

LAW AND INFORMATION  
A “LOVE-HATE” RELATIONSHIP

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1. *Introduction*

Tensions between law and information have been exceptionally strenuous<sup>1</sup>. Information has proven an incredibly unruly horse for law to tame. Simultaneously, there is a deep connection between law and information. The article presents a short “history” of this connection, of law and information, the various domains where we see law regulating information, what the main principles are when it does, and lastly, a perspective of the future of law and information.

2. *Some historical notes in information law:  
the signs of a ‘hate’ side*

Information law as a term is quite modern. It definitely did not exist fifty years ago in the legal world, in neither civil nor common law jurisdictions. Even today, we see ‘information law’ to be used as a term describing a legal field under no consensus whatsoever about what it really covers-and what not. We see, for example, even today, diverse expressions (in books’ titles, in the titles of legal courses, in the titles of research centers worldwide, in the thematic research terms of legal databases like WESTLAW): “Information and Computer Law<sup>2</sup>” (expressing a separation between them, in the sense that there is a computer law *apart* of information law<sup>3</sup>), “Infor-

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1. The paper stems from a lecture at the Heinrich Heine University of Germany, Information Science Department, held at January 26, 2011. Thank you Pr. Stock for this wonderful opportunity.

2. Example: the John Marshall Journal of Computer and Information Law. [www.jcil.org](http://www.jcil.org).

3. See for example the title of a book by Cambridge University Press edited by Luciano Floridi, “The Cambridge Handbook of Information and Computer Ethics”, 2010. Floridi speaks of computer and information ethics as a new branch of applied ethics that investigates the transformations brought about by ICT and their implications for the future of human life and society, for the evolution of moral values and rights and for the evaluation of agency behaviours”, id., p. ix. That he speaks of ethics (and now law) makes no difference for the needs of our current discussion here.

mation Law and Intellectual Property<sup>4</sup>) (again, expressing that Intellectual Property is not a part of Information Law) and “Information and Communication Technology Law”/“Information Technology Law”<sup>5</sup> (expressing that there is a branch of law connected to technology which forms an entirely separate field of law). We also see some somewhat different from the above terms like “Internet Law”, “Cyber Law”<sup>6</sup> and others—those aiming, of course, at including all law dealing with Internet and/or the cyber world. On the other hand, we also have what I think is correct from a scientific point of view, one field, information law, covering the whole of this domain, without a need for additions in its title; this is the position taken, for example, by the New York University “Institute for Information Law”<sup>7</sup> and the Dutch “Institute for Information Law” (IVIR<sup>8</sup>)-and I should mention, the annual international conference we hold in Greece under the same title<sup>9</sup>.

What is apparent, from the very beginning, is that in its recent origin, information law has been centered around the concept of “information” as a technological sort of concept, ‘information’ as used in computer/information science, lately as digital (information), information as in “Information Revolution”—in any case, *not* “information” as a general, even a philosophical term, for example, as meaning “a reduction of uncertainty” (no more, no less)<sup>10</sup> or even as “not matter nor energy”<sup>11</sup>. This phrase comes from the creator of the modern file of control and communication systems; but

4. Example: the Center for Intellectual Property and Information Law of the University of Cambridge (CIPIL). [www.cipil.law.cam.ac.uk](http://www.cipil.law.cam.ac.uk).

5. There is a Rutledge journal under this title, see [www.tand.law.uk](http://www.tand.law.uk). See also, JILT, the Journal of Information, Law and Technology, one of the ‘oldest’ journals of the field, from the University of Warwick, UK.

6. In relation to this, the debate between Judge Estabrook (Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. Chi. Legal F. 207.) and Lawrence Lessig (What Cyberlaw Might Teach, available at [http://www.harvard.edu/publications/1999/The\\_Law\\_of\\_the:Horse](http://www.harvard.edu/publications/1999/The_Law_of_the:Horse)) is intriguing.

