of the new technology is the equivalent of the commission of a crime, and it is this emergence that provokes the lateral thinking and vehicle for their focus. What are the impacts of the new technology on the right to privacy? Or property rights? Is it potentially harmful? All these questions and more can come within the purview of the crazy wall. Importantly, possible benefits as well as negative aspects will be considered. The wall provides a mechanism for charting these issues holistically, whilst for the regulator it enables an evaluation of how best to achieve its objectives.

As noted above, the relationship between Law 1.0 and Law 2.0 is analogous to the relationship between classical contract theory and neoclassical contract theory; the latter tries to ameliorate the harshness of the former without destroying its very foundations (Greenfield & Osborn 2008). So, for example a traditional approach to

the enforceability of a record or publishing contract under Law 1.0 would begin by looking at whether the formalities of contract had been followed. It would recognise that the technology had developed to allow the subject matter of the contract to change (a new subject matter for contract, a 'novel category', predicated on development of recording technologies and its means of exploitation) but would apply the law to the contract in a more traditional black letter fashion. The act of signing the contract, the form, the content of the contract and how legal principles apply is primary.

Law 2.0. is more akin to a neo-classical approach that would recognise that contracts do not exist in a vacuum and would be more cognisant of the process by which the contract came into existence rather than focusing on the outcome (Law 1.0). In Law 2.0, the court faced with examining whether a contract should be enforced would examine the context, the process and consider policy; we might see the court explore a more welfarist focussed approach, or consider the use of doctrines that have developed to ameliorate the harshness of some of the more dogmatic applications of legal principle, such as restraint of trade, undue influence, or imbalances in the bargaining process. It may also consider the implications of enforcing such a bargain: what are the impacts on the artist and on the public? If there is no clause in the contract covering the exploitation of the material produced and artistic freedom, then the public's ability to hear the fruits of artistic labour may be compromised. In such a case, a broader, contextual, Law 2.0 approach would consider the wider context of the relationship.

Law 3.0 does something different and offers a more radical alternative. Whilst Law 2.0 offers potential and can paper over the cracks or ameliorate Law 1.0's problems and has some cognisance of policy and contextual issues, it still sees technology as an issue to be tackled. Technology in fact has a further and more nuanced possible use:

'As for technology, in regulatory thinking, technological developments first present as a challenge, as a target for regulatory measures. However, a major rethink occurs when technologies then present as potential regulatory tools, to be used in support of rules or even to supplant rules and bear the full regulatory burden' (Brownsword 2022: 7)

# Law 3.0: A Radical Decentring of the Law

Law 3.0 is in some ways similar to relational contract theory, in that it is contextual with a vengeance. Technologies that might be considered a threat through the gaze of Law 1.0 or 2.0 are seen as potentially useful tools when perceived through a Law 3.0 lens. As Brownsword puts it (2022: 50): With the emergence of Law 3.0, the questions are whether technical measures might be used in support of the rules relied on to serve regulatory policies, whether technologies might be used to assist those who are undertaking legal and regulatory functions, and whether the technologies and technical measures might actually supplant the rules and the humans who make, administer, and enforce them.'

Rather than a reductive debate about how the law applies to a new technology and how it deals with the problems that it might create, the question becomes one of how the *technology itself* might be able to tackle the problem. Can the technological advance, rather than being the subject of legal regulation, be the tool that enables effective regulation? Thus, blockchain and smart contracts might be seen as ways of *supporting* contractual principles rather than being the subjects of regulatory challenge. These new and emerging technologies are not without their problems, but they offer the potential for creative *solutions*. Emerging technologies such as AI would be interesting areas to consider here, and issues such as non-fungible tokens (NFTs) have already been looked at in terms of tickets, but we have chosen blockchain technology as the most apposite example to discuss here.

Blockchain is a technology-enabled distributed ledger system (Yeung 2019). Rather than being stored in one specific location or database, like a traditional ledger where some sort of central and 'trusted' authority exists, the records and digital information are stored *across* a number of different computers that synchronise with each other as new information is added (CMS 2023). Blockchain technology is transparent, 'trustless' and immutable, with no financial intermediaries or gatekeepers or the possibility for one single point of failure. This type of ledger is manifestly different to the traditional 'star' or 'hub and spoke' structure of centralised systems and relies instead on a distributed 'mesh' structure (O'Dair 2016: 6). What O'Dair's report illustrates is the potential of blockchain for transformation; how the technology might transform or revolutionise the industry, specifically through '... a networked database for music copyright information ... fast, frictionless royalty payments ... transparency through the value chain ... (and) access to alternative sources of capital' (O'Dair 2016: 8), creating what he calls the networked record industry.

