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## Online and offline equivalence: aspiration and achievement

Chris Reed

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### **\*I.J.L. & I.T. 248 Abstract**

A widely accepted principle of lawmaking is there should be equivalence between online and offline laws. The application of this principle requires the achievement of functional equivalence, irrespective of whether there is also formal equivalence of wording. However, there are complex barriers, deriving from the nature of the online technologies, to doing so successfully. In many instances the only way to achieve equivalence is via a fundamental reform of offline law. Ultimately, this process will leave little if any room for a separate law of cyberspace.

### **1 Introduction**

When dealing with cyberspace, lawmakers often claim to be guided by the principle that there should be equivalence of legal treatment between online and offline activities. The first public statement of this kind was made in the Bonn Ministerial Conference Declaration of 6-8 July 1997, which declared in its principle 22:

Ministers stress that the general legal frameworks should be applied online as they are off-line. In view of the speed at which new technologies are developing, they will strive to frame regulations which are technology-neutral, whilst bearing in mind the need to avoid unnecessary regulation.<sup>1</sup>

**\*I.J.L. & I.T. 249** The statement only applied to the general body of existing law, leaving the way open to deal with cyberspace-specific issues in different ways on a case-by-case basis. However, within a few years lawmakers began to view the principle as more widely mandating an approach in which all laws and regulations should, so far as possible, be equivalent online and off-line. In other words, the same legal principles should regulate an online technology activity as those which applied to the equivalent off-line technology activity.<sup>2</sup>

This article sets out to explore the circumstances in which this principle can successfully be applied to the regulation of cyberspace, and to identify situations where its application is problematic. It also examines the reverse effect of the principle on offline law.

It is worth pointing out at this stage that there is real potential for confusion between the principles of equivalence and technology neutrality. Indeed, the Bonn Ministerial Conference Declaration quoted above links the two expressly. For the purposes of this article, equivalence guides the law maker as to the principles of law which should apply to cyberspace activities and to some extent helps shape the substantive rules. Technology neutrality addresses the choice between the available substantive rules which could be used to implement those legal principles. In broad terms, technology neutrality means that the implementing rules should not favour or discriminate against a particular technology<sup>3</sup>, though the detailed usage of the concept is far more complex than this<sup>4</sup> because the two principles aim at achieving different but related ends. Sometimes the term technology neutrality is used to mean what I have described elsewhere as 'technology indifference'<sup>5</sup>, which attempts to define a rule in such a way that it applies equally well to the activity whatever technology is used to undertake it. This is broadly similar to the concept of formal equivalence explained below. More commonly, though, the term is used to describe a legislative aim that the rules should not discriminate between technologies and should continue to apply effectively even if new technologies are developed. Such a rule might be devised only for online activities, and is therefore not necessarily aiming at equivalence online and offline.

### **\*I.J.L. & I.T. 250 2 What does Equivalence Mean?**

The first problem with adopting a principle of equivalence is that the term does not have a clear meaning in the context of lawmaking. Maurice Schellekens identifies two main ways in which it has been used.<sup>6</sup> The first is as an overarching policy statement that there should be broad equivalence of treatment for offline and online activities while remaining agnostic as to how such equivalence should be achieved. As Schellekens points out, this tells us nothing about the lawmaking techniques involved:

The law is a black-box and its output must meet certain requirements. It is for lawyers to figure out how the requirements can be met.<sup>7</sup>

The alternative usage is that the principle acts as a substantive guideline for the application of existing law or the creation of new law. However, this too is ambiguous.

One way in which it might be applied is to say that the *same* rule has to apply to both online and offline situations. In other words, the search is for a single rule or, where the rule is reiterated for different situations in, for example, sectoral regulation, for the equivalent rules to be worded identically. There are numerous examples of equivalence in this purely formal sense from the cases which applied existing law, devised before cyberspace came into existence, to online activities. The problem which these cases highlighted was that differences between online and offline technologies and practices often resulted in the effect of the rule being very different as between them. As an example, the established offline rule in defamation law was that a publisher is liable to the person defamed, in addition to the author.<sup>8</sup> Applying this rule without modification to online material will often produce the result that the host of an internet resource such as a website or newsgroup is made liable for defamatory content of which the host had no knowledge and could not discover without taking unusual precautions.<sup>9</sup> The effect of the rule is very different for an offline publisher, who rarely publishes material which not first been reviewed by representatives of the publisher such as editors.

The alternative way of using the principle as a substantive guideline is to seek to achieve functionally equivalent treatment irrespective of whether the activity takes place online or offline. In theory this might be combined *\*I.J.L. & I.T. 251* with an attempt at formal equivalence, by seeking new wording for the rule which seems equally applicable to both, but this creates a risk that the offline effects of the rule might be altered unintentionally. It is therefore usually only appropriate if a full review of the law is undertaken<sup>10</sup> or a completely new rule is being formulated.<sup>11</sup> In most recent legislation, even though the lawmaker might reasonably be expected to have online activities in mind, there is little evidence of attempts to achieve formal equivalence but numerous examples of rules written specifically to deal with online behaviour.

The most common way of using the principle seems to be to lay down general principles of law, and then to create specific rule-sets to deal with the particular difficulties which arise online in an attempt to achieve functional equivalence. Specific adoption of this approach can be found, for example, in the UK FSA's policy document 'New Regulator for a New Millennium'<sup>12</sup>, which explained how it intended to apply the Financial Services and Markets Act 2000. Apostolos Gkoutzinis writes:

This policy means that the FSA will not discriminate in its approach on the basis of delivery channel alone, unless the risks to the statutory objectives justify it. Nevertheless, non-discrimination does not suggest the imposition of the same requirements on all delivery channels, since the risk may differ but it does require the FSA to be able to justify any differences by reference to the features of the specific medium.<sup>13</sup>

The Act itself made no specific provision for online activities, but has been amended numerous times since its enactment to introduce detailed online rules.<sup>14</sup>

This approach seeks equivalence of *application* of the rules, in other words that the obligations imposed on the subject of the rules should be broadly equivalent in burden once allowance has been made for the differences between the online and offline versions of the activity. There is however a second element of functional equivalence, equivalence of *outcome*, which also needs to be considered.

Perhaps the clearest example of an attempt to achieve equivalence of outcome can be seen in the case of electronic signatures. In the common law world, manuscript signatures simply perform evidential functions, *\*I.J.L. & I.T. 252* and so the common law jurisdictions have experienced no difficulty in translating the rules for online signatures in a way which achieves equivalent effect.<sup>15</sup> However, in civil law jurisdictions signatures often have a formal significance which derives from the physical action of writing one's name on paper. Because this physical action cannot be replicated

online those jurisdictions have experienced substantial difficulty in modifying their laws.<sup>16</sup>

To solve this difficulty the EU e-Signatures Directive<sup>17</sup> introduced the concept of an 'advanced electronic signature' which, if supported by a qualifying identity certificate issued by an appropriate person, would be legally equivalent to a hand-written signature.<sup>18</sup> The intention of this measure was clearly to establish equivalence of outcome between online and offline signatures, and there is no doubt that it did so in purely legal terms. As a matter of law, throughout the EU such electronic signatures are legally equivalent to manuscript signatures.

Where the Directive failed was that it ignored the question of the *utility* of this new kind of electronic signature. Manuscript signatures require no technology more complex than a pen, and are easy and cheap to apply to a document. By contrast advanced electronic signatures require expensive technology, major changes to the ways that users interact with each other, and detailed legal and technical advice before they can be adopted.<sup>19</sup> The minimal adoption of advanced electronic signatures by internet users demonstrates this failure very clearly.<sup>20</sup> The lesson to be drawn here is that an attempt to achieve functional equivalence must not consider just the purely legal effects of a rule. It must also encompass the effects of the rule on the wider environment in which the activity is undertaken.