7. [www.law.nyu.edu/centers/ili/index.htm](http://www.law.nyu.edu/centers/ili/index.htm).

8. [www.ivir.nl/index-english.html](http://www.ivir.nl/index-english.html).

9. The site of this years’ conference is <http://conferences.ionio.gr/icil2011>.

10. This is supported by Kenneth Arrow, a Nobel laureate in Economics of 1972, who sustained that “the meaning of information is precisely a reduction of uncertainty”. See *Perelman M.*, Information, Social relations and the economics of high technology, 1991.

11. This is a quote by *Nobert Wiener*, in his book *Cybernetics*, where he continues: “No materialism which does not admit this can survive at the present day”, see extracts in <http://www.informationphilosopher.com/solutions/schientists/wiener>, last access January 14, 2011.

modern physicists also use similar definitions of information. For example, *Bekenstein*, a famous physicist, supported that the current trend in physics is to sustain that the entire universe is made by information<sup>12</sup>.

Anyway, at the beginnings of the exploration of the impact of information and communication technologies in our lives from a legal and ethical point of view, information was seen only from its technological side—as something “inside” the new, then, technologies: TV, radio, telephone, telegraph, even electricity and electromagnetic radiation. The theoretical development of law dealing with these new technologies advanced—slowly—along with the “information revolution”—evidence of this phenomenon was the discovery of a vast information and communication artifacts (mainframe, laptop, mini, desktop and palmtop computers, software, databases, word processors, spread sheets, electronic games, the Internet, email and more<sup>13</sup>). These were the new technologies that created a new source of danger to people’s interests, so the law first had to redress this new source of danger. And second, the law had to accommodate interests in the new information products, in a new Information Age, within existing legal categories. Was this easy?

Not at all. The law is by nature conservative, ‘attempting to bring order out of chaos only as fast as consensus can be reached among social groups willing to conform they believe are fair and workable...’<sup>14</sup> But in what has to do with information, the usual chaos demanding order becomes even harder to organize: people simply do not agree on solutions, information is by nature something almost impossible to regulate and most importantly, information technology runs so fast that the law usually lumbers along like “an unwieldy dinosaur.”<sup>15</sup>

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12. *Bekenstein J.D.*, Information in the Holographic Universe. *Scientific American*, Volume 289, Number 2, August 2003, p. 61.

13. See *Bynum T.*, Philosophy and the Information Revolution, Proceedings of the 8th Computer Ethics: Philosophical Enquiry International Conference, Corfu 2009, Nomiki Vivliothiki, 2009, pp. 3-20.

14. *Branscomb A.*, Who Owns Information? From Privacy to Public Access, New York: Basic Books, 1994, 5.

15. *Branscomb A.*, id, 5. See also the case, *MGM Studios, Inc. v. Grokster, Ltd.*, which was adjudicated by the US Supreme Court and is considered by many to be the sequel to the *Napster* case, another technology that “outpaced” the law.

### 3. Three “hate” stories in the ‘love-hate’ relationship

#### 3.1. Software and copyright

I will offer here, initially, an example of the early and severe embarrassment lawyers felt, when they found themselves in front of the necessary selection of a legal “tool” to protect interests in information products when these begun to be produced. This is the story of the legal protection of software. As widely reported in the relevant bibliography<sup>16</sup>, lawyers in the early days of the information revolution did not quite well understand not only what kind of an “object” (for sale) or “product” software was, but also which kind of intellectual property protection was best for it<sup>17</sup>: copyright, patent, both, none or even, an entirely new ‘tool<sup>18</sup>’, either a mechanism such as a new *sui generis* right over here, software or else. (As lawyers know, we create creatures like *sui generis* rights when we just don’t know and can’t validly guess what other, already existing right, is suitable or best for our case. When this unfortunate situation occurs in the context of medicine, we call a disease “*idiopathic*” – meaning that we don’t know what caused it or what it exactly is). This is one example of the “hate” part of the “love-hate relationship” of law and information: after endless discussions, both in the US and Europe, the verdict was issued that software could indeed be treated like any other written work and achieve the protection by copyrights. But there is no doubt that, no matter what, a series of 0 and 1s<sup>19</sup> is just not original and expressive as a novel-it has nothing to do with people’s feelings and it cannot elevate anyone’s soul from a clearly aesthetic point of view<sup>20</sup>.

