

## **Anomalies in Internet Law**

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### **Abstract**

Modern information technology has brought a flood of new possibilities. It has become a lot cheaper and easier to communicate with other people anywhere in the world and to send each other music files, video clips, texts and pictures. Rather than just enjoying these new possibilities, many governments, companies and even individuals try to stop others from using these new technologies to their full potential. Of course these 'frustrating agents' have good reasons for their efforts: their interests are harmed or potentially harmed. The music industry, as well as other 'content' providers, has been very active in trying to stop new technologies being applied. Furthermore, governments have constantly tried to forbid or restrict the use of new technologies, often referring to interests such as crime control, security and privacy.

Not only are these efforts often contradictory - the music industry would have an interest in cheap means of transportation for their products and governments undermine the privacy of their citizens in order to protect their right to security- but there are additional problems. National governments (as well as the EU) have introduced a confusing system of new rules in order to protect intellectual property rights. They have accepted that the content providers could introduce new technologies that harmed the property rights of consumers: so called Digital Rights Management systems. When it became apparent, however, that these technologies were not effective, more new rules were introduced, not to solve the problem of the legal protection of property rights, but to make it illegal to try to circumvent digital rights management techniques. In this paper, an attempt is made to identify the anomalies referred to here, to explain them and to suggest some new ways for governments, firms and individuals to deal with new technologies.

### **1. Matters of technology**

The adaptation of the law to the technological developments in the information society has lead to a multitude of unnecessary laws and regulations. Legislators appear to have a problem with accepting the idea that the law does not keep step with developments in society. This should, however, be seen as something positive as there is only one thing worse than the law not keeping step with new developments, and that is that the law does keep step with them. In that case it would be possible – quod non – to realize a 'grand design' by means of laws and regulations. Implementing this grand design would mean that all kinds of actions that would not fit within this design would be forbidden or be made unattractive, for example by being too expensive. Liberties would have to be restricted because there are always liberties that do not comply with the dominant grand design. Another consequence would be that the majority of all those new rules and regulations would not be useful. It is often thought, even by lawyers, that laws solve problems in society. However, in many cases legislation causes new problems because it introduces anomalies. We would like to characterize this kind of rules as 'phantom legislation'. The new legislation only seemingly solves new problems in society, or that is solves problems that only seem to be problems.

#### **1.1 Bookkeeping and retention of financial and administrative data**

In the Netherlands, as in many other countries, a discussion took place among lawyers as to whether the new practice of having automated business administrations was in accordance

with the legal rules concerning bookkeeping and the retention of financial and administrative data. The reason for this discussion was not that any civil servant working for the tax service had ever refused to accept data from an automated administration or had said that such an administration was not in compliance with the rules. The only problem was that in those rules 'books and writings' ('boeken en bescheiden') were mentioned. Possibly because of the fact that, in the past, the bookkeeping medium has always been paper, some lawyers came up with the idea that to lay down the data on other media, for example a computer disk, would necessarily be against the law. Although computerized administration had caused absolutely no problem in practice, and there was no practical reason to do so, the Dutch legislator decided in 1993 to adapt a number of articles in the law and regulations, and change 'books and writings' to 'books and writings and other carriers of data'.<sup>1</sup>

Did this solve a problem? The answer is obvious: no. In the real world of business practice, there was no problem to solve. The modern wide-spread practice of computerized bookkeeping made it clear that businesses were perfectly comfortable with respect to the legal validity of their automated bookkeeping. Nor, looking at the text of the rules objectively, was there any substantial reason to presume that computerized administrative data would not be covered by the terminology used. Admittedly, this may be easier to say now in retrospect, two decennia later, in an age where we have e-books and the like. Nonetheless, from the 'sixties' in the last century bookkeeping machines, bookkeeping computers, bookkeeping software and computer bookkeeping have become familiar terms whereas mechanical devices, like punch cards had been used in bookkeeping since before the Second World War. Neither was a computerized administration intrinsically against the aims or ratio of the existing laws. The idea of the rules and regulations was, and is, that an administration is kept in order to provide an objective and reliable representation of the assets and liabilities of a business.

