The International Lawyer in Times of Cyberspace

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A. Introduction

The 'new economy' is a reality. The global digital information and communication networks are profoundly changing the way many businesses operate. While some pundits pointing at stock market losses in early 2000 have already declared the 'new economy' a fading hype, the real pressure today is on traditional brick and mortar companies to accommodate their business models to the new networked reality.

Technology is one major driving force of change: the doubling of information processing capacity every 18 months ('Moore's Law')[1] and the tripling of network bandwidth every 12 months ('Gilder's Law')[2] permit dramatic non-linear growth rates. The flexibility of decentralized digital networks does not constrain information flows to particular kinds of information anymore. The Internet can be used to send email, listen to music, download software, access databases and watch movies. Moreover, every Internet user is by definition not just a recipient, but also an author, a producer and a distributor of information.[3]

Business consultants are eagerly publishing books on how these forces of change are 'un-gluing' value chains in many business sectors.[4] Unlike early – and naïve – predictions of the imminent end of all intermediaries and the dawn of direct producer-to-consumer links on a global scale, more sophisticated students of the 'new economy' predict nothing but uncertainty.

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1 Named after its 'creator' Gordon Moore, one of the founders of Intel, the world's largest producer of microprocessors; see Gordon Moore, *Cramming More Components onto Integrated Circuits* (Electronics, 1965) reprinted in Richard Rhodes (ed.), *Visions of Technology* (1999), p. 243.

2 George Gilder, Telecosm (2000).

3 This is often termed 'convergence'.

4 An intriguing one is Philip Evans and Thomas Wuerster, *Blown to Bits* (1999).

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Thus, risking thoughts on the role of the international lawyer in times of cyberspace is like reading tea leaves. If we have little clue of the general direction of the economy, its effect on the legal profession must be even more uncertain. This is more than the usual disclaimer – it is nothing less than the stark warning of 'proceed with caution, and at your own risk'.

The most obvious change for the legal profession brought about by the 'new economy' is, of course, the increase in demand for legal work, especially in the areas of corporate law, M&A and corporate finance. This is coupled with an unusually strong international dimension as e-commerce companies tend to expand internationally much quicker than their traditional brick-and-mortar counterparts. European start-ups now actively search for the 'right' exchange to list their shares and for the 'right' financial market to place their bonds. Moreover, not only cooperation among dot-coms but consolidation of market niches through fast-paced and international acquisitions will require substantially more international legal issues to be addressed and solved.

However, for law firms the beneficial increase of demand for their services has a downside as well. Acutely aware of their constant need for legal advice, dot-com companies opt more frequently for hiring legal counsel in-house, and thus reserve outside counsel (and its higher fees) for important, non-routine matters. This demand for lawyers to join dot-coms with attractive wages and even more attractive stock options has forced traditional law firms, especially in competitive markets like Silicon Valley or New York City to increase salaries to mind-boggling new heights. A first year associate, right out of law school, who joins one of the top New York City firms, can in 2000 expect to make up to USD160,000 including bonuses. Most of us may be in shock reading these numbers, but economists, of course, will explain to us quite happily: this is just the old story of supply and demand – the markets are working.

What else, though, is changing, apart from the rather superficial economic shift in legal services and lawyers, towards one with an international expertise? The Internet can be seen as challenging legal practice in two very different ways. First, cyberspace may pose substantive challenges to the law and its practice. Secondly, the widespread use of modern digital information and communication networks may deeply change the work environment for lawyers.

B. Cyberspace as a Substantive Challenge to Law and its Practice

A number of early commentators suggested that cyberspace would make obsolete the entire legal system as we know it. They suggested that cyberspace is a lawless place, outside the reach of national jurisdictions and thus outside the scope of national laws.[5] Cyberspace, they reckoned, would become a testing ground for

regulatory competition and create a global 'race-to-the-bottom'. Furthermore, as all information would be constantly moving on the global network, it would escape law enforcement and remain eternally free.[6] National legislatures would be relegated to 'sitting on the fences'. John Perry Barlow, an early Digerati, even proclaimed cyberspace's independence.[7] Law and lawyers have no place in cyberspace, was his message and he argued it eloquently.