16. See for example *Branscomb A.*, id., ch. “Who Owns Computer Software?” p. 138.

17. It is interesting to note here that the whole field of intellectual property (exclusive rights over information in essence) was severely underdeveloped until very lately: as one of the most famous IP scholars in the United States notes, Jane Ginsburg, in her introduction to the book “Intellectual Property Stories” she co-edited with *Rochelle Cooper Dreyfuss* in 2006, “...twenty years ago, it would have been difficult to obtain the participation of fifteen nationally-recognized full-time members of the intellectual property professorate. This book reflects the emergence of intellectual property as an academic subject...” (p. 1).

18. See *Thurow L.*, *A New System of Intellectual Property Rights*, Harvard Business Review 95 (Sept. Oct. 1995).

19. No intention to undermine software programs here whatsoever.

20. I admit that this is not current copyright law, that works are protected by copyright only when they present these characteristics; however, this is so, perhaps *because* we have had in the past to accommodate products like software programs and databases within copyright protection.

We offer now, throughout Europe, and the US, a life of the author plus seventy years term of a copyright over the author's software-time, which for these particular "authors" is most certainly ridiculous, as we know that after five years from its first sale, a particular software product almost lacks any reason to exist—this being admittedly, an exaggeration<sup>21</sup>. Academics, among others, who lament this pathetic situation, do not fail to note that exclusive rights to software (copyrights or patents or whatever), had they been enforced earlier, would have perhaps almost stopped Internet technology<sup>22</sup>.

### 3.2. *Law against information piracy*

The second example also comes from the IP domain. Piracy is thriving. It is common knowledge that copyrighted works are being pirated daily by the thousands via illegal Internet downloading, films, books, musical works, everything. The law was internationally rather slow to answer these provocations, but still, in the United States, the Digital Millennium Copyright Act and in Europe, the The Information Society Directive (2001/29/EC 22 May 2001) and the Directive for the enforcement of intellectual property rights (2004/48/EC 29 April 2004) especially on the enforcement of all IP rights were implemented, as concrete legislative instruments of a clear supranational nature to fight against information piracy.

There is no evidence, however, that this legislation had any really significant influence on the reduction of piracy, even when criminalization of piracy reached unprecedented measures. Additionally, what we have seen in the past is that when one form of information piracy is finally declared illegal and is punished, instantly information technology alters the means, the technique of information piracy, so that even the so young rule may not anymore be applicable to a new technology<sup>23</sup>. To accentuate the problem,

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21. Admittedly, a similar argument could also stand for books e.tc., properly adapted, of course to this kind of works. "...Most books go out of print within a year. The same is true for music and film. Commercial culture is shark-like. It must keep moving. And when a commercial work falls out of favour with the commercial distributors, the commercial life ends..". *Lessig L.*, *Free Culture. How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*. The Penguin Press, 2004, 225.

22. See *Zittrain J.*, "...the framers of the Internet did not design the network with visions of mainstream dominance. Instead, the very unexpectedness of its success was a critical ingredient. The Internet was able to develop quietly and organically for years before it became widely known, remaining outside the notice of those who would have insisted on more cautious structures had they only suspected how ubiquitous it would become...". *The Future of Internet and How to Stop It*, Yale University Press, 2008, p. 7.

23. See the Napster case in peer-to-peer networks and copyright contributory liability of ISPs.

it makes us think, for example, that the most important US Supreme Court decisions on information have been resolved under the slightest majority (like 5-4, example: *Diamond v. Chakrabarty*,<sup>24</sup> the case allowing the patenting of living organisms in the US).