Thus, under a Law 3.0 approach, new technologies have the potential to be part of the regulatory solution, instead of being the object of new regulation as would be the case with Law 1.0 and 2.0. If Law 2.0 can be said to look at a broader range of normative instruments than just the law, Law 3.0 takes this contextualisation further looks beyond more normative rules to issues such as 'appropriate design of places, products and processes' (Brownsword 2020: 29). Technology and its tools can then be located on an interventionist spectrum further illustrating the necessity for a nimble approach and that 'one size does not fit all'. At the soft end of the technological spectrum is the use of CCTV, a technology that aids compliance with

the rules and provides evidence of rule breaking. At the hard end of the spectrum, technology is embedded in the hardware or regulatory architecture, limiting the practical options of those subject to the regulations; Digital Rights Management is one instance of this where geographical restrictions can be embedded into the product itself. Further, Law 3.0 indicates that technology might be part of the solution to the problem, not merely another issue to be tackled by the regulatory lens.

Having outlined the concepts of Law 1.0, Law 2.0 and Law 3.0 more generally, we now apply these theoretical lenses to the ticketing industry more specifically, charting not only how tickets fit within this framework, but also where tickets sit on the technology spectrum.

# Event Tickets: Law, Technology, and the Case for Law 3.0

In this section, we build on the analytical framework developed by Brownsword and apply it specifically to tickets, and in particular to the regulation of the secondary market in event tickets. Tickets to sport and entertainment events are purchased by event attendees in one of two generally accessible markets. The primary market consists of the original sales by event organisers and/or their official or authorised agents to the original purchaser. The secondary market consists of resales by the original purchaser to third parties. It is this market that has been the focus of direct legislative intervention to ensure that purchasers using the secondary market are provided with sufficient protections. A specific subset of the secondary market, and the one that has fuelled many of the legislative interventions to date, is the uncapped and unauthorised resale of event tickets, commonly referred to as ticket touting or scalping. In this case, tickets are bought and/or sold in breach of the ticket's terms and conditions (T&Cs), with the original purchase being made with the intention to resell the ticket for a profit (Competition and Markets Authority 2021: 12).

The secondary market in event tickets has experienced technological developments similar to the rest of the creative sector, especially its transition from exclusively physical to predominantly digital tickets. The regulation of this secondary market has suffered from a similarly piecemeal and reactive series of panic law responses. The lack of an effective strategy for these legislative interventions has left the law struggling to regulate the technological developments in the resale and purchase of tickets, unused by police and prosecutors, and functionally obsolete. Using Brownsword's framework, the evolution of the regulation of the secondary ticketing market will be analysed to demonstrate how Law 1.0 and Law 2.0 approaches have contributed significantly to the legal-technological dissonance.

### Tickets, Touting and Law 1.0 - The Legal Responses

What we now refer to as event tickets have evolved significantly as a means of restricting access, or charging entry fees, to entertainment events. Part of this evolution has been predicated on technological advances. Our particular focus of inquiry is the secondary ticket market, where technology has had a marked impact. Initial regulatory responses to the secondary ticketing market were precipitated by the football hooligan 'folk devil', rather than because of technological developments in ticketing. Specifically, the issue was one of crowd management, attempting to reduce crowd disorder by preventing the fans of rival teams mixing in the same part of the venue (Shortt 1924).

The first legal intervention in football ticketing followed the massive over-crowding at the 1923 FA Cup Final at the newly completed Wembley Stadium. The regulatory response from the FA was to make attendance at future FA Cup Finals by advanced ticket purchase only, an unintended consequence of which was to create the conditions in which touting could thrive by introducing scarcity in the primary market and paving the way for the conditions for the evolution of the secondary market. Despite advances in ticketing technologies at the time, there was no corresponding legislative input to or oversight of the ticket markets (Shortt 1924).

The use of a wide variety of restrictive T&Cs to prevent unauthorised resales, coupled with the lack of regulation of the secondary market in event tickets, resulted in the normalisation of touting as an integral part of the ticketing land-scape. What is strange when approaching this issue from a strictly legal perspective, is the acceptance of ticket touting as a means of purchasing tickets despite such resales being a breach of contract, where unauthorised reselling is in breach of any prohibitive T&Cs, and a criminal offence. In *R v Marshall* ([1998] 2 Cr. App. R 282), the defendant was found guilty of theft when reselling discarded passes for the London Underground. The T&Cs stated that property in, or legal ownership of, the ticket remained vested in London Underground, therefore, any unauthorised dealing with the tickets, including selling them, constituted theft. It is commonplace for event tickets to contain similar T&Cs that both retain property in the ticket and prohibit its unauthorised resale. Thus, although there is a basic Law 1.0 legal framework in place to criminalise ticket touting, the law was only very rarely used as a means of regulating activities in the secondary market.