The difficulty with the aim of achieving functional equivalence is often that online and offline activities are so different that it may be almost impossible to assess the application and outcome of the rules on a comparable basis. To return to defamation, in many jurisdictions the law has *\*I.J.L. & I.T. 253* been amended to introduce new rules which apply only online. These rules attempt to achieve equivalence by conferring some degree of immunity on an online host of defamatory material<sup>21</sup> or by redefining the term publisher to exclude some categories of online actor.<sup>22</sup> However, the result may well have been to favour online publishing over offline in some circumstances.<sup>23</sup> Given the substantial operating differences between online hosting and offline publishing, it is far from clear what equivalence of treatment between them might be.

### 3 Equivalence as a Policy Statement

Does a policy statement announcing an aim that there should be equivalence between online and offline law serve any useful purpose? The answer must be yes, at the very least because the statement makes a normative assertion about the ways in which online actors are expected to behave. The standards to which such actors will be held are to be broadly the same as the standards offline.

A normative statement of this kind goes some way towards countering the natural human tendency to treat cyberspace as somewhere 'other' where different, and usually lower, standards of behaviour are permissible. This tendency is well-documented, and we know that many users of online fora engage in a degree of aggression and casual abuse which they would not show face-to-face<sup>24</sup>, while those who would never dream of making multiple physical copies of a music CD for friends are perfectly happy to engage in file-sharing.<sup>25</sup>

If online and offline law were radically different, it would be necessary for users to make a complex mental switch when going online. Human beings already have difficulty in complying with all the rules which currently apply to their offline activities, and it is unrealistic to expect them to learn a separate set of ground rules to govern their online lives.

It might be objected that the online world already has a number of established legal rules which do not apply offline. One example is the *\*I.J.L. & I.T. 254* system for resolving disputes over domain name registration, which deals with a problem which does not exist in the offline world. However, that system is based on concepts of contract and trade marks which originated in the offline world, and is clearly developing via the extension of offline law principles rather than creating a completely new set of legal norms.<sup>26</sup> A more apposite example might seem to be the requirement under the Electronic Commerce Directive for businesses to identify themselves and give an offline address and contact details.<sup>27</sup> Even here, we can find a long-standing offline principle that traders should be identifiable in the requirements for company registration and the UK Business Names Act 1985 s. 4(1), and at the EU level the need for offline as well as online sellers to be identifiable is set out in the Distance Selling Directive.<sup>28</sup> The additional obligations imposed by the Electronic Commerce Directive simply extend these offline principles to cope with the complete lack of physical contact in the offline world.

These connections between the rules online and offline are important. The policy statement would lose its normative effect if the rules were so often different that it became apparent that there was no

match between the policy and reality. This does not, of course, mean that there must never be a difference between online and offline law. However, those differences need to be kept as few as possible, and to be justified, if the policy is to have any meaning.

#### 4 Equivalence as a Substantive Guideline

Although the policy statement can serve a useful purpose, its implementation into substantive law is not easy. The greatest difficulty lies in defining or assessing whether a proposed implementation of the policy does in fact produce equivalent treatment between online and offline activities. Schellekens points out:

The law regulates relations between persons. Every person has his own position and interests, worthy of legal protection. A rule is, in one way or another, the outcome of a balancing of the interests involved. A rule has, for example, the rationale to protect one interest and in doing so, it takes account of other, flanking interests. The relation between the *\*I.J.L. & I.T. 255* interests or the way in which a balance can be found between conflicting interests on-line may be quite different off-line.<sup>29</sup>

He goes on to say that in some cases the appropriate solution may be a new rule for online activities, applying the offline rationale in a different way to take account of online differences.<sup>30</sup>

Whether a different rule is required to achieve equivalence depends to a large extent on the primary focus of the rule. If its most important element is the mental state of the subject, as is the case for much of the criminal law, then it is usually easy to achieve online and offline equivalence through an identical, or slightly modified, version of the offline rule. If, however, the rule focuses on the behaviour of the actor rather than his or her mental state, there is likely to be a need for a different rule if the nature of the behaviour online is radically different from the offline situation.

##### 4.1 Rules Targeting Mental States

Many of the legal rules which are designed to regulate human activities in general are expressed in terms of the mental state of the actor when engaged in the activity in question. The reason these rules require little or no modification to be applied to online activities in an equivalent way is that a user's mental state will generally be much the same whether acting online or offline.

Criminal law rules often define offences in terms of the intention of the defendant, and there has been no real difficulty in applying general purpose rules, such as those against harassment, to online actors who are simply using the internet as a new vehicle to engage in criminal conduct.<sup>31</sup> Problems have arisen, however, where an essential element of the offence involves the mental state of the *victim* as opposed to the defendant. Because computer and communications technologies permit automated decision-making, it may not be possible to identify a human victim who has the required mental state. In the UK this issue arose in relation to the offence of fraud, which required a victim to have been deceived. The initial approach to resolving this problem was via piecemeal amendment of specific offences<sup>32</sup>, but the Law Commission identified that this was not a satisfactory solution and recommended complete reform of the law *\*I.J.L. & I.T. 256* of fraud.<sup>33</sup> The Fraud Act 2006 deals with the problem by redefining the offence in terms of the defendant's intention only, thereby producing a rule which works in an equivalent way both online and offline.<sup>34</sup>

Mental states also play a role in non-criminal rules. Contract formation is an obvious example, requiring the reaching of an agreement between the parties.<sup>35</sup> The means of communication used to form this agreement, whether online or offline, are irrelevant, and thus the only legal difficulties in this area have arisen under legal systems which impose formal requirements for such agreements to be legally valid contracts.<sup>36</sup>

##### 4.2 Rules Targeting Behaviours

Where legal rules target the behaviour of actors, irrespective of their intentions, achieving functional equivalence between their online and offline application can be more difficult. In the early days of public use of the internet, when the courts had no choice but to apply the existing offline rules, many examples of non-equivalent effects became apparent. When laws designed specifically for online situations were enacted, it was also common to discover that the effects they produced were different from what had been expected<sup>37</sup>, and thus produced non-equivalent treatment of the online situation. Part 4 of this article attempts to analyse the reasons which made the achievement of equivalence so problematic.

### 4.3 A Tentative Methodology

We have seen that if the rule in question is primarily concerned with the mental state of the person subject to the rule, there should be little difficulty in achieving online/offline equivalence. However, where the rule focuses on regulating behaviours we need a methodology to guide our implementation of the offline principles into a new rule of substantive law.

The methodology proposed here has three stages:

- Identifying the various interests which the rule needs to take into account;
- Analysing the ways in which the new rule is likely to affect those interests; and
- Evaluating the resultant balance of interests to decide if it is equivalent to the offline situation.

**\*I.J.L. & I.T. 257** The first of these is not obviously difficult, though as we shall see later there are a number of fields of law where it is far from clear which interests are intended to be affected by the rules. The second requires the lawmaker to predict the ways in which online activities will develop, and lawmakers have a track record of poor predictions in this area.<sup>38</sup> The third is clearly problematic because the balance of interests is unlikely to be identical under the new online rule, and it is not obvious how a lawmaker should judge whether a diminution in one interest is adequately balanced by an improvement in another.

It may be possible to derive some insight into these problems by examining known hard cases, where difficulties have arisen when attempting to apply existing rules to new online activities or creating new online rules which have equivalent effects to their offline counterparts.

## 5 Why is Equivalence Hard to Achieve?

This article suggests that there are four categories of online activity which differ from their offline versions in ways which make it difficult to produce rules with equivalent effect for both. The first arises from the technical characteristics of the internet technologies, which can encourage or even mandate that the activity is carried out in different ways. The second category contains those activities whose effects are qualitatively different when carried out online. The third encompasses activities which are completely new, and thus have no offline equivalent. The final category consists of activities which fall clearly into a single legal domain offline, but where the convergence of communications technologies potentially subjects that activity to more than one legal domain when conducted online.