### 3.3. *A data protection laws story*

Leaving for a while the paradigm of intellectual property, if we check the data protection information laws, we see that internationally, we face major differences of data protection regimes. In Europe, the data protection Directive of 1995, the Directive on the protection of individuals with regard to the processing of personal data and on the free movement of such data (95/46/EC October 24, 1995) provided for a sweeping protection of data, in both private and public law fields. On the contrary, in the US, only safe harbor regimes offer protection for data. Europe is supposed to be allowed to send data over to the US only under the same conditions of legislation equal to the strict provisions of the data protection Directive. What makes the situation impossible from a unitary information law perspective is the universal nature of data (information), the immense transferability, the impossibility to enclose by the strictest technological means.

Example: in Greece, because of the data protection Directive, the names of litigants in a controversy are considered personal data, not to be published without the consent of the litigants themselves. All judicial decisions are anonymized before they can be legally published in the law reports. And the court clerks, before they give copies of judicial decisions to interested lawyers, are obliged at least in theory-as in many cases this is not followed-to delete the names of the litigants throughout the decision. In one case, an attorney who had won an important trademark case, published it in Greece, having deleted the names of the litigants. However, he also sent it to an American journal, which published the opinion keeping the names intact, as American law and legal tradition of centuries dictates. The e-mailing of the judgment with the names intact to the US was declared by the Greek Data Protection Authority as illegal, under the Directive, which prohibits processing (sending is processing) data of this kind without the consent of the data subject.

What are we taught? When it comes to information, it may very well have a character superseding national boundaries; data (information) flow

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24. 447 U.S. 303 (1980). Exactly the same had happened centuries ago, in the major English copyright case in the House of Lords, *Donaldson v. Beckett*, (1774) 2 Brown's Parl. Cases 129, 1 Eng. Rep. 837 (a six to five decision that changed the copyright law world forever after).

from one country to another in a second and what is illegal transfer for the sender is perfectly legal for the recipient. So, this is a “hate” side of the “love-hate” relationship law and information, as we know it is close to impossible to achieve the same regulation of information in all the countries of the world, so we are just trying to catch something that is impossible to confine.

What legal tools can we use for information? This brings us to the next, closely related to the above question: which (existing) legal concepts can we use, when we deal with information? In classic civil law dealing with obligations (this branch has a history more than 2.000 years and begins with the Romans), we use the model of *property*, as a set of rules to protect the owner’s exclusive right over a thing. A thing can be a house, a horse, a book, a computer and so on. But can we own information? Is “property” a suitable tool for information? Are we already using property over information anyway? Returning to history, what Jefferson has stated so eloquently in a 1813 letter over a patent sought by a private citizen, was that an idea (=information) can’t be owned: it is like light and like fire, expandable without the possibility of human restriction<sup>25</sup>. Moreover, as he declared,

25. This part of his letter has been quoted extensively: “If nature has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as long as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of every one, and the receiver cannot dispossess himself of it. Its peculiar character, too, is that no one possesses the less, because every other possesses the whole of it. He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me. That ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been peculiarly and benevolently designed by nature, when she made them, like fire, expansible over all space, without lessening their density in any point, and like the air in which we breathe, move, and have our physical being, incapable of confinement or exclusive appropriation. Inventions then cannot, in nature, be a subject of property. Society may give an exclusive right to the profits arising from them, as an encouragement to men to pursue ideas which may produce utility, but this may or may not be done, according to the will and convenience of the society, without claim or complaint from any body. Accordingly, it is a fact, as far as I am informed, that England was, until we copied her, the only country on earth which ever, by a general law, gave a legal right to the exclusive use of an idea. In some other countries it is sometimes done, in a great case, and by a special and personal act, but, generally speaking, other nations have thought that these monopolies produce more embarrassment than advantage to society; and it may be observed that the nations which refuse monopolies of invention, are as fruitful as England in new and useful devices...” . For the whole letter see <http://www.red-bean.com/kfogel/jefferson-macpherson-letter.html>.

when I share an idea with you, I still have it; when I give you something I own (=property over a chattel), I have it no more. These are the differences that led Jefferson to denounce the use of a legal tool like a patent over ideas/information. I tie “idea” with “information” in the context of patent law as I believe there can be no doubt that what we patent, in the end, is information (a utility patent protects in fact *the idea* of a structure or the utilitarian features or steps, a design patent protects *the idea* of appearance features and so on-of course, after these ideas are expressed in words and filed with the competent Patent Office).