Such utopias, of course, are just that: utopias. Cyberspace is a social space. Conflicts arise. Laws, seen as sets of social rules, are in essence formalized societal conflict-resolution procedures. Rules will become necessary, even if cyberspace can stay outside existing legal systems. And not even that is going to happen. Numerous court cases over the last couple of years clearly demonstrate that national legal systems have not given up on regulating cyberspace, and law enforcement agencies have not given up on enforcing these rules. On the contrary, national legislators all over the world have recently intensified their activities to extend the reach of laws to the Internet, from content-control to privacy, from digital signatures and e-commerce to taxation. And law enforcement is stepping up its readiness to police the net.

Frank Easterbrook has argued that 'cyberlaws' are not at all different from laws in 'real space'.[8] All that we need to do, he suggests, is to apply existing laws to cyberspace. Consequently, he questions whether cyberspace will challenge the existing legal systems. To study 'cyberlaw' he pronounces is thus as sensible as to study the 'law of the horses'. Neither will extend much our understanding of legal concepts and structures.

Easterbrook's catchy dictum has been well received among the more traditional legal circles. For them, 'business as usual' is always a welcome result. But in his article Easterbrook is a bit more cautious, stating that in one way cyberspace may substantially challenge existing legal systems, albeit not in the fundamental sense envisioned by the cyber-libertarians of Barlow's calibre.

Following Easterbrook's cautious lead I will suggest three such likely challenges for the legal system and its practice.

I. Network Globality, Robert Coase and the Search for Jurisdiction

The Internet disregards geographic boundaries. In general, users neither know nor care about where their communicative counterpart is located. Frances Cairncross

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[5] Compare David R. Johnson and David G. Post, 'Law And Borders – The Rise of Law in Cyberspace' (1996) 48 *Stan L Rev*, p. 1367; John T. Delacourt, 'The International Impact of Internet Regulation' (1997) 38 *Harv Int'l L J*, p. 207; Dan L. Burk, 'Federalism in Cyberspace' (1996) 28 *Conn L Rev*, p. 1095; Joel R. Reidenberg, 'Governing Networks and Rule-making in Cyberspace' (1996) 45 *Emory L J*, p. 911.

[6] David Post, Anarchy, 'State and the Internet: An Essay on Law-Making in Cyberspace' (1995) *J Online L*, art. 3, at pp. 39–41.

[7] John Perry Barlow, 'A Cyberspace Independence Declaration' available online at <www.eff.org/barlow>.

[8] Frank H. Easterbrook, 'Cyberspace and the Law of the Horse' (1996) *U Chi Legal F*, p. 207.

has announced the 'death of distance' on the global networks.[9] Indeed, the net dramatically increases the volume of cross-jurisdictional transactions, while the average size of the transaction shrinks. Users are more and more willing to shop outside their geographic proximity for less and less valuable goods.

Cross-jurisdictional transactions are not a novel challenge for legal systems. All that is required in such cases is the invention of a set of meta-rules, a set of rules defining which jurisdictions' rules to apply. International private law and conflicts of laws have done just that. Today nobody would assume that an American super-tanker registered in Liberia transporting oil from Saudi-Arabia to a refinery in the Netherlands operates in a lawless vacuum. It may take some thinking and research to resolve legal issues arising from such traditional cross-jurisdictional transactions, but – as long as one can involve a couple of dozen capable international lawyers – the case poses no principle legal problem. The myriad different transactions in cyberspace, however, will pose problems – not because they are concluded in a lawless place, but because their quantity and value offsets the existing economic equation of solving cross-jurisdictional issues. Having a group of lawyers on both sides, with knowledge of all jurisdictions involved, refine draft after draft of the contract to cover all possible options, may be economical for a transaction involving a super-tanker full of crude oil, but is certainly not for an order of three paper-back books from Amazon.com.

Forty years ago, Nobel laureate Robert Coase pointed out the importance of transaction costs.[10] The legal system is ensuring a smooth resolution of possible conflicts and thus lowers transaction costs. But if using the legal system turns out to be more costly than what the parties involved may gain from it, they will look for other methods of conflict-resolution. If this happens on a large scale then the primacy of the legal system as the conflict-resolution system of choice will indeed be challenged. Law firms will lose clients, and customers their trust in the law. Ultimately the legal system may then at least partially be replaced by something else – an international for-profit mediation regime, for example.