For the first and second of these categories, the differences in the nature or effects of the online activity often highlight the fact that the pre-existing offline law did not clearly identify or define the interests which the law was balancing. The third and fourth categories are prone to categorisation difficulties, where the activity is erroneously diagnosed as falling within an existing legal categorisation or where it clearly falls within more than one category and is thus subject to multiple rule-sets.

### 5.1 Uncertain Interest Balancing

#### 5.1.1 New ways of acting

It is obviously true that the technology used for online activities can result in those activities being very different in nature from their offline counterparts. Although obvious, this is not particularly helpful. If we wish to understand **\*I.J.L. & I.T. 258** the problem deeply enough to be able to assess why equivalence is hard to achieve, we must analyse the reasons for these differences.

The internet technologies exhibit a number of features which are not present offline, and which are relevant to the problem of equivalence. All of these are emergent properties of the way in which communications are carried between the networks of computers which constitute cyberspace.

The fundamental difference from the offline world is that all online communications are transported in digital form, and thus there is no movement of any physical property which acts as a carrier for the information which constitutes the communication. This is very different from digital information recorded on a physical carrier such as a CD. All the other features which differ from the offline world derive from this digitisation and dematerialisation.

The second feature is that the method of information transport is via copying the communication from computer to computer<sup>39</sup>, unlike sending a letter in which the physical package is moved from place to place. The third, related to this, is that numerous intermediaries become involved in the communication, all copying and transmitting the information.

Fourthly, digitisation allows automation of decisions, such as whether to send the communication in the first place and what to do with it when it is received. As a consequence, a large element of human oversight and decision-making disappears.

Fifth, the internet is borderless unless national barriers are introduced artificially.<sup>40</sup> All addressees of communications are equally close to the sender. Related to this, the sixth feature is that one-to-many communication is vastly easier than in the offline world, where the infrastructure required for one-to-many communications is rare and expensive.<sup>41</sup>

Seventh and finally, the marginal cost of each internet communication is very nearly zero. Almost all the costs are in setting up the infrastructure (computers, servers, internet connection services), and these are largely fixed costs irrespective of the amount of communication which takes place.

An important consequence of these features of cyberspace is that when an activity is moved online, aiming to achieve the same purposes as offline, the technology both encourages the actor to do this in new ways and constrains him from replicating all the features of the offline activity.

To illustrate this, let us take the example of Georgina who publishes a hard-copy specialist-interest magazine. She does this as a labour of love, *\*I.J.L. & I.T. 259* not seeking to make a profit, and the five hundred recipients of the magazine, all of whom are in the UK, pay an annual subscription which covers the cost of production and mailing.

When she transforms the magazine into a website, the internet technologies encourage Georgina to make a number of changes in the way she communicates with her readers:

- Her costs will plummet, because she no longer has to print and mail the physical copies. There will be some small costs for web hosting, but these can probably be covered by incorporating advertising links onto her web pages. Advertising was previously not possible because the magazine had too small a circulation.
- If her readers find the advertisements attractive and click through from them to the advertisers' sites, Georgina may find that she begins to make a profit, transforming her activity into a business.
- As Georgina is not charging, the website can be open to the whole world. It is therefore likely to be viewed from many countries other than the UK by those sharing the special interest.
- In the offline magazine, Georgina could only include text and images of which she had copies. Now she can link to all kinds of material hosted on other websites, incorporating them virtually as part of her own offering.
- The website will allow her to host audio and video clips, something which was not possible in a hard copy magazine.
- Website hosting services often provide tools for creating discussion fora, and if Georgina uses these she will be hosting material provided by her users, probably unmoderated unless she is prepared to devote substantially more time to the project.

The technology also constrains Georgina from, among other things, restricting website access to her existing five hundred subscribers. There is no easy way of doing this<sup>42</sup>, and in any event why should she bother given the advantages of allowing free access? Similarly, she cannot easily limit access to UK-based users, and as we have seen the technology encourages her to make the website accessible world-wide.

If we attempt to apply the methodology proposed in part 3.3 above, the difficulties in achieving equivalence of effect become immediately apparent. The field of copyright law is particularly relevant to offline magazines and so we shall examine some rules from that field here.

In her offline magazine Georgina will generally<sup>43</sup> infringe copyright in any materials she includes in it unless she has permission from the *\*I.J.L. & I.T. 260* rightholder, for example the author of the text and the owner of copyright in photographs. This is because making copies, distributing copies or

making the work available to the public are all infringing acts.<sup>44</sup> However, when Georgina starts her website she can 'include' materials on other websites in her offering simply by linking to them, so that she does not need to make copies or host them on her website.

Applying the offline rule produces real uncertainty as to whether the linking is an infringement of copyright.<sup>45</sup> All Georgina's website contains, even in the case of in-line links<sup>46</sup>, are the addresses of those materials via which the user's web browser can download them direct from the websites which host them. The complaint in such cases is not really about unlicensed copying, but rather that Georgina has made the materials accessible in a way which the rights owner did not intend<sup>47</sup>, and potentially also that she is taking unfair advantage of the rightholder's work for her own benefit without making payment.<sup>48</sup>

Step one of our tentative methodology immediately identifies that it is unclear precisely what interests of the rightholder are intended to be protected by the rules. If those interests are defined narrowly, in terms solely of controlling the making and dissemination of copies of the work, then Georgina's website does not really affect those interests at all because the rightholder still controls those matters.<sup>49</sup> This would mean that the application of the offline rules to the website produced equivalent effects, and no modification of the rules is required. If, though, the interests of the rightholder include control of all forms of dissemination of the work, it appears that Georgina's website does affect those interests.

There is no consensus about which of these analyses of the rightholder's interests is the correct one. It is impossible to continue with the methodology in an attempt to find a rule of equivalent effect until the relevant interests have been defined.

This lack of clarity about the interests to be balanced is very common. Copyright, like many other of our law-systems, developed incrementally *\*I.J.L. & I.T. 261* over a long period of time. New rights were added on a piecemeal basis to deal with issues as they arose. The question whether the rightholder's interests are limited to controlling the making of and dealing in copies, or whether they extend to include wider control over dissemination of the work, never needed to be considered in the offline world. This is because the only known methods of disseminating a work widely for reading and viewing involved physical transfer of copies, so that control of those copies inevitably gave de facto control of dissemination until the cyberspace technologies removed that control.

The reforms to copyright law as a result of the advent of cyberspace, and particularly the granting of some immunities to intermediaries against infringement liability and other liabilities arising from the carriage and hosting of digital information, made no attempt to achieve online and offline equivalence. A new type of actor had emerged, and it was clear that the uncertain application of offline rules to the activities of intermediaries might hamper the development of the internet.<sup>50</sup> Granting blanket immunity was a pragmatic measure to protect the nascent interests of these new actors, and of society generally in the development of the internet, but took little account of the interests of those who had rights in information or were affected by its communication. Judges are beginning to look for ways to change this new balance of interests<sup>51</sup> and proposals to modify the immunity are increasingly being put forward.<sup>52</sup>

As an interim conclusion, therefore, we have identified that one of the reasons why the new features of the internet technologies make it hard to produce rules with online and offline equivalence is that the new behaviours which arise from those technologies highlight the fact that the existing rules do not contain a clear understanding of the interests which the law has to balance. This is, however, not the only reason for our difficulties.

### **5.1.2 Qualitatively Different Consequences of the Activity**

In some cases the consequences of moving an activity online appear at first sight to be very much the same as when the activity is conducted offline. Further thought often reveals, however, that their scope has increased so *\*I.J.L. & I.T. 262* widely that they are in fact qualitatively different from the same activity conducted offline.<sup>53</sup>

A good example of such an activity is private copying of a copyright work. In most of the Civil Law jurisdictions private copying is a permitted exception to the rightholder's exclusive rights.<sup>54</sup> Offline copying of a book or a CD requires physical contact between the copier and the work to be copied, and this therefore limits the extent of private copying. Once the work is accessible in digital form online, however, anyone with an internet connection can copy it without needing to move from their desktop. This produces a dramatic increase in the quantity of private copies made, an increase which

is so large that it seems likely to destroy the current music industry business model.<sup>55</sup>

The qualitative change in the consequences of private copying inevitably led to a debate about whether the rule should be changed online. Schellekens points out<sup>56</sup> that the two sides of the debate focused on different interests; proponents of change argued that the interests of rightholders were being damaged, and that the private copier had no interests to protect, whereas opponents identified interests in protecting the private life of the users of works and in freedom to communicate information as paramount. This debate had not been necessary offline because private copying was seen as de minimis and, in practice, not something which could be controlled effectively. In other words, the interests which the offline rule balanced had not previously been defined.