Jefferson in 1813 called the granting of a patent an embarrassment; certainly we continue, as lawyers, being embarrassed today, as patents are granted to information by thousands daily. Also, while it may be true, admittedly that information is not an object, nor it has intrinsic value in and by itself<sup>26</sup>, again we do grant proprietary rights to information such as software. We certainly have the same troubles with granting proprietary rights in the biotechnology sector (gene sequences etc).

#### 4. *The emerged principles of information law-the “love” part*

So, is the situation so intolerable? Is there no way to achieve a uniform regime for information, as we have to face the difficulties mentioned above? Perhaps not. It would be helpful to return to the roots of this story, that is, to the fundamental principles of information law. If these exist, and can be universally agreed, then the “hate” side of the relationship may be at least, a little ‘less hateful’. I will offer here a very small account of the fundamental principles of information law, as they seem to have emerged until today.

One of them is the principle of respect for *privacy*: new technologies must be designed in order to take into account people’s interests in privacy (privacy is a constitutional right in both civil and common law worlds). Again, the issue of privacy surpasses the discussion of the threats by ICTs; it is a very old subject of legal discussion.

Another fundamental principle is respect for personal autonomy: ICTs may threat interests in the free development of personality, in the own construction of identity and our sense of self. Again, obviously this issue of autonomy is a very old subject of legal discussion. For example, data protection laws, a sub-set of information law, protect both interests in informational privacy and informational self-determination.

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26. See argumentation against treating information as property by *Druey N.*, Information cannot be owned, at <http://cyber.law.harvard.edu/sites/cyber.law.harvard.edu/files/Druey.pdf>. Last access January 13, 2012.

The protection of intellectual property is also a current theme-respect for people's IP rights (copyrights, patents, trademarks and other) also forms a principle in both modern information law and ethics<sup>27</sup>.

We must add here the principle of freedom of speech and protection against censorship: whereas the safeguarding of people's right to speak in the digital (example: cyber) world is paramount<sup>28</sup>, again this is no difference whatsoever in essence from our old discussions on freedom of speech and protection of censorship.

Also, information law dictates freedom of information in the sense of securing access to public (initially and under certain circumstances, also private) documents. Again, this information (documents the citizen demands access to) may most probably be electronic governmental records, but the laws on freedom of information worldwide do not in principle make any special reference to the nature of the information sought. Freedom of information is, anyway, a main principle of information law.

As we see, principles of information law are in fact, the expression of human rights in information-a human right to be protected from undue interference with one's personal information privacy), the right to control who has access to our information (autonomy), the right to have rights over information (IP rights), the right to have access to other kinds of information (freedom of information) and the like. This is the domain where I see the 'love' part of the 'love-hate' relationship of law and information: the law is 'used' to protect, in some cases for centuries, this kind of human rights: autonomy, privacy, freedom of speech, freedom of information, and further more, the right to read, the right to know, the right to be a citizen with access to as much information as possible, *technologically* possible that is-the right, therefore, to the free enjoyment of new technologies like the Internet, a right which in Greece today is a constitutional right. These are the rights that "demand", for example, that:

- a governmental website be accessible to people with disabilities
- a public domain work be not "locked" in a database "negating" any notion of fair use, again due to technology

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27. On information ethics, see one of the first works on principles, *Severson R.*, *The Principles of Information Ethics*, M.E.Sharpe publications, 1997. An analytical exposition of all themes on information ethics can be found in the important site of the groundbreaking International Center for Ethics site, [www.icie.org](http://www.icie.org).