If there was a problem with computerized bookkeeping it should have been that, unlike paper based administrations, the digital ones are insufficiently reliable. Although there are some problems, most people know that is not the case. There are a host of technical, administrative en organisational measures in place to make sure that a computerized administration is acceptable to the accountant who performs the external audit of the annual accounts of a business. If these measures had failed to produce satisfactory results, it is unlikely that the situation could be remedied by just stating that computerize bookkeeping is now permissible.

Therefore, it is clear that the changes in the law here did not solve any problems. Unfortunately, the legislator went just a little bit further, and, thereby, created a serious anomaly. The new rule added explicitly that apart from the 'books and writing', 'other data carriers' were allowed to be kept. This was strange as, given the legislator was changing the rules anyway, he may well have taken the opportunity to lay down to just keep the data. It is the data that count, not the carriers. To add injury to injustice, the legislator added, that the yearly financial balance has to be put on paper and be kept in that form. In the 21<sup>st</sup> century, in a period we like to refer to as the information society and in the middle of a stream of measures to try and stimulate the use of new technology, the government, obliges businesses to lay down their annual financial balance on paper and store it in that form. In an irrelevant attempt to legalize computerized bookkeeping, we are back to keeping records on paper.

## **1.2 Documents and writings**

What has been said above about automated bookkeeping and the storage of administrative data fits in a more general discussion about documents and writings. It is strange to see that legal concepts are doubted just because in the everyday practice of offices and elsewhere there is a change from paper documents to their electronic form. The terms used in legal texts such as 'documents' and 'writings' are perfectly adequate to cover the paper form as well as the electronic. However, it seems to be difficult for lawyers and sometimes others to liberate themselves from the tradition that documents and writing have always been on paper. They almost seem to think that 'documents' and 'writings' are synonyms for 'paper'. However, contrary to this assumption, in the laws and regulations themselves there is no demand that documents and writings should have the paper form.

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<sup>1</sup> Article 2:10 Civil Code.

The definition in English proceedings of 'document' is 'anything in which information of any description is recorded'.<sup>2</sup> 'Writing' is generally referred to as 'meaningful letters or characters that constitute readable matter'.<sup>3</sup> In the Netherlands, the question whether punch cards would fall under this description was answered positively.<sup>4</sup> In the current legal discussion in the Netherlands, 'writing' is often defined as 'an information carrier containing meaningful data'.<sup>5</sup> This means that electronic computer files can generally be qualified as 'writings' and 'documents'. Nevertheless, this definition is rather extraordinary. The apparent need to come up with a definition of 'writings' was prompted by modern information technology. What is extraordinary is that the definition focuses on the 'information carrier' where it is precisely this modern information technology that makes it possible to 'disengage' the data from the information carrier. It would be much more appropriate to define 'writings' as 'data files that contains characters'.<sup>6</sup> The idea that 'characters' are 'meaningful' would not need explicit formulation as it is already incorporated in the meaning of the term 'characters'. The significance of having something in writing is not the carrier, but the data it contains. From a legal point of view an essential matter is the reliability of the data, in particular its authenticity. This leads to our next anomaly, the 'electronic signature'.