It was not until the introduction of s.166 Criminal Justice and Public Order Act 1994 (CJPOA), that the touting of football tickets at professional football matches in the UK was criminalised (James 2017: ch. 13.4). The provision is both a paradigmatic Law 1.0 response and an example of classic panic law. It operates as though legislative intervention is the only answer and is a badly drafted and ineffective law that was enacted in reaction to incidents of football disorder, rather than as a targeted

response to ticket touting. In its original form, it was an offence for an unauthorised person to sell, or offer or expose for sale, a ticket for a designated football match, in any public place or place to which the public has access or, in the course of a trade or business, in any other place. The provision, which was aimed very specifically at traditional street-based touts, soon had to be amended as it was so easy to circumvent, for example, by selling a scarf at an inflated value and giving away a free ticket with every purchase, or conducting the sale on private land.

Its focus on the classic tout trope also meant that s.166 was ineffective as a means of prohibiting online sales. In 2007, s.166(1) was amended to give 'sell' the following extended meaning: offering to sell a ticket; exposing a ticket for sale; making a ticket available for sale by another; advertising that a ticket is available for purchase; and giving a ticket to a person who pays or agrees to pay for some other goods or services or offering to do so. In a cursory nod to the existence of internet resales, s.166A CJPOA made it a criminal offence where an information service provider knew that a resale contrary to s.166 was being advertised on its platform. Although these offences have been on the statute books for over 30 years, there are only around 100 arrests per year for the contravention of s.166, virtually none of which result in prosecutions (Home Office 2023). There are no reported prosecutions for the s.166A offence.

The emergence of new internet-based technologies has seen a proliferation of online marketplaces where tickets can be traded. Interaction with these platforms has been boosted by new technologies that has fuelled their growth and their exploitation by touts. This in turn has changed the location of many secondary market transactions from the street to online (Morretti 2024), and lead to the appearance of a new folk devil: the ticket speculator and profiteer. However, Law 1.0 responses continued to dominate regulatory interventions.

In the absence of any effective regulatory framework, ticket touts have been able to develop their businesses without the risk of criminalisation. It was only in 2010 that Parliament debated in detail whether the scarcity of tickets to some events was being exacerbated by ticket touting and whether it was time to regulate what was seen as excessive profiteering. Sharon Hodgson MP's Sale of Tickets (Sporting and Cultural Events) bill had its first reading on 30 June 2010 (Hodgson 2010). Hodgson identified a new folk devil: the ruthless profiteer who used technological workarounds to buy large numbers of tickets to popular events and massively overcharge unsuspecting, and/or naïve consumers for their products and services (Hodgson et al. 2024). The bill enabled venue operators and event organisers to apply to be designated, which would mean that any unauthorised person who was concerned in the resale of a ticket for a designated event at a price greater than 10 % above the original face value of the ticket was guilty of a criminal offence. In the bill, 'concerned' was given the same extended meaning as 'sell' in s.166 CJPOA, and 'face

value' was defined as the original cost of the ticket, including any administration or other fees incurred in its purchase from the primary retailer. Ultimately, the bill was filibustered by free marketeers on the Conservative benches, who saw no need for what they saw as being a legitimate exploitation of a gap in the market, rather than engaging with whether such resales were an unlawful breach of contract or inherently criminal conduct.

The reactive nature of the Law 1.0 responses to ticket touting to date has continued to be driven by a combination of moral panic, that all touts are inherently bad, and the need for the government of the day to be seen to be doing something. This piecemeal approach, when coupled with a lack of depth of understanding of emergent technologies and a dominant political view that ignores the potential illegality of these transactions, is a recipe for panic law. The most recent regulatory interventions have been paradigms of this Law 1.0 approach, where specific technological developments *need* to be regulated to suppress their abuse by ticket touts. Below, a series of developments are considered that illustrate not only how Law 1.0 and 2.0 might operate to tackle problems that may be exacerbated by technology, but how technology might also be part of the solution in Law 3.0.

#### **Online Platforms**

The growth of online resale platforms, such as viagogo, now dominate the secondary market in event tickets. These platforms are not ticket sellers or agents themselves, but act as online marketplaces on which tickets can be resold. Those with tickets to sell, whether it is the owner of a genuinely spare ticket or a professional tout, can advertise their tickets on them and process the sale using the platforms' software. One of the key consumer concerns about resale platforms is their appearance, whether explicitly or by implication, of being official ticket agents. The Advertising Standards Authority stated in its Ruling on Viagogo AG that it was misleading for a resale site to imply that it was an official primary ticket outlet, contrary to Committee of Advertising Practice Code (Edition 12) rule 3.1 (Committee of Advertising Practice 2014).