28. For example, defamation by a publication in the Internet certainly bears greater dangers to harm a person, due to the medium of this defamation (intensity of harm, unknown number and location of recipients, impossibility to ascertain total deletion of the defamatory content from all sites forever e.tc.)

–a new rule on orphan works be instituted, so that the dream of the greatest digital library of the world may one day become a reality

–no one is deprived of the chance to *learn how* to access information on the first place-to learn how to read.

In this aspect, we have in the modern world come to embrace the main human rights dealing (also) with information, as rights protecting fundamental conditions of a free human existence. And it is so interesting to discover that, people from the information ethics field (a field so closely connected to information law), such as Professor *Rafael Capurro*<sup>29</sup> in Germany, founder of the International Centre for Information Ethics, have long time ago started the description of the field of information ethics at the very beginning: with the ancient Greek civilization, when «*παρρησία*», freedom of speech in the ancient Greek Agora was absolutely essential for democracy and where also freedom of printed works first originated<sup>30</sup>. For the information ethics world, it seems that the field originates at a time where technology was, modernly speaking, practically *non-existent*<sup>31</sup>. And

29. The first article of *Capurro* on information ethics appeared as far back as 1981, *Capurro*, Zur Frage der Ethik in Fachinformation und-kommunikation (1981) (in German) available at <http://www.capurro.de/infoethik81.html>, last access January 15, 2011.

30. "...In the Western tradition information ethics has its roots in the oral culture of ancient Greece. Agora (marketplace and meeting place) and freedom of speech (Greek: *parrhesia*) were essential to Athenian democracy. The cynics cultivated freedom of speech as a special form of expression. Socrates (469-399 B.C.) practised his thinking in public places and never published his arguments. Plato (427-347 B.C.) discusses in his dialogues the transition from an oral to a written culture. Under the influence of Christianity a book culture was developed which was mainly centered on one book, namely the Bible." From [www.icie.zkm.de/research](http://www.icie.zkm.de/research), The Field. Last Access January 14, 2011. On the history of information ethics see <http://icie.zkm.de/research>.

31. See also *Bynum T.*, The historical roots of information and computer ethics, in *The Cambridge Handbook of Information and Computer Ethics*, 2010, ed. *Luciano Floridi*, p. 20, who traces the roots of information ethics in Aristotle, more than two thousand years ago, in the sense that he was a founder of a detailed theory of the nature of the Universe and in particular, and who also was the first one to declare that individual entities in the Universe are made out of matter and forms and forms *are* or at the very least, *contain* information. (Note, however, the previous footnote of Socrates and Plato, who preceded Aristotle). At the same time, however, we must acknowledge that ethics scholars are not in a perfect agreement over the nature and scope of the field of information ethics, see *Floridi L.* in *The Cambridge Handbook of Information and Computer Ethics*, 2010, ed. *Luciano Floridi*, p. 77, who notes in his chapter "Information Ethics" that "...Information ethics has come to mean different things to different researchers, working in a variety of disciplines, including computer ethics, business ethics, computer science, the philosophy of information, social epistemology and library and information science. This is not surprising...".

this is so because, the center of the discussion is human rights related to information and not technology. Information law scholars have, I think, much to learn from their colleagues of the information ethics world.

### 5. *Information v. technology*

The idea, therefore, that ICTs are a main feature of information law, that there can be no information law unless it resolves a question with a clear technological side, is plainly inadequate. The weight must be given not to technology, but to information-the information revolution did give rise to a new set of dilemmas, but not to a new set of rights, of legal concepts, of legal ideas, to be discovered in order to accommodate these dilemmas. Even dealing with the very notion of information, the law must learn from science that "each creature on earth is a creature of information; information sits at the entrance of our cells and information rattles around in our brains<sup>32</sup>"-the meaning science gives to information is of paramount importance to every other discipline, law, of course, included. *Information*, not technology, is the fundamental and core concept<sup>33</sup>: a "concept as fundamental and important as being, knowledge, life, intelligence, meaning, of good and evil-all pivotal concepts with which it is interdependent-and so equally worthy of autonomous investigation..."<sup>34</sup>