The private copying exception is an example where, in the EU at least, the methodology proposed in part 3.3 was followed in an attempt to achieve online and offline equivalence of effect. Art. 5(2)(b) of the EU Copyright Directive<sup>57</sup> permitted Member States to maintain their private copying exceptions under more restrictive conditions than previously, and the Explanatory Memorandum to the proposal for the Directive<sup>58</sup> explains the factors to be taken into account in determining the appropriate balance, which include compensation for rightholders and respect for the three step test set out in art. 9(2) of the Berne Convention. A consultation by the European Commission on the exception has been in progress *\*I.J.L. & I.T. 263* since 2004<sup>59</sup> and the Belgian and French courts have reconsidered the appropriateness of the balance, deciding that the three step test is the paramount statement of the balance and that national law needs to be interpreted in that light.<sup>60</sup>

It seems reasonable to conclude that the appropriate balance between the interests of private copiers and rightholders has still to be established. For that reason, we can also conclude that there is not yet equivalence of effect between the online and offline rules relating to private copying.

To take a second example, the qualitatively different consequences of publishing defamatory material online, compared to offline, have shown that English defamation law embodies a balance of interests which is almost certainly inappropriate for cyberspace. English law has traditionally concentrated on protecting the interests of the defamed person only and this, coupled with placing the burden of proving truth on the defendant, has led to it being recognised as the world's most claimant-friendly jurisdiction. The English courts adopt the principle set out in Australia in *Gutnick v Dow Jones*<sup>61</sup> that publication of an online defamatory statement occurs where it is read, and that each reading is a fresh publication with its own limitation period.<sup>62</sup> In consequence, a claimant who has any kind of reputation in England<sup>63</sup> is able to bring an English defamation action by proving no more than that the website containing the defamatory statement was accessible in England.<sup>64</sup>

This tilting of the balance in favour of the interests of the defamed person did not seem to present insuperable problems in the offline world. UK authors and publishers learnt to work within its constraints, and the UK press was not thought to be notably less free than in other countries. However, it is generally recognised that the minimal weight given by English defamation law to the interests in free speech and press freedom poses particular problems for online publishers. It has even been reported that some US publishers are blocking online access from UK IP addresses.<sup>65</sup> As a consequence, the UK government is reconsidering the balance of interests. The Ministry of Justice is consulting on reforming the multiple publication rule<sup>66</sup>, and since the publication of that consultation the Minister of *\*I.J.L. & I.T. 264* Justice has announced plans for major law reform to end 'libel tourism', particularly in relation to online publication.<sup>67</sup>

Where the consequences of taking an activity online are qualitatively different from its offline equivalent it seems likely that an attempt to achieve equivalence by applying the existing offline principles is doomed to failure. Equivalence is likely to be achievable only by conducting a review of the interests involved, both on- and offline, with the aim of developing new rules which can be applied in both situations.

## 5.2 Categorisation Problems

The second reason why equivalence of effect is hard to achieve can be that an online activity has been wrongly categorised. Categorisation is a fundamental part of legal analysis. Lawyers are trained to review an activity, identify potentially applicable categories under the existing law, and then assign the activity to its most appropriate category. This analytical method enables the lawyer to advise which rule-set from the existing law applies to the activity.

Where the most similar existing category is not a good fit for a completely new activity, in spite of the apparent similarities, this is a defective method for determining the appropriate legal solution. In the



first instance an inappropriate offline rule will be applied, even though it is not properly adapted for the new activity. Following this, the error will be compounded when it becomes clear that a new rule is necessary because the search for a new rule will inevitably start from the existing categorisation, which was wrong in the first place. The tendency is always to regulate the new activity by modifying an existing legal regime, rather than subjecting it to a *de novo* analysis with a view to developing a new and appropriately fitting rule-set.

Categorisation problems also arise when there are two distinct offline categories, each with its own rule-set, but conducting the activity online converges the categories so that it is no longer obvious which the online activity fits into. The potential to apply both rule-sets can produce contradictory rules, and inevitably makes the starting point for achieving equivalence entirely opaque.

### 5.2.1 No Offline Equivalent

In some cases an online activity is so completely new that it has no offline equivalent. Where this happens, it might be thought that there would no question of attempting to achieve functional equivalence to offline rules in its regulation, because there are no offline rules which are clearly applicable to the new activity.

**\*I.J.L. & I.T. 265** However, this is too simplistic an approach. Even where an online activity is novel, some aspects of that activity will necessarily appear similar to existing offline activities. There is thus a temptation to seize on the similarities while ignoring the differences, and attempt to assimilate the regulation of the new activity to the most closely matching offline activity.

This is precisely what occurred with the regulation of e-money. When the concept was first mooted in the early 1990s it was clear that it did not exhibit any of the characteristics which would subject it to existing financial services regulation, and was thus an almost completely unregulated activity in most jurisdictions.<sup>68</sup> In Europe there was strong pressure to regulate this new phenomenon<sup>69</sup>, resulting in the e-Money Directive 2000.<sup>70</sup>

The drafters of this Directive perceived the closest existing model to be that of payment systems operated by deposit-taking banks, and therefore imported many characteristics from the regulation of those institutions into the new law on e-money. Their aim was expressly to achieve some degree of regulatory equivalence, described in the recitals to the Directive as being to 'preserve a level playing field between electronic money institutions and other credit institutions issuing electronic money'.<sup>71</sup> However, the effect was in fact to impose a business model on e-money issuers which was entirely inappropriate<sup>72</sup> and may well have prevented the further development of e-payment services.<sup>73</sup> A new Directive was enacted in 2009 and will come into force in 2011<sup>74</sup>, and this new legislation abandons the deposit-taking bank analogy in favour of a more generic model of payment service regulation which was developed in the light of modern, on-line payment services.

The tendency to focus on categorisation can be seen particularly clearly in respect of the legal regulation of search engines. Gasser identifies<sup>75</sup> a **\*I.J.L. & I.T. 266** large number of strands which make up the regulatory debate about search engines. All these strands derive from the categorisation of search engine activities in terms of known offline activities. To take just a few as examples:

- The debate on infrastructure regulation places search engines in the category of utilities and argues for or against their regulation along the same lines as telecoms and water companies.<sup>76</sup>
- The ownership debate divides quite clearly between those who place search engines in the same category as ISPs and online communication network operators<sup>77</sup>, and those who see them as intentional copiers and republishers of others' material.<sup>78</sup>
- The content debate contains a wide variety of categories for its participants to use. A common divide is between those who categorise search engines with newspapers, broadcasters and other free speech facilitators<sup>79</sup> and those who view them as executive arms of the pornography industry.<sup>80</sup>

To add a further example not listed by Gasser, the web crawling and deep linking activities of search engines have been categorised by some courts and some commentators as trespasses to physical property.<sup>81</sup>

The fact that search engines can, with little effort, be fitted into *all* these categories is surely a clear indication that *none* of them provides an appropriate rule-set. One possible approach to the problem would be to apply whichever rule-set. seems most apt, based on identifying the categorisation which

most closely fits the facts of the actual case. This would produce a level of uncertainty in the law which must be unacceptable. It seems clear that search engines are *sui generis*, and require a rule-set which is crafted specifically for that purpose. Whether the concept of equivalence has any part to play in that crafting is examined in part 6 below.