<sup>1</sup> A17–392814, Available from: https://www.asa.org.uk/rulings/viagogo-ag-a17-392814.html [Accessed 18 March 2024].

#### **Ticket Bots**

One of the cornerstones of primary sellers' attempts to prevent tickets becoming available to touts is their restriction on the number of tickets that each person or household can purchase for each event. To circumvent these restrictions, touts use specific computer programmes, referred to as bots, to subvert primary sellers' ticket purchasing protocols. The use of bots has added to touts' reputation as folk devils who use secretive advanced technologies to secure additional tickets from which they can make significant profits. In response, The Breaching of Limits on Ticket Sales Regulations 725/2018 were introduced under the powers conferred on the Secretary of State for Digital, Culture, Media and Sport by s.106 Digital Economy Act 2017. By Regulation 3, it is an offence for a person to use software that is designed to enable or facilitate the completion of any part of a process to purchase sport or entertainment event tickets with intent to obtain tickets in excess of the sales limit, and with a view to any person obtaining financial gain. Although this provision looks good, it has not been used to prosecute any touts to date, despite the near ubiquity of professional touts using bots to acquire their inventory.

#### Inaccurate Information About the Ticket

One of the most common complaints from purchasers engaging with the secondary market was that the tickets that they had purchased were not accurately described in the online listing. Of particular importance is that some music events now include in their T&Cs a provision that if the ticket has been resold by any unauthorised means, it will be invalidated, with any subsequent purchaser being denied entry to the venue (Fullbrook 2024). As venues began to enforce these conditions, focus on the accuracy of the listings has intensified.

To enable purchasers to determine more accurately the quality of a ticket that they are intending to buy on the secondary market, and which they could not see in person prior to completing the purchase, the most recent legislation requires that adverts for touted tickets must include specific identifying information. Under s.90 Consumer Rights Act 2015, anyone reselling an event ticket on the secondary market is under a duty to provide information enabling the purchaser to identify the seat or area to which they will have access, any unique reference number, any T&Cs that might be breached by the resale, and the original face value of the ticket. This pro-consumer duty is reinforced in s.91(2), by a warning to event organisers that a touted ticket can only be cancelled where a term of the original contract for the sale of the ticket provided for its cancellation if it was offered for re-sale or if it was re-sold by the original purchaser. This appears to put the sanctity of the original T&Cs, law that can be found in courts, to the forefront, a classic Law 1.0 approach.

Finally, s.92 requires that the operators of secondary resale platforms must inform event organisers when they know that a person has used or is using the facility in such a way that an offence has been or is being committed in respect of a sport or entertainment event. As 'offence' is defined as including any crime under the law of any part of the United Kingdom, then following *R v Marshall* all listings have the potential to result in theft, and the listing of all tickets to professional football matches are already crimes. Once again, the power to regulate is present, but its enforcement is not.

This part of the Consumer Rights Act 2015 does not create new offences per se, as there is the creation only of statutory duties to act. However, s.93 provides that if either the relevant local weights and measures authority in Great Britain or the Department of Enterprise, Trade and Investment in Northern Ireland can prove on the balance of probabilities that the duties have been breached, then a fine of up to £5,000 can be imposed. Once again, the power to regulate is present, but its enforcement is not.

Law 1.0 responses have had little to no impact on the ongoing growth of the secondary market in event tickets. The reactive legislative responses have addressed known issues, but not in a coherent or effective way. Further, their lack of enforcement has left them, to a large extent, meaningless, with the most recent high-profile convictions relying on general criminal and corporate offences (Hollinrake 2023: 5).

# Tickets, Touting and Law 2.0 – Law and Policy Responses (The Case of London 2012)

To date, the focus of UK legislative interventions has aligned very clearly with a Law 1.0 response: identify a problematic technological development affecting the market and criminalise it, or at least view it through a criminal lens. The regulation of ticketing at the London 2012 Olympic Games saw a shift towards a Law 2.0 response, where the criminalisation of touting Olympic tickets was coupled with extensive T&Cs, stadium regulations, a targeted education programme, and the online tracking of prospective resales. Although this approach was considered to be successful by the London Organising Committee of the Olympic Games (LOCOG) and the Metropolitan Police, it required a huge and costly investment in manpower to ensure its effectiveness, which is not practicable as a more generalised response. Between 2017–2021, National Trading Standards estimates that the cost of bringing cases against just three major touts and their associates to be in the region of £2m

(Competition and Markets Authority 2021: 36), an amount that is clearly unsustainable.