### 1.3 Electronic signatures

Another peculiar development, which is related to the issue of 'writings' and 'documents', is that of the legal framework for electronic signatures.<sup>7</sup> Whether or not a document is authentic does not depend upon legal rules but upon facts. However, that is exactly the subject of the EU Directive 1999/93/EC. This Directive states that 'data in electronic form which serve as a reliable method of authentication'<sup>8</sup> satisfy the legal requirements for authentication in the same manner as another reliable method of authentication (a 'handwritten signature').<sup>9</sup> What is strange here is that the Article refers to 'the legal requirements of a signature' without making clear what those legal requirements actually are. This in itself is already rather Kafkaesk, but in fact this Article says nothing more than 'electronic authentication methods that can ensure authentication are suitable for ensuring authentication'. That that is the case, as indeed it already was before the implementation of this new legal framework, is only because of the fact that some encryption techniques are extremely reliable. This whole new legal framework adds nothing to the factual situation that existed before the Directive. While having failed to introduce anything new of value, the Directive has only served to complicate matters by introducing new categories of signature; 'electronic signature' and 'handwritten signature' (similar to the new distinction between 'electronic documents' and 'paper documents') while doing nothing to clarify the definition of the term 'signature' itself (or for that matter 'document').<sup>10</sup>

### 1.4 From encryption to DRM

Technological protection measures have become the subject matter of legislation in the field of intellectual property. In Europe, the Directive 2001/29/EC<sup>11</sup> obliges Member States to provide adequate legal protection against the circumvention of any effective technological

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<sup>2</sup> Gubby, Helen, English legal terminology, The Hague: Boom 2004, p. 50.

<sup>3</sup> A more explicit definition can be found, for example, in the US Code: 'any form of representation or communication, including hand-bills, notices, or advertising, that contain letters, words, or pictorial representations', USC Title 18, Part I, Chapter 65, § 1365.

<sup>4</sup> Court Amsterdam, 18 February 1972, NJ 1972, 210.

<sup>5</sup> For example HR 15 January 1991, NJ 1991, 668. Also: 'a carrier of understandable characters, which render a thought'.

<sup>6</sup> Kleve, Pieter, Juridische iconen in de informatiemaatschappij (diss. 2004) (Legal Icons in the Information Age, with English summary), Rotterdam/Deventer, Sanders/Kluwer, p. 229, p. 367.

<sup>7</sup> Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures.

<sup>8</sup> Article 2 (1) and (2) Directive 1999/93/EC.

<sup>9</sup> Article 5 (1) (a) Directive 1999/93/EC.

<sup>10</sup> 1 USC: 'signature' or 'subscription' includes a mark when the person making the same intended it as such.

<sup>11</sup> 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.

measures<sup>12</sup> as well as against the removal or alteration of any electronic rights-management information.<sup>13</sup> (Similar provisions may be found in the United States in the Digital Millennium Copyright Act 1998.)

What is immediately noticeable here is that the extension of *intellectual* property rights in favour of one party (the right-holder) dictates a limitation of the ordinary *property rights* of the other party (the owner). It is not the right to duplicate a work or to make it public that is subject to further limitations, but the right of the owner with respect to his control over a copy of that work.

On closer examination, what is even more remarkable is the special relationship between the system of legal protection and the system of technical protection. Initially works are protected by copyright. In practice, this form of legal protection is found wanting, and as a result business enterprises turn to technological protection measures. Again, in practice these technological protection measures are also found wanting because the security systems can be penetrated, or circumvented.<sup>14</sup> To turn to legal protection to protect the technological protection measures that were developed because of the inadequacy of legal protection, not only reveals an incapacity for creative thought but also a startling incapacity to learn from the past and develop a proper problem solving strategy.

The lessons were there. The exception that was made to copyright law to allow copying for private use was made precisely because legal protection had failed, as had technological measures, to prevent so-called 'home copying'. Yet this whole industry, one that is presumed to be creative, that now through technological developments disposes of a distribution network to which all consumers have access, can come up with no better solution than to fall back on outdated protective reflexes aimed at limiting the distribution source.<sup>15</sup>

A good example of such an old-fashioned reflex is the reaction from the entertainment industry to a Dutch entrepreneur who introduced an online video recorder.<sup>16</sup> Consumers can log in at the website of this firm and programme a recording of a television programme in order to play the programme back at a later time. Immediately, a host of objections were raised, at first mainly on the basis that the new Internet service would mean an infringement of copyrights. Whether this argument holds water could be doubted, but we would like to observe here that the accepted idea of making a 'home copy'<sup>17</sup> is apparently called into doubt when the video recorder, although operated from the home, is physically located elsewhere.