### 5.2.2 Convergence

The phenomenon of convergence has troubled lawmakers ever since the internet became a pervasive means of communication. Courts were soon *\*I.J.L. & I.T. 267* asked to choose between categorisation of ISPs as mere telecommunications carriers or as publishers<sup>82</sup>, and websites as news sources or cable programming services.<sup>83</sup> Telecommunications regulation had for many years established separate regulatory regimes for data carriage and voice telephony, but as soon as the bandwidth became available to allow realtime audio carriage it became clear that these categories had converged online so that it was impossible to define which regime applied.<sup>84</sup>

The internet communications technologies are completely indifferent to the content of the information which passes across the internet. From the technological perspective, text, numbers, audio and video are all the same thing. Regulatory distinctions based on the technologies used to communicate (paper for text, electro-magnetic radiation for audio and video) become very difficult to maintain.

The problems facing lawmakers are illustrated particularly clearly in the EU's recent attempt to clarify the application of television regulation to online audiovisual content. Most countries place constraints on the types of content which can be included in television programmes, but do not apply those constraints to audiovisual material made available via a website.<sup>85</sup> The Audiovisual Media Services Directive of 2007<sup>86</sup> aimed to maintain the regulatory control for television programming, whether delivered by traditional broadcasting or online, and also to ensure that a less onerous regulatory regime applied to 'television-like' on-demand online content whose provision 'would lead the user reasonably to expect regulatory protection'.<sup>87</sup> This is a clear policy that there should be equivalence between the regulation which applies to offline television and that which applies to similar content services provided online.

However, the difficulties in achieving equivalence are substantial and have produced an unusual drafting style. The recitals to the Directive, *\*I.J.L. & I.T. 268* which would normally state the reasons why particular provisions are included, instead make lengthy statements about what its provisions *should* achieve. This is perhaps in recognition that the nature of the technology makes it unlikely that they will in fact achieve those aims.

As examples, recital 16 states:

... the definition of an audiovisual media service should cover only audiovisual media services, whether television broadcasting or ondemand, which are mass media, that is, which are intended for reception by, and which could have a clear impact on, a significant proportion of the general public ... but should not cover activities which are primarily non-economic and which are not in competition with television broadcasting, such as private websites and services consisting of the provision or distribution of audiovisual content generated by private users for the purposes of sharing and exchange within communities of interest.

There was clearly no way to translate this optimistic statement into law, and so the definition which decides whether or not an online activity is subjected to the regulatory regime is in fact that its operator 'has editorial responsibility for the choice of the audiovisual content of the audiovisual media service and determines the manner in which it is organised'.<sup>88</sup>

Similarly hopeful statements are that the regulation should not apply to emails or to 'websites that contain audiovisual elements only in an ancillary manner, such as animated graphical elements, short advertising spots or information related to a product or non-audiovisual service'<sup>89</sup>, nor to online versions of newspapers and magazines.<sup>90</sup> The concept of 'television' is to include 'near video-on-demand' online services, but not actual video-on-demand.<sup>91</sup> Finally, 'In the context of television broadcasting, the notion of simultaneous viewing should also cover quasi-simultaneous viewing because of the variations in the short time lag which occurs between the transmission and the reception of the broadcast due to technical reasons inherent in the transmission process', although the actual definition refers only to simultaneous viewing.<sup>92</sup>

This article is not the place to discuss the merits and defects of the Directive<sup>93</sup>, and only time will tell whether the hopes expressed in its *\*I.J.L. & I.T. 269* recitals are matched by the decisions of the

courts and the ways in which the online audiovisual content sector develops. My aim was rather to illustrate the point that the regulation is firmly grounded in a categorisation labelled 'television broadcasting', but that convergence resulting from the nature of the internet technologies has made that categorisation, at best, problematic.

The term 'convergence' has been adopted to describe the situation where an online activity brings two previously separate categories of regulation so close to each other that the boundary between them becomes difficult to determine. What it can also indicate is that, as is the case for audiovisual content, the online version of the activity has not merely converged the categories but has actually merged them. In effect they have ceased to exist as separate categories so far as the online world is concerned.

As a consequence, any attempt to categorise the online activity as a step towards achieving equivalence of effect with the offline world is a pointless exercise. If equivalence is sought, it can only be achieved by reforming the offline law to abolish or modify its categories in a way which is compatible with the online world. This is the route taken in the most recent revision of the EU communications regulation regime, which has abandoned the distinction between voice and data carriage, in large part in an attempt to achieve online and offline equivalence.<sup>94</sup>

## 6 When can Equivalence be Achieved?

We have seen that making a policy statement that the law should be broadly equivalent online and offline serves a useful purpose, but that using the concept of equivalence as a guideline for making substantive law is more problematic. Part of the difficulty arises from the fact that 'equivalence' is hard to define. Formal equivalence, where the wording of the rule is the same for cyberspace as for the physical world, does not implement the policy unless it also achieves functional equivalence. Functional equivalence is in part the achievement of congruence between the obligations imposed on actors, but also requires the rule to produce similar economic and social outcomes in both online and offline situations.

However, we have also seen that there are circumstances in which achieving equivalence is difficult, perhaps impossible. How can we identify those cases where it is worth attempting to produce equivalence?

The easiest situation is where the offline rule's fundamental obligations are based on the intentions or beliefs of the subject, in other words on mental states. Rules of this type are common, and I have argued in part 3.1 above that they can be applied to online activities with little or no *\*I.J.L. & I.T. 270* modification because the mental states of actors do not normally alter merely because they are acting online. Here, formal equivalence of wording is also likely to achieve functional equivalence.

Offline rules which target behaviour, by imposing requirements on how an activity is conducted, are less likely to be easily applicable to online actors without revision. This is because the internet technologies make it possible, and often highly desirable, to carry out the activity in a different manner from offline. Here, functional equivalence can be achieved by recasting the offline rule provided that use of internet technologies does not make the activity so different from its offline analogue that equivalence cannot be achieved. To decide whether the differences are too great, the lawmaker must undertake two elements of analysis:

- First, the interests which are balanced by the offline rule must be identified, and then the online activity must be analysed to discover whether the same interests are engaged. If this is the case, the rule should be revised to achieve the same, or at least a broadly similar, balance online. The lawmaker also needs to consider the utility of the online solution, as if the revised rule makes the online activity more onerous or less effective than its offline counterpart the new rule will not achieve full functional equivalence.<sup>95</sup>
- Second, the lawmaker needs to consider the categorisation of the online activity, because regulating it by revising an offline rule clearly places that activity in the same category as the offline behaviour. The dangers of false categorisation, and in particular the phenomenon of convergence through which the technologies of cyberspace collapse and merge offline categories, have been explained at part 4.2 above.

If there is an identifiable set of interests which are engaged both online and off, and additionally the online activity can accurately be categorised with its offline analogue, it is likely that functional equivalence can be achieved by producing a revised version of the offline rules to apply online.

Where the existing offline rule neither applies in an equivalent way to the offline situation, nor can be modified to produce equivalence, the only remaining option is to undertake reform of the law to produce a new ruleset which is capable of applying both online and offline. This approach is likely to be workable if an appropriate set of interests can be identified for balancing, and if in addition a new legal category can be devised which is capable of capturing both the online and offline activities.<sup>96</sup> Where fresh categorisation is not possible, as seems likely for online 'television-like' activities<sup>97</sup>, the search for equivalence will probably fail.

**\*I.J.L. & I.T. 271** Ab initio law reform will also need to re-examine the fundamental basis of the existing offline law. It is increasingly common to find, when a new activity goes online, that the legal regulation of that activity offline depended on unarticulated assumptions which no longer hold true. These tend to be assumptions about physical property, ownership or control which, once the activity has been reduced to no more than dematerialised transactions in electronic information, cease to hold true. We have seen examples of this from the laws relating to fraud, defamation, payment services and telecommunications regulation, all of which identified that the offline law needed to be changed if equivalence were to be achievable.