The first step in the regulation of the resale of London 2012 tickets was classic Law 1.0. Drawing on its perceived success in football, s.166 CJPOA was recycled and reused to criminalise any breach of the restrictions on resale for tickets to the London 2012 Olympic and Paralympic Games in s.31 London Olympic Games and Paralympic Games Act 2006 (LOGPGA). This criminalised the unauthorised resale of an Olympic ticket in a public place or in the course of business, where acting in the course of business means simply making a profit or aiming to make a profit from the resale. The offence was a specific requirement of the Host City Contract (James & Osborn 2011), which the International Olympic Committee required as a means of protecting the integrity of LOCOG's ticketing policies. Despite the differing underpinning rationale for criminalisation, the CJPOA was used as the template for the new offence without any effective Parliamentary scrutiny.

The new criminal offence was supplemented by a range of contractual measures. The T&Cs for Olympic tickets ran to an unprecedented 19 pages.<sup>2</sup> Although entry to an Olympic venue was secured by a physical ticket, the detailed T&Cs were available online. Clause 1.21 defined a ticket as a personal revocable licence from LOCOG allowing an individual to attend an Olympic event, with Clause 9.2 stating that tickets remained the property of LOCOG. This is analogous to the situation in R v Marshall and would mean that any unauthorised sale of a ticket to London 2012 was theft, as well as the Olympic-specific offence in s.31 LOGPGA. Clauses 17 and 18 dealt with resales and transfers, and the impact on a ticket's validity if resold. In particular, Clause 17.2 reiterated that tickets were non-transferable, except to family or friends for whom the purchaser had bought the tickets as part of a group (Clause 17.3), or through the official London 2012 Ticket Resale Scheme (Clause 17.4).

This classic Law 1.0 approach was supplemented by a range of what can be classified as Law 2.0 measures. First, there was a high-profile educational push that was spearheaded by the LOCOG. This ensured that prospective purchasers were made aware that Olympic tickets should only be bought through the official channels and that there was a risk that touted tickets would be void and entry denied.

Secondly, LOCOG worked closely with the Metropolitan Police on Operation Podium, a dedicated division that had as one of its goals the prevention of ticket touting (Greater London Authority 2011: 27). Pre-emptive operations focused on 30 international websites and 970 known ticket touts, resulting in 100 charges for a range of criminal offences including fraud, ticket touting and money laundering

<sup>2</sup> Copy, Available from: https://www.herial.sk/files/LOCOG-Terms-and-Conditions.pdf [Accessed 18 March 2024].

(Laville 2012). Between 25 July and 17 August 2012, a total of 220 individuals were arrested for Olympic ticketing offences as part of Operation Podium (Brokenshire 2012), though ultimately very few of these were prosecuted, and the fines imposed tended to be low (Bull 2012).

Thirdly, LOCOG purchased a number of web addresses that may have been vulnerable to purchase by fraudsters and hosted a website checker on the London 2012 site for anyone wanting to verify the legitimacy of a website that was offering London 2012 tickets for sale (Greater London Authority 2011: 27). This ensured that touts could not buy web addresses that looked or sounded similar to the official London 2012 websites, reducing potential confusion for prospective purchasers and shielding them from potential fraud, a clear use of technological know-how to improve the consumer experience.

London 2012 demonstrates a Law 2.0 approach to addressing the unauthorised resale of event tickets, layered on top of a Law 1.0 base. However, the approach was resource intensive with a dedicated team of anti-touting police working specifically to enforce Olympic tickets' T&Cs. It is extremely unlikely that a similar resource will be dedicated to preventing ticket touting at future events, or to enforcing the law in the secondary market more generally (Competition and Markets Authority 2021: 51) As ticketing technology has advanced significantly since 2012, it is essential to consider a truly contextual Law 3.0 approach, where technology itself is instrumental in the regulatory landscape.

## Tickets, Touting and Law 3.0 – The Contextual Response

To date, attempts to regulate the secondary ticketing market have been unsuccessful. The Law 1.0 approaches are ineffective as they fail both to keep pace with the emergence of new technologies and are enforced only rarely by prosecution authorities that have unclear spheres of jurisdiction (Competition and Markets Authority 2021: 20–22). Where Law 2.0 approaches have been more successful, they suffer from being disproportionately resource intensive and are not practicable as an ongoing solution. The UK government has rejected all of the CMA's proposals on regulating 'the uncapped secondary tickets sector,' including the proposal to create a new regulatory function in an existing or new body that would have lead responsibility for ticket touting (Competition & Markets Authority 2021: 58). The government continues to maintain that the uncapped secondary market offers necessary services to consumers, and that there is insufficient evidence for increasing regulation in the sector or the regulatory powers of either the CMA or Trading Standards (Hollinrake 2023: 2, 7). This has resulted in a situation where touting is accepted as normal, and touts are able to exploit technological developments to secure and sell inventory.