Similarly confusing seems to be buying music, film and other products of the information industry. When consumers log in on a site of – for example – a music shop and place their order, they often get the option either to download the music or have a CD sent to their address. If the postal service delivers the album the purchase is legally qualified as the sale of a good, but if the download option is chosen, the transaction suddenly changes into an information society *service*.<sup>18</sup> This anomaly, like many others, is the result of the complicated or rather muddled status that lawyers have attributed to electronic data files.

### **1.5 From the delivery of music files to the legal status of data**

One of the most important reasons by far for these contradictory measures is the legal status of electronic data files. A recurrent argument in legal discussions has been that data are intangible. As data are intangible, they cannot fall under the legal categories of 'property' and

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<sup>12</sup> Article 6 Directive 2001/29/EC.

<sup>13</sup> Article 7 Directive 2001/29/EC.

<sup>14</sup> Kleve, P. & F. Koff, MP3: The end of copyright as we know it. In: Proceedings of the IASTED international conference law and technology (LawTech '99), Honolulu 1999, p. 32–37.

<sup>15</sup> Could the statement made by Apple and EMI, at the beginning of April 2007 that music could be sold on the Internet without technological protection measures be a sign of change?

<sup>16</sup> <http://www.maxx-xs.nl/>.

<sup>17</sup> In Sony-Betamax judged as 'time-shifting'.

<sup>18</sup> Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce), consideration (18).

'goods'. This presumption led to a comprehensive change to the Criminal Law Code in the Netherlands in 1993.<sup>19</sup> The changes to the Code were the result of a report that had been produced by the Franken Committee, a Committee set up by the state. This Committee determined that as data are intangible, several important provisions in the Criminal Law Code would not apply if the criminal behaviour laid down in those provisions concerned data.<sup>20</sup> For example, the provisions concerning theft and criminal damage would not apply to data because these provisions were concerned with 'goods' and 'property'. In order to cover criminal damage, a sort of 'cut and paste' Article was added to the Code, whereby the word 'property' was replaced by the word 'data'.<sup>21</sup> Copying data increased the severity of the offence of hacking.<sup>22</sup>

The influence of the Committee was considerable. Not only did its recommendations lead to 28 changes to the Criminal Law Code, the Supreme Court of the Netherlands (Hoge Raad) based its decision in a criminal case concerning the embezzlement of data on the opinion of the Committee.<sup>23</sup> The embezzlement of data was not possible because that would require data to be goods. Furthermore, the application of the new rules to data were not possible because this was a case from the Dutch Antilles where these new rules had not been implemented into the Criminal Law Code. The Supreme Court argued that data were not goods because a characteristic of goods is that when someone takes over the control of goods, the original possessor of those goods loses the control. However, that is not the case where data are copied: the original data file remains in the possession of the original possessor.

It is regrettable that this Committee did indeed exercise such considerable influence. It is regrettable because the changes to the law that this Committee considered to be imperative were in fact totally unnecessary. Ironically, the very changes it suggested undermined its own assumption that data are intangible. Take, for example, the 'cut and paste' Article on criminal damage, inserted on the Committee's recommendation in order to make the damaging of data a criminal offence. This was apparently necessary, according to the Committee, because data are not tangible and therefore cannot be treated as property. However, if data are not tangible how can they be damaged? The simple fact that 'something' is damaged, and not damaged in a metaphorical sense as in an offence like defamation, means that the object damaged must be tangible. This Article would otherwise also in a literal sense be 'phantom' legislation.

Another example is the presumed impossibility of confiscating data because the Article in the Code that dealt with the objects of confiscation would not cover data. To deal with this apparent problem, yet another new Article was inserted into the Criminal law Code to make it possible to confiscate data.<sup>24</sup> What is remarkable about this Article is that if it is possible to confiscate data, why was it presumed that data could not be stolen? Furthermore, the new Article makes it not only possible to confiscate data but also that data that has been confiscated can be destroyed.<sup>25</sup> Surely, if the law recognises that data can be destroyed, for that is what the new Article says, then it must recognise that data can, at the very least, be damaged?