Such an overturning of assumptions can also occur because of policy decisions made to encourage the development of cyberspace, such as the scheme of country of origin regulation established by arts 3 and 4 of the Electronic Commerce Directive. As a consequence German unfair competition law, which placed severe controls on advertising and other competitive activity by foreign traders, ceased to apply to online sellers based in other EU Member States but remained in force for German sellers. It was therefore swiftly reformed to achieve functional equivalence.<sup>98</sup>

As cyberspace permeates more and more activities, ab initio law reform is likely to increase. Because such reform tends to produce laws which are both functionally *and* formally equivalent, we may eventually see a decline in the approach of using heavily modified offline rules to govern cyberspace. The principle of equivalence seems after all to be of more than symbolic value, and a rule which applies equally well both online and offline is likely to achieve a higher degree of equivalence than two different rule-sets whose combination of application and outcome merely aspire to be equivalent.

## 7 Intractable Cases

Where none of the approaches discussed in part 5 above can be used, the lawmaker will be forced to acknowledge that this is a case where cyberspace mandates a non-equivalent regulatory regime. However, we have seen that the number of such cases is very few.

Copyright law presents no major theoretical obstacles to achieving equivalence<sup>99</sup>, but is nonetheless an intractable case. This is because of the international copyright treaties, which constrain lawmakers from undertaking unilateral law reform. International consensus on the interests at **\*I.J.L. & I.T. 272** stake, and the appropriate balance to be struck between them, is unlikely to be achieved in the near future. Until there is consensus that fundamental reform is necessary we are unlikely to see any more than failed attempts to achieve equivalence through the introduction of new rules for cyberspace activities.

Broadcast content control is a second intractable case. We saw in part 4.2.2 above that online video and audio content presents a major categorisation challenge, and that the EU's attempts to assimilate parts of that content within broadcasting regulation are unlikely to be wholly successful. This seems to be a case where a special regulatory regime for cyberspace alone is the only workable option. However, the technological convergence which has created the categorisation problem may also solve it in the longer term. The numbers watching television at the time it is broadcast seem to be falling year on year<sup>100</sup> and the trend among younger elements of the population is to decrease television watching and increase access to content via cyberspace.<sup>101</sup> If asynchronous access to content via cyberspace becomes the norm, the political imperative to retain control of broadcast content will diminish. As a consequence, ab initio law reform may become possible. If this happens, a new regime which achieves both functional and formal equivalence is likely to result.

Search engines, as we saw in part 4.2.1, are an intractable case because there are so many offline categories into which they can partially be placed that it is clear they amount to an entirely new category of activity. Numerous court decisions held that their activities were not subject to legal control<sup>102</sup>, and there is little regulation designed specifically for that purpose.<sup>103</sup> However, the business model for search engines has evolved some distance from that of merely locating online resources, and recent court decisions have begun to apply laws originally crafted for the offline

<sup>104</sup> There is likely very soon to be a need to develop a regulatory regime for search engines, which balances the benefits they bring against the potential damage to the interest of content owners and others. Such a regime would necessarily apply only to cyberspace.

The most interesting intractable case is that of online intermediary liability. At present there is no offline equivalent to these intermediaries, and if they are to be regulated at all the regime must apply to cyberspace alone. However, the granting of blanket immunities to internet intermediaries may in the long term be seen to be a temporary expedient, designed *\*I.J.L. & I.T. 273* to prevent the application of inappropriate offline rules in the period before reform was achievable. If the offline rules are reformed to produce a regime which applies equally well online, as is currently proposed for UK defamation law, the rationale for maintaining these immunities disappears.

During the course of researching this article I have become increasingly convinced that the principle of equivalence is important, and that the long-term trend will be to achieve that equivalence through ab initio reform of offline law. If I am correct, this will leave little space for special online rules. The early dreams of a separate law of cyberspace<sup>105</sup> are thus likely to remain unrealised.

Professor of Electronic Commerce Law, Queen Mary University of London School of Law, Centre for Commercial Law Studies. Email: [chris.reed@qmul.ac.uk](mailto:chris.reed@qmul.ac.uk)

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1. [http://europa.eu.int/ISPO/bonn/Min\\_declaration/i\\_finalen.html](http://europa.eu.int/ISPO/bonn/Min_declaration/i_finalen.html).
  2. See e.g. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions, *Principles and guidelines for the Community's audiovisual policy in the digital age* COM (1999) 0657 final, note 17: 'identical services should in principle be regulated in the same way, regardless of their means of transmission.'
  3. See e.g. Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions, *Towards a new Framework for Electronic Communications Infrastructure and Associated Services: the 1999 Communications Review* COM (1999) 539 final, 10 November 1999 p. 14: 'Technological neutrality means that legislation should define the objectives to be achieved and should neither impose, nor discriminate in favour of, the use of a particular type of technology to achieve those objectives.'
  4. See Chris Reed, 'Taking Sides on Technology Neutrality', (2007) 4:3 *SCRIPT-ed* 263 <http://www.law.ed.ac.uk/ahrc/script-ed/vol4-3/reed.asp> and Bert-Jaap Koops, 'Should ICT Regulation be Technology-Neutral' in Bert-Jaap Koops, Miriam Lips, Corien Prins & Maurice Schellekens, *Starting Points for ICT Regulation: deconstructing prevalent policy one-liners* (2006) 77.
  5. Chris Reed, *ibid* part 2.1.
  6. Maurice Schellekens, 'What Holds Off-Line, Also Holds On-Line?' in Bert-Jaap Koops, Miriam Lips, Corien Prins & Maurice Schellekens, *Starting Points for ICT Regulation: deconstructing prevalent policy one-liners* (TMC Asser Press: The Hague 2006) 51, 56-7.
  7. *Ibid* at 57.
  8. Indeed, publication is the 'material part' of the cause of action, rather than the writing itself - *Hebditch v MacIlwaine* [1894] 2 QB 58, 61 per Lord Esher MR.
  9. For an example from the UK, see *Godfrey v Demon Internet Ltd* [1999] 4 All ER 342, though in that case the claim was carefully drafted to apply only to publication which occurred subsequent to the defendant receiving notice of the presence of the defamatory material in a newsgroup which it hosted.
  10. As, for example, was the case for the UK Fraud Act 2006, discussed at 3.1 below.
  11. E.g. the UK Terrorism Act 2006 created a new offence of disseminating terrorist publications, and s. 2(2) states that this includes transmitting the publication electronically.
  12. UK FSA (London, January 2000).
  13. Apostolos Gkoutzinis, 'The Prudential Supervision of Internet Banking in the United Kingdom - is the 'Basel Approach' Finding its Way Through National Regulations' (2002) 17 *JIBL* 249, 254.
  14. See e.g. Financial Services and Markets Act 2000 (Financial Promotion) (Amendment) (Electronic Commerce Directive) Order 2002, SI 2002 No 2157; Financial Services and Markets Act 2000 (Regulated Activities) (Amendment) (No. 2) Order 2002, SI 2002 No 1776; Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, SI 2005 No 1529.
  15. See Chris Reed, 'What is a Signature' 2000(3) *The Journal of Information, Law and Technology (JILT)*. [http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2000\\_3/reed/](http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2000_3/reed/).
  16. See Minyan Wang, 'The impact of information technology development on the legal concept: a particular examination on the legal concept of 'signatures'' (2007) *Int JL&IT* 253, 259-263 (Germany and China); Stephen Mason, 'The international implications of using electronic signatures' (2005) *CTLR* 160, 164 (France).
  17. Directive 1999/93/EC on a Community framework for electronic signatures OJ L13/12, 19 January 2000.
  18. Art 5(1).
  19. See the discussion in Chris Reed, 'How to Make Bad Law: lessons from the computer and communications sector' (Queen Mary School of Law Legal Studies Research Paper 40/2010) part 2 - [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1538527](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1538527).
  20. See *Study on the legal and market aspects of electronic signatures* (KUL 2003),

[http://ec.europa.eu/information\\_society/eeurope/2005/all\\_about/security/electronic\\_sig\\_report.pdf](http://ec.europa.eu/information_society/eeurope/2005/all_about/security/electronic_sig_report.pdf); *Report from the Commission to the European Parliament and the Council on the operation of Directive 1999/93/EC on a Community framework for electronic signatures*, COM(2006) 120 final 15 March 2006, 5-8.