Law 1.0 and Law 2.0 do not work in this area. Law 3.0, where the emergent technologies are part of the solution rather than the problem, could provide a new approach to regulating resales. This would enable us to move beyond the ineffective Law 1.0 and Law 2.0 approaches and harness the technological developments into a more coherent and contextual framework.

This more holistic approach was proposed by the FanFair Alliance in September 2023 (FanFair 2023). Its three-point plan called for: legislative action that would criminalise reselling event tickets for a profit; tech action that would ensure search engines and platforms directed consumers to official ticket sources, not touts; and music industry action that would make capped and consumer-friendly ticket resale visible and viable. Whilst there are examples of what further legislative intervention may look like in Ireland and Australia (James & Osborn 2023, 2024), and the Conservative government made it clear that it will not go down this particular route (Hollinrake 2023), the Labour Party announced in February 2024 that legislation introducing a cap on tickets would form part of their Manifesto. Outside of legislation, with the law explicitly decentred, the second and third points could provide the impetus for future regulation of the secondary market. This would leave technology as the driving force behind a multi-faceted regulatory framework that uses ticketing technologies to make it more difficult to transfer tickets without the organiser's permission, and targeted regulation of specific points of the ticketing lifecycle.

The second of FFA's points would require search engines and secondary platforms to ensure that primary sales are prioritised over resales. The resale platforms will often pay to ensure that searches for tickets that are available on their sites will place them above the official primary seller, even when there are still tickets available from the primary market. This would be a clear case of harnessing technology to prevent its exploitation by ticket touts.

The third of FFA's points could be addressed by requiring all primary sellers to include a resale function in their app or on their platform. For example, tickets bought using the Dice app can only be sold on the Dice app. If a sale is successful, the price of the ticket is refunded. Similar mechanisms are available on major players like Ticketmaster. An alternative would be to require primary sellers to have an authorised capped resale platform, such as Twickets. Although these existing resale platforms are not perfect, for example, Dice only allows resales once the event is sold out, they provide safe and effective opportunities for resale, if not an automatic full refund.

Technology can also be used to regulate the secondary market in other ways. Tickets themselves are becoming increasingly sophisticated. Glastonbury Festival tickets are individually personalised to the named ticket holder and are strictly non-transferable. Primavera Sound Barcelona requires passport information to be held in its ticketing app so that identity checks can be carried out on entry and on site. Dynamic QR codes ensure that the 'ticket' is constantly updated and cannot be copied and passed on to a third party. These developments all make it more difficult to make an unauthorised resale of a ticket. The next stage of this process could be a move towards disintermediation, where event organisers use technology to sell directly to consumers instead of through agents and retain a much higher degree of control of the transactional process, with blockchain having the potential to be utilised here. A combination of regulatory law and the use of ticketing technologies could make it much more difficult to tout a ticket in the future. Such an approach could mean that we do not need to engage with the existential question of whether an uncapped secondary market is needed, as unauthorised resale would become increasingly difficult and less profitable.

## Conclusion

Law 1.0 and Law 2.0 interventions have had little impact on the secondary market. What this article demonstrates is that regulatory interventions are unable to keep pace with ticketing technologies and are inappropriate on their own as a mechanism to regulate touting. As tickets have moved from paper to digital, with sales moving from box offices to telephone purchases to online transactions, the legislative framework has been incapable of preventing the unauthorised resale of event tickets. Technological developments have proven themselves to be doubly disruptive. First, they have disrupted our understanding of what law is and where it is to be found. Secondly, technology has disrupted the idea that law is the central instrument of social order and introduced the prospect of technological governance (Brownsword 2022: 5). Where Bengoetxea is right to say that technology shapes the law – it can and does – the increasing dissonance between legal intervention and the emergence of new technologies means that the law is rarely *the* answer to effective regulation, though it may be part of a more rounded, holistic response. The doubly disruptive effect of emergent technologies paves the way for a more radical, Law 3.0 response.

## References

Alexander, Isabella (2010) *Copyright Law and the Public Interest in the Nineteenth Century.* Oxford: Hart Publishing.