One can detect, therefore, not only in ethics or physics, but even in law, a uniform concept of information as wide as just described. Experts worldwide have come to understand and stress this unity inherent in the concept, perhaps sometimes even without realizing it. For example, we see intellectual property to be described in a unifying way:

"...doctrines usually included in intellectual property include among others, copyright, patent, trademark, trade secrecy, rights in tomography of integrated circuits, rights in industrial design, plant breeder rights, rights of publicity, database rights, rights against misappropriation...each doctrine involves restraining people from using or duplication

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32. *Seiffe C.*, 2006, *Decoding the Universe: How the New Science of Information is Explaining Everything in the Cosmos, from Our Brains to Our Souls*, New York: Viking Penguin.

33. See also *Bull H.P.*, Was Ist Informationsrecht? In *Informatik und Recht*, 1986, Heft 1/8, 287.

34. *Floridi L.* What is the Philosophy of Information? In Moore J.H., & Bynum T.W., eds., *Cyberphilosophy: the information of computing and philosophy*, Oxford, UK, Blackwell, 115-138 (a metaphilosophy), at p. 134.

a pattern.’ (information<sup>35</sup>) ‘...that is owned by, or associated with another party. The range of potentially covered patterns is wide, including for example, patterns in words, symbols, gene segments, the settings of computer switches, physical structures, processes, colours and sounds. The patterns are thought of as valuable intangibles, capable of being embodied in, and replicated by, physical media...’<sup>36</sup>.

What Gordon says “patterns” is in fact, information and more importantly, information not necessarily related to technology in any significant way. What early researchers like the Dutch *Dommering* more than twenty years ago had envisaged as information law<sup>37</sup>, under a unitary approach is slowly becoming detectible today<sup>38</sup>, if not directly, at least as indirectly as *Gordon*’s unitary view of IP and IP-related rights.

Academics are not alone in their unitary views on information: law-makers also have attempted to follow it. For example, the draft Article 2B of the Uniform Commercial Code of the US dealing with information defined information as follows:

“(22) Information means data, text, images, sounds and works of authorship, including computer programs, databases, literary or musical works, audiovisual works, motion pictures, mask works, or the like and any intellectual property or other rights in information”.

This is a definition that encompasses raw data which have been possessed and embodied in some medium<sup>39</sup>.

In conclusion, in order to enhance the “love” side of the information and law relationship and to shrink as much as possible the “hate” side, we need to:

35. The parenthesis is mine.

36. See *Gordon W.*, Intellectual Property, The Oxford Handbook of Legal Studies, Peter Cane and Mark Tushnet, eds., Oxford University Press, pp. 617-646, October 2003, at p. 1.

37. See *Dommering*, Information law and Themes of this Book in *Atles, Dommering, Hugenholtz & Kabel*, eds., Information Law Towards the 21<sup>st</sup> Century, The Hague, Kluwer Law International and *Dommering*, An Introduction in Information Law: Works of Fact at the Crossroads of Freedom and Protection in *Dommering & Hugenholtz* (eds), Protecting Works of Fact: Copyright Freedom of Expression and Information Law, The Hague, Kluwer Law International.

38. See *Mock W.*, On the Centrality of Information Law: a Rational Choice Discussion of Information Law and Transparency, *Journal of Computer and Information Law*, vol, XVII, 1069.

39. See *Mock*, id., at 1076.

a. agree upon a unitary definition of information when it comes to information law, freeing information as we need to understand it here from its struggle with technology and

b. to return and explore the basic principles of information law, as they have in fact evolved during the centuries, and not specifically after the Information Revolution.

This will, perhaps, allow in the future the delineation of a robust system of information law, designed to adequately protect people's most fundamental interests in connection to information.