21. See e.g. Directive 2000/31/EC on electronic commerce OJ L 178 p. 1, 17 July 2000 art. 14.
22. See e.g. US Communications Decency Act 1996, 47 USC § 230.
23. For example, a host does not lose its US Communications Decency Act immunity even when it knows the nature of the content - *Zeran v. America Online Inc.* 129 F.3d 327 (4th Cir. 1997) at 330-31; *Barrett v. Rosenthal* 146 P.3d 510 (Cal Supr Ct 2006) at 514, 525, whereas an offline distributor of defamatory material becomes liable for its content once knowledge of its defamatory nature has been acquired - see e.g. *Cubby Inc v Compu Serve Inc* 776 F Supp 135, 140 (SDNY, 1991).
24. Anirban Sengupta & Anoshua Chaudhuri, 'Are Social Networking Sites a Source of Online Harassment for Teens? Evidence from Survey Data' NET Institute Working Paper #08-17 (September 2008) - [www.NETinst.org](http://www.NETinst.org); Tanya Byron, *SaferChildren in a Digital World: report of the Byron Review* (2008) para 3.63 - <http://www.dcsf.gov.uk/byronreview/>.
25. Steven A. Hetcher, 'The Music Industry's Failed Attempt to Influence File Sharing Norms' (2004) 7 *Vand J Ent L & Prac* 10.
26. Thus panels deciding cases under the ICANN Uniform Dispute Resolution Policy use concepts from offline law. See e.g. *Jeanette Winterson v. Mark Hogarth*, WIPO Case No. D2000-0235, 22 May 2000 (unregistered trade marks), *AltaVista Company v. Grandtotal Finances Limited*, WIPO Case No. D2000-0848, 17 October 2000 (misappropriation of trade reputation), etc. See further Torsten Bettinger (ed), *Domain Name Law And Practice: An International Handbook* (OUP: Oxford 2005).
27. Directive 2000/31/EC on electronic commerce OJ L 178/1, 17 July 2000 art 5.
28. Directive 97/7/EC on the protection of consumers in respect of distance contracts, OJ L 144/19, 4 June 1997 art 4.
29. Schellekens, op cit n 6 above, 68.
30. Schellekens, op cit n 6 above, 70.
31. See Chris Reed, 'Why Must You Be Mean to Me? - crime, punishment and online personality', Queen Mary University of London School of Law Legal Studies Research Paper 9/2009, <http://ssrn.com/abstract=1305125>.
32. See e.g. UK Value Added Tax Act 1994, s. 2(6): intent to deceive, includes a reference to furnishing, sending or otherwise making use of such a document, with intent to secure that a machine will respond to the document as if it were a true document.
33. UK Law Commission, *Fraud* (Law Com No 276, Cm 5569, 2002).
34. UK Law Commission, *Fraud* (Law Com No 276, Cm 5569, 2002).
35. See also Council of Europe Convention on Cybercrime (2001, in force 2004) art 8 for a similar approach.
36. Or, more precisely, the objective appearance of the formation of an agreement.
37. See further Chris Reed, 'Electronic Commerce' in Chris Reed & John Angel, *Computer Law* (6th ed, OUP: Oxford 2007) at 4.2.2.
38. Chris Reed, 'The Law of Unintended Consequences - embedded business models in IT regulation', (2007) 2 *JILT* [http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2007\\_2/reed](http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2007_2/reed).
39. *Ibid.*
40. More accurately from router to router, but routers are merely specialised computers.
41. As via the so-called Great Firewall of China (see, inter alia, Chinese Measures on the Administration of Internet Information Services 2001; Chinese Interim Regulations on the Administration of Internet Publishing 2002; Internet Society of China, Public Pledge on Self-Discipline for China Internet Industry).
42. The cheapest one-to-many communications infrastructure is the notice board, but this has limited reach. For a wider audience, access is necessary to a publishing and distribution network or to broadcasting facilities.
43. Password-protecting the website will only work until a subscriber shares his password with another, and there is no simple way of identifying who is in fact accessing a website, whatever technology is used to control access - see Chris Reed, *Internet Law: text and materials*, (2nd ed, Cambridge University Press: Cambridge 2004) Ch 5.
44. Public domain materials present no copyright problems and so are not considered here.
45. These are Berne Convention rights, and so almost all countries will have equivalent rules.
46. For a more detailed explanation of how linking works, technically and in terms of infringement, see Chris Reed, 'Controlling World-Wide Web Links: property rights, access rights and unfair competition' *Indiana Journal of Global Legal Studies* (1998) Vol 6.1, 167.
47. For example, if an author produces web page code which results in the display of images to accompany the text, where those images are hosted on a different server and the code merely points to their location. Technically, this results in the user's web browser requesting a copy of the image from the hosting server, and displaying it on the user's screen in the format prescribed by the web page code.
48. Chris Reed, op cit n 45 above.
49. See e.g. *Google v Copiepresse*, Brussels Court of First Instance (TGI), 13th February 2007.
50. Even if expressing the interests of the rightholder in this way includes an interest in controlling the ways in which the work is combined with other works, an interest which would be affected by in-line linking, the rightholder has the ability to control this matter through the way in which the hosting website makes the linked material available. Failure to exercise such control suggests that the rightholder does not object to in-line linking, and thus that the interest is not adversely affected - see Chris Reed, op cit note 45 at 193-199.
51. 'Both existing and emerging disparities in Member States' legislation and case-law concerning liability of service providers acting as intermediaries prevent the smooth functioning of the internal market, in particular by impairing the development of cross-border services and producing distortions of competition', Directive 2000/31/EC on electronic commerce OJ L 178/1, 17 July 2000, recital 40.
52. See inter alia *Barnes v. Yahoo* 565 F 3d 560 (9th Cir 2009); *Hermès International v Feitz* (Case RG 06/02604, Tribunale de Grande Instance Troyes, 4 June 2008); *SABAM v Scarlet SA* (Brussels Court of First Instance 29 June 2007, 24 October 2008); *Internet Auction I* (German Bundesgerichtshof, Case I ZR 304/01, [2005] ETMR25).
53. See e.g. Robert D Richards, 'Sex, Lies, and the Internet: Balancing First Amendment Interests, Reputational Harm, and Privacy in the Age of Blogs and Social Networking Sites' (2009) 8 *First Amend L Rev* 176; Katy Noeth, 'The Never-Ending Limits of § 230: Extending ISP Immunity to the Sexual Exploitation of Children' (2009) 61 *Fed Comm LJ* 765.