Allcock, Toby & Campbell, Madeleine (2021) The UK Dangerous Dogs Act: Improved, but legally and ethically flawed. *Veterinary Record* 189(3): 85–128.

- Barker, Martin (2020) The UK 'Video Nasties' Campaign Revisited: Panics, Claims-Making, Risks, and Politics, pp. 29–50 in: L. Tsaliki & D. Chronaki (eds), Discourses of Anxiety over Childhood and Youth across Cultures. Champagne: Palgrave Macmillan.
- Brokenshire, James (2012) HC Deb. 18 September 2012, c573W. Available from: https://publications. parliament.uk/pa/cm201213/cmhansrd/cm120918/text/120918w0002.htm#120918w0002.htm spnew6 [Accessed 18 March 2024].
- Brownsword, Roger (2021) Law 3.0: rules, regulation and technology, London: Routledge.
- Brownsword, Roger (2022) Rethinking Law, Regulation, and Technology. Cheltenham: Edward Elgar Publishina.
- Bull, Rachel (2012) Operation Podium arrests 29 for Olympic ticket touting, Campaign, 31 July. Available from: https://www.campaignlive.co.uk/article/operation-podium-arrests-29-olympic-tickettouting/1143520 [Accessed 18 March 2024].
- Cohen, Stanley (1972) Folk devils and moral panics. London: McGibbon and Kane.
- Committee of Advertising Practice (2014) The Committee of Advertising Practice Code (12th edn.). London: Committee of Advertising Practice. Available from: https://www.asa.org.uk/static/47eb51e7-028d-4509-ab3c0f4822c9a3c4/The-Cap-code.pdf [Accessed 18 March 2024].
- Competition and Markets Authority (2021) Secondary ticketing: Recommendations to government for improving consumer protection, available from: https://assets.publishing.service.gov.uk/ media/61163dd1d3bf7f63a54f5f94/Secondary\_Tickets\_Report.pdf [Accessed 18 March 2024].
- The Culture, Media and Sport Committee (2023) NFTs and the blockchain: the risks to sport and culture. HC 598, published 11 October 2023. Available from: https://committees. parliament.uk/committee/378/culture-media-and-sport-committee/news/199344/ nfts-and-the-blockchain-the-risks-to-sport-and-culture-cms-committee-publishes-governmentresponse-to-report/#:~:text=The%20report%2C%20published%20in%20October,damaging%20 the%20reputations%20of%20clubs [Accessed 23 April 2024].
- DeGraaf, Leonard (1995) Confronting the Mass Market: Thomas Edison and the Entertainment Phonograph. *Business and Economic History*, 24(1): 88–96.
- Edison, Thomas (1878) The Phonograph and Its Future. The North American Review, 126(262): 527-536. FanFair Alliance (2023) FanFair Alliance urges 3 pro-consumer measures to end mass-scale ticket touting. Available from: https://fanfairalliance.org/fanfair-alliance-urges-3-pro-consumermeasures-to-end-mass-scale-ticket-touting/ [Accessed 18 March 2024].
- Foster, Ken & Osborn, Guy (2016) Dancing on the edge of disciplines: law and the interdisciplinary turn. Entertainment and Sports Law Journal 8(1): 2.
- Fullbrook, Danny (2024) Ed Sheeran cancelled resold tickets to tackle touts court hears. BBC News, 24 January. Available from: https://www.bbc.co.uk/news/uk-england-norfolk-68085597?xtor=AL-73-%5Bpartner%5D-%5BBBC+England%5D-%5Bheadline%5D-%5Bnews%5D-%5Bbizdev%5D-%5Bisapi%5D&at\_medium=social&at\_campaign\_type=owned&at\_ptr\_name=twitter&at\_ campaign=Social\_Flow&at\_link\_type=web\_link&at\_bbc\_team=editorial&at\_format=link&at\_link\_ origin=BBCSuffolk&at link id=F54D7494-BAEF-11EE-AFF5-6EB9D0B4AF07 [Accessed 18 March
- Gaines, Jane (1991) Contested Culture. The Image, The Voice, The Law. London: BFI Publishing. Greater London Authority (2011) Just the ticket: The ticketing arrangements for the London 2012 Olympic Games and Paralympic Games. Available from: https://www.london.gov.uk/media/60951/ download [Accessed 18 March 2024].
- Greenfield, Steve & Osborn, Guy (1997) Good Technology? Music and the challenge of technology towards the fin de siècle. *Information & communications technology law* 6(1): 77–85.