With respect to the case heard by the Supreme Court mentioned above, it is interesting to note that the Supreme Court did convict the defendant. The argument for this conviction was, however, rather bizarre. It hinged upon the fact that the defendant had copied the data onto a floppy disk that belonged to his employer. According to this reasoning, the defendant was found guilty for embezzling a floppy disk (which had computer data on it). What then would have been the verdict if the defendant had not copied the data to a floppy disk that was the property of his employer, but to his own floppy disk? Instead the Supreme Court could have made use of a different sort of argument. That a 'thing' can be copied and that the copy can

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<sup>19</sup> Wet computercriminaliteit, (Computer Crime Act), Stb. 1993 nr. 33.

<sup>20</sup> 'Informatietechniek & strafrecht', (Information Technology and Criminal Law), the report of the Committee on Computer Criminality (chairman. H. Franken), Staatsuitgeverij 1987.

<sup>21</sup> Article 350a Criminal Law Code.

<sup>22</sup> Article 138a (2) Criminal Law Code.

<sup>23</sup> HR 3 December 1996, NJ 1997, 574.

<sup>24</sup> Article 125i Criminal Procedural Law Code.

<sup>25</sup> Article 125n Criminal Procedural Law Code.

be taken away while the original stays where it is does not imply that the copy is not a good. A more precise formulation of the question would be who owned the copy and whether the taking away of the copy would be theft. What the Supreme Court had failed to appreciate in its discussion as to whether data could be stolen was that a copy had been taken away and that did effect the control the original possessor had over the data: the thief could, for example, decide to place the data file on the Internet.

Meanwhile, legal practice continued to develop. Within a year of the verdict reached by the Supreme Court, the president of the District Court of The Hague stated that a database is a good because 'delivery and sale of it does not in fact appear to be impossible'.<sup>26</sup>

## 2. Some explanations

Although they seem like strange bed partners, both the entertainment industry and the authorities have been confronted by the new issues resulting from technological developments. This has led to contradictory measures. Take, for example, the European Union Directive 2006/24/EC. With an explicit reference to safeguarding national security (i.e. State security), defence, public security or the prevention, investigation, detection and prosecution of criminal offences, in particular organized crime and terrorism, Member States are obliged to implement the retention of data concerning internet, e-mail and telephony, for periods of not less than six months and not more than two years from the date of the communication.<sup>27</sup> Apparently in order to protect their citizens' security, it is necessary for governments to infringe their citizens' right to privacy.

There does not seem to be one all embracing explanation for these anomalies. It is possible to point to different causes. In the first place, it takes time before new technology is assimilated in society and can be evaluated on its own merits. Secondly, this unfamiliarity with new technology is reflected in the way that legal concepts, which are in themselves familiar, are applied. A good example is the problems lawyers have encountered concerning the legal status of electronic data files.

Although electricity, electromagnetism and energy have long been the object of study for physicists, lawyers often have a dissenting opinion as to what constitutes physical characteristics. This is surprising, as the difference between tangible and intangible corresponds rather satisfactorily to that between goods and rights. Rights are, just as ideas and notions, not tangible. However, when ideas and notions take form in goods, then the products of those ideas and notions are tangible. That applies equally to information. If information can be described as the intangible interpretation of data, then data cannot be described in any other way than as the tangible patterns which contain the information.

Nor does legal dogma stand in the way of categorising electronic data files as goods. As mentioned above, the decision of the District Court of The Hague recognised that data files can be sold and delivered and they can be confiscated. These are the characteristics associated with goods. Moreover, the status of data files as goods, which naturally arises from these tangible patterns, serves a social goal, just as this is the case with, for example, cars.