54. Utah Kohl 'Legal Reasoning and Legal Change in the Age of the Internet -Why the Ground Rules are still Valid' [1999] 7 Int J L&IT 123, 125 ff.
55. Natali Helberger & P Bernt Hugenholtz, 'No Place Like Home for Making a Copy: Private Copying in European Copyright Law and Consumer Law' (2007) 22 Berkeley Tech LJ 1061.
56. IFPI, *Digital Music Report 2009: Key Statistics* ([http://www.ifpi.org/content/section\\_resources/dmr2009.html](http://www.ifpi.org/content/section_resources/dmr2009.html)) estimates that 16% of European users regularly swap infringing music files online, and that in 2008 the number of infringing music files shared exceeded 40 billion, suggesting an infringement rate for downloads of about 95%.
57. Maurice Schellekens, op cit n 6 above at 63-5.
58. Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society, OJ L167/10, 22 June 2001.
59. COM(97) 628 final, 10 December 1997, see in particular pp 37-9.
60. See [http://ec.europa.eu/internal\\_market/copyright/levy\\_reform/index\\_en.htm](http://ec.europa.eu/internal_market/copyright/levy_reform/index_en.htm).
61. *Test Achats v EMI Recorded Music Belgium et al.*, Brussels Court of Appeal, 9 September 2005, case 2004/AR/1649; *Studio Canal et al. v S. Perquin and Union federale des consommateurs Que choisir*, Cour de Cassation, 1st civil section, 28 February 2006, case N° 549, Bull. 2006 I N° 126 p. 115 ('Mulholland Drive').
62. [2001] VSC 305, [2002] HCA 56 (10 December 2002, High Court).
63. *Loutchansky v. Times Newspapers Ltd* [2002] QB 783.
64. If a claimant has little or no reputation in England a claim may be struck out as an abuse of process - *Dow Jones v Jameel* [2005] EWCA Civ 75.
65. See e.g. *Richardson v Schwarzenegger* [2004] EWHC 2422 (QB), where the allegedly defamatory words were uttered at a US press conference, originally reported by a US newspaper and published in England only via that newspaper's website.
66. 'Libel threat to force US papers out of Britain', *The Times* 8 November 2009.
67. <http://www.justice.gov.uk/consultations/defamation-internet-consultation-paper.htm>.
68. 'Jack Straw pledges action to end libel tourism', *The Sunday Times* 22 November 2009.
69. See Chris Reed & Lars Davies, *Digital Cash - the legal implications* (Centre for Commercial Law Studies Report: London 1995). The exceptions were those few countries which already regulated payment services as a generic activity such as the Netherlands.
70. Though not in the US, which took the position that regulation should be delayed until the nature of the phenomenon became clearer - Federal Reserve Bank Governor Kelly, 'Developments in electronic money and banking', Cyberpayments '96 Conference, Dallas 1996, [http://www.federalreserve.gov/board\\_docs/speeches/1996/19960618.htm](http://www.federalreserve.gov/board_docs/speeches/1996/19960618.htm).
71. Directive 2000/46/EC of the European Parliament and of the Council of 18 September 2000 on the taking up, pursuit of and prudential supervision of the business of electronic money institutions OJ L 275/39, 27 October 2000.
72. Ibid recital 12.
73. Chris Reed, 'The Law of Unintended Consequences - embedded business models in IT regulation', (2007) 2 JILT [http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2007\\_2/reed](http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2007_2/reed).
74. See the analysis of the defects of the original Directive in Proposal for a Directive of the European Parliament and of the Council on the taking up, pursuit and prudential supervision of the business of electronic money institutions, amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC, COM (2008) 627 final 9 October 2008 p 2.
75. Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC, OJ L267/7 10 October 2009.
76. Urs Gasser, 'Regulating Search Engines: Taking Stock and Looking Ahead (2006) 8 Yale JL & Tech 201 at Part III.A.
77. For a comprehensive review of this line of discussion see Viva R Moffatt, 'Regulating Search' (2009) 22 Harv JL & Tech 475.
78. Matthew D Lawless, 'Against Search Engine Volition' (2008) 18 Alb LJ Sci & Tech 205; Jane Strachan, 'The Internet of tomorrow: the new-old communications tool of control' (2004) 26 EIPR 123.
79. This group is sub-divided on the question whether search engine activities do, or ought always to, fall within a copyright exception like fair use. For a review, see Jonathan Band, 'Google and Fair Use' (2008) 3 J Bus & Tech L 1.
80. Seth F Kreimer, 'Censorship by Proxy: the First Amendment, Internet Intermediaries, and the Problem of the Weakest Link' (2008) 155 U Pa L Rev 11; Ben Allgrove & Paul Ganley, 'Search engines, data aggregators and UK copyright law: a proposal' (2007) 29 EIPR 227.
81. See the discussion of US attempts to control the availability of pornography to children in Jonathan P Wentz, 'Ashcroft v. ACLU: the context and economic implications of burdened access to online sexual speech' (2007) 17 Geo. Mason U Civ Rts LJ 477.
82. See e.g. *eBay v Bidder's Edge* (N.D.Cal. 2000) 100 F.Supp.2d 1058; John D Saba Jr, 'Internet Property Rights: e-Trespass' (2002) 33 St Mary's LJ 367.
83. See e.g. *Cubby Inc CompuServe Inc* 776 F Supp 135 (SDNY 1991); *Stratton Oakmont, Inc v Prodigy Services Co* 23 Media L Rep 1794 (NY Sup Ct May 25, 1995).
84. *Shetland Times v Shetland News* [1997] FSR 604.
85. See Maria Michalis, 'Regulation of internet telephony in the United States and the European Union' (2004) CTLR 142; Simon Muys, 'New wines and old wineskins: addressing the challenge of regulating IP-based networks and services' (2006) CTLR 59.
86. A notable exception is Australia, whose government is renewing its efforts to introduce internet content filtering via what has been described as the Great Australian Firewall. A plan to require ISPs to provide a 'clean feed' of internet content, using a blacklist maintained by the Australian Communications and Media Authority, was announced in December 2007 by the Telecommunications Minister Stephen Conroy (see <http://www.abc.net.au/news/stories/2007/12/31/2129471.htm>), with a provision that residents could opt out of the 'clean feed' to receive unrestricted content. In October 2008 it was reported that the government had modified its plans to require mandatory filtering of certain categories of content (see <http://www.heraldsun.com.au/news/mandatory-censorship-on-web/story-0-111117883306>). The

proposals have not yet received legislative approval at the time of writing.

87. Directive 2007/65/EC amending Directive 89/552 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services, OJ L298/23 18 December 2007. The predecessor legislation, Directive 89/552, had established the regulatory regime for the preceding 20 years.
88. Ibid, recital 17.
89. Ibid art. 1(1)(d).
90. Ibid recital 18.
91. Ibid recital 21.
92. Ibid recital 20.
93. Ibid recital 24 and art. 1(1)(g) (definition of television broadcasting).
94. See Andreas Breitschaft, 'Evaluating the linear/non-linear divide - are there any better factors for the future regulation of audiovisual media content?' (2009) Ent LR 291; Stephen Ridgway, 'The Audiovisual Media Services Directive -what does it mean, is it necessary and what are the challenges to its implementation?' (2008) CTLR 108; Neal Geach, 'Converging Regulation for Convergent Media: an overview of the Audiovisual Media Services Directive' JILT 2008(1) <(http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2008\_1/).
95. See Katrina Dick, 'The emergence and regulation of VoIP' (2004) CTLR 157.
96. See the example of EU electronic signature law at part 1 above.
97. As was achieved for payment services in the EU - see part 4.2.1 above.
98. See part 4.2.2 above.
99. *Gesetz gegen den unlauteren Wettbewerb* (UWG) of 3 July 2004 (BGBl. I 2004 32/1414).
100. The proposals for reform to deal with online issues are too numerous to list comprehensively - as one example see Bernt Hugenholtz et al, *The Recasting of Copyright & Related Rights for the Knowledge Economy (final report)* (Institute for Information Law, University of Amsterdam 2006), European Commission DG Internal Market Study Contract No. ETD/2005/IM/DI/95.
101. See e.g. 'Doctor Who fails to top Christmas TV ratings' *Sunday Times* 28 December 2009;
102. Ofcom, *UK adults' media literacy* (2009 interim report) 14-16.
103. For an extensive review, see Urs Gasser, 'Regulating Search Engines: Taking Stock and Looking Ahead' (2006) 8 Yale JL & Tech 201.
104. The most important is probably the immunity granted to 'location tools' under the US Digital Millennium Copyright Act, 17 USC §512(d).
105. See e.g. *Perfect 10 v Amazon.com and Google*, 487 F.3d 701 (9th Cir. 2007); *Google v Copiepresse*, Brussels Court of First Instance (TGI), 13th February 2007.

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