- Greenfield, Steve & Osborn, Guy (1998) When the Writ Hits the Fan: Panic Law and Football Fandom, pp. 255–268, in *Fanatics*. London: Routledge.
- Gur-Arye, Miriam (2017) The impact of moral panic on the criminal justice system: Hit and run traffic offences as a case study. *New Criminal Law Review* 20(2): 309.
- Hodgson, Sharon (2010) *Sale of Tickets (Sporting and Cultural Events) Bill.* London: The Stationery Office. Hodgson, Sharon, James, Mark & Osborn Guy (2024) Sharon Hodgson MP Interviewed. *Entertainment and Sports Law Journal* 22(1). doi: https://doi.org/10.16997/esli.1584
- Hollinrake, Kevin (2023) *Government Response to the CMA's Report on Secondary Ticketing*. Available at: https://assets.publishing.service.gov.uk/media/645bc35bc6e8970012a0fcbc/government-response-to-CMAs-secondary-ticketing-report.pdf [Accessed 18 March 2024].
- Home Office (2023) Football-related arrests and banning orders, England and Wales:

  2022 to 2023 season. Available at: https://www.gov.uk/government/statistics/
  football-related-arrests-and-banning-orders-2022-to-2023-season/football-related-arrests-and-banning-orders-england-and-wales-2022-to-2023-season#:~:text=During%20the%202022%20
  to%202023%20football%20season%2C%20there%20were%202%2C264,clubs%20and%20the%20
  national%20teams [Accessed 18 March 2024].
- Hull, Geoffrey (2004) The Recording Industry. London: Routledge.
- Hunningher, Joost, Morgan-Tamosunas, Rikki, Osborn, Guy & Spankie, Ro (2015) *The Magic Screen: A History of Regent Street Cinema*. London: University of Westminster Press.
- James, Mark (2017) Sports Law, 3rd ed. London: Bloomsbury Publishing.
- James, Mark & Osborn, Guy 2011. London 2012 and the impact of the UK's Olympic and Paralympic legislation: protecting commerce or preserving culture? *Modern Law Review*. 74(3), pp. 410–429.
- James, Mark & Osborn, Guy (2023) Shadowplay: the case for regulating ticket touting *The Quietus*. Available at: https://thequietus.com/articles/33631-secondary-ticketing-viagogo-stubhublegislation [last accessed 14 March 2024]
- James, Mark & Osborn, Guy (2024) 'A new dawn for ticket regulation' *Entertainment and Sports Law Journal* 22(1). doi: https://doi.org/10.16997/eslj.1582
- Jones, Richard (2009) Technology and the cultural appropriation of music. *International Review of Law, Computers & Technology*. 23(1–2): 109–122.
- King, Peter (2003). Moral panics and violent street crime 1750–2000: a comparative perspective, pp. 53–73 in B Godfrey, C Emsley & G Dunstall (eds) *Comparative Histories of Crime*. London: Routledge.
- Laville, Sandra (2012) Olympic tickets: police draw up hitlist in crackdown on black market, *The Guardian*, 20 June. Available at: https://www.theguardian.com/sport/2012/jun/19/olympic-tickets-police-black-market [Accessed 18 March 2024].
- Lloyd, Sarah (2013) Ticketing the British Eighteenth Century: "A thing ... Never heard of before." *Journal of Social History* 46(4): 843–871.
- Morris, Thomas (1962) The Origins of the Statute of Anne. *Copyright Law Symposium (ASCAP)*: 222–260. Available at: https://heinonline.org/HOL/P?h=hein.journals/cpyrgt12&i=234 [Accessed 18 March 2024].
- Netanel, Neil (2008) Why has copyright expanded? Analysis and critique, pp. 3–34, in Macmillan, Fiona (ed) *New Directions in Copyright Law.* London: Edward Elgar.
- O'Dair, Marcus (2016) *Music on the Blockchain* Middlesex University: Blockchain for the Creative Industries Research Cluster Report No 1. Available at: https://www.mdx.ac.uk/\_\_data/assets/pdf\_file/0026/230696/Music-On-The-Blockchain.pdf [last accessed 15 April 2024]
- Redhead, Steve (1995) Unpopular Cultures; The birth of law and popular culture. Manchester: MUP.

Rose, Mark (2009) The Public Sphere and the Emergence of Copyright: Areopagitica, the Stationers' Company, and the Statute of Anne. Tulane Journal of Technology and Intellectual Property 12: 123-144

Rossell, Deac (1995) A Chronology of Cinema, 1889–1896. Film History 7(2): 115–236. Shortt, Edward (1924) Report of the departmental Committee on crowds. London, H.M. Stationery Office. Yeung, Karen (2019) Regulation by Blockchain: the Emerging Battle for Supremacy between the Code of Law and Code as Law. Modern Law Review 82(2): 207-239