There are many examples from various legal domains of legal concepts not keeping step with technical concepts. For example, in the Lindquist case, a weblog was categorized as 'processing' personal data.<sup>28</sup> In this case, it was decided that 'the act of referring, on an internet page, to various persons and identifying them by name or by other means, for instance by giving their telephone number or information regarding their working conditions and hobbies, constitutes the processing of personal data wholly or partly by automatic means

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<sup>26</sup> Pres. Rb. Den Haag 24 October 1997, CR 1998-2, p. 72. See also in Germany: BGH 15 November 2006, XII ZR 120/04.

<sup>27</sup> Directive 2006/24/EC of the European Parliament and of the Council of 15 March 2006 on the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks and amending Directive 2002/58/EC.

<sup>28</sup> European Court, 22 May 2003.

within the meaning of Article 3(1) of Directive 95/46'.<sup>29</sup> One anomaly the Lindquist case shares with the example of p2p file-sharing in its attempt to restrict the use of new technology instead of recognising and acknowledging the fact that new technology is beneficiary to social developments. Furthermore, it is interesting to compare this categorization as 'processing' with the functions of computers. Apart from input and output, computers have three functions: processing, storage and telecommunication. In the Lindquist case, there is no 'processing' of data, but rather storage, or output. A similar anomaly can be noticed in intellectual property law, where internal processing of data is defined as copying, as 'temporary reproductions'.<sup>30</sup> Here the error would appear to be the other way round: there is processing but not durable storage, which is a necessary precondition for reproduction. What is curious about this observation is that most people are now familiar with the basic functions of computers, yet this knowledge can so easily be ignored.

A third important explanation is that technological developments lead to greater social complexity. This is particularly evident with the phenomenon that has been called globalisation. It seems to be a given that we now are involved in multiple, many faceted and therefore increasing complex relationships. These raise new issues to which no one simple answer seems to be available. The world around us is changing quickly, which demands a great deal from our ability to adapt.

### 3. Conclusion

Given the above, it is arguable that governments, companies and lawyers would be wise to reconsider their attitudes to new technology. With respect to governments, it is suggested that a more restrained approach would be appropriate. Legal concepts become antiquated less quickly than legislators have realized. Time and money have been wasted in pointless changes to laws and setting up whole new regimes to deal with data, whereas the existing laws were already perfectly adequate for the purpose. The issues that deserve more governmental focus are the social and economic issues that arise from new technology, rather than technical or legal concepts.

As for businesses, there are new chances and new business models. The entertainment industry is not about to crash. On the contrary, the entertainment industry is growing. Even in those areas where there has been a decline in sales, for example music CDs, there is no conclusive evidence that the reason for this is p2p file sharing.<sup>31</sup>

Individuals are REMPS, (resourceful, evaluative, maximising persons),<sup>32</sup> they will adjust. Whereas the EU was voicing concerns about e-commerce back in 2000, for example, today traditional shops selling books, records, audio/video equipment, fridges and washing machines are struggling with the growth of Internet shopping. In practice, people have become familiar very quickly with carrying out commerce in a new way. In the light of this rational behaviour of individuals, it seems only adequate that the authorities initiate monitoring policies in order to maintain public safety and security.

With respect to the legal profession, a more rational approach to technology is required. Lawyers should not rush ahead to deal with new technologies that they do not, or do not entirely, understand. It is expected of lawyers that they will not 'rush in where fools fear to tread', but rather that they will take the time to contemplate these new issues, to formulate them in terms of problems that have already been solved. It would be helpful, however, if time

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<sup>29</sup> Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data

<sup>30</sup> Article 4 Council Directive of 14 May 1991 on the legal protection of computer programs (91/250/EEC), article 5 Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases and article 2 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 Directive.

<sup>31</sup> See OECD report DSTI/ICCP/IE(2004)12/FINAL.

<sup>32</sup> For this model of man see Jensen M.C. & W. H. Meckling, 'The Nature of Man', Journal of Applied Corporate Finance 1994–2.

was made available during their law degrees to allow for some understanding of technology and the basic economics of business processes.