The obvious response to the challenge then is to lower the transaction costs the parties incur when using the legal system, especially in cross-jurisdictional cases. Harmonization of legal rules across jurisdictions provides one possible strategy to achieve this cost cutting. The directives of the European Union (EU) in the area of intellectual property rights, distance selling, e-commerce services, and privacy and digital signatures, have attempted to do just that, and so have the efforts of the World Trade Organization (WTO). But harmonization of national laws has its limits. Few nations are willing to give up legal rules based on what they perceive as important national values. Thus the challenge to lower transaction costs will persist, at least in the short-term.

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[9] Frances Cairncross, *The Death of Distance* (1997); Jack L. Goldsmith, 'Against Cyberanarchy' (1998) 65 *U Chi L Rev* 1199, p. 1203 has termed this as the 'boundary-destroying' view of cyberspace.

[10] Robert Coase, 'The Problem of Social Cost' (1960) 2 *Journal of Law & Economics*, p. 1.

II. Ownership and Attribution of Information:

Markets presuppose some kind of ownership, i.e., the ability to keep others who have not transacted to receive the good from getting access to it. In contrast, 'common' or 'public' goods, like air, are available for everyone. Therefore these cannot be traded at markets.

Establishing ownership of physical goods is comparatively easy. The owner of a chair can keep others from using it, only one can use a chair at the same time. Property law is based on physical exclusivity, on 'drawing lines'. Ownership of information, however, is substantially more difficult, as information is non-exclusive. It can be used by more than one person simultaneously. Moreover, information so far has played largely an auxiliary role in industrial societies – as a necessary tool to coordinate supply and demand. But in the information economy, information itself turns into the primary economic good. And the legal rules stating who controls the information provide the primary structure of power.

Anne Wells Branscomb expertly sketched out the issues in her book *Who Owns Information?*[11] and Frank Easterbrook predicted that issues of ownership and control of information would provide real challenges for the legal system in the information society.[12] Three years ago, demands for cyberspace content-control kept lawmakers in America and Europe busy. Today they have been replaced by debates on intellectual property and privacy – hot issues of information *ownership*.

Because of the peculiar nature of information – being non-exclusive and immaterial – traditional legal concepts of ownership, property and possession are of very limited applicability. Copyright laws have evolved over decades, incorporating numerous rules-of-thumb to accommodate the diverging interests of exclusive ownership and free flows of information. Many of these pragmatic solutions won't work in cyberspace anymore. Even worse, copyright means different things in the common and the civil law traditions, a distinction blurred in a global virtual electronic marketplace of information.[13]

Therefore, establishing an efficient and equitable internationally acceptable set of rules of control and ownership of information poses a second, very substantial and very real challenge to the legal system and its practice.

III. Governance of Structure

Larry Lessig is best-known for helping us understand that some of the implicit rules of transacting and communicating in cyberspace are not written by democratically legitimized legislatures, but by profit-driven commercial software companies who

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[11] Anne Wells Branscomb, *Who Owns Information?* (1994).
[12] Frank H. Easterbrook, 'Cyberspace and the Law of the Horse' (1996) *U Chi Legal F* 207.
[13] See Viktor Mayer-Schönberger, *Information & Recht* (2000).

create the tools with which the vast majority of users access the Internet.[14] If this shift continues, law may lose its supremacy and evolve into something arcane, while the 'action' shifts to software code. In such a future engineers, not lawyers, will contest the rules and solve conflicts.

Lessig's argument epitomized in the statement '(software-)code is law' is quite persuasive. Among others, it influenced a federal judge to break up Microsoft. Fred Schauer has reminded us that the concept of implicit rules is nothing new.[15] Our world is full of rules and limits inherent in the tools we use. Thus the challenge for the legal system in cyberspace is not the existence of implicit rules outside the law, but of their in-transparency, the lack of choice and of the paucity of legitimacy.

Forcing software creators through laws if necessary to open their source code and hence make their rules explicit has been suggested as a workable remedy, saving both the world and, implicitly, the supremacy of law. 'Open Source' has evolved from an idea to a movement gaining substantial momentum.[16]

One needs to be cautious, however, in assessing its success. Open Source may open the source code to (theoretical) public scrutiny. But making implicit rules explicit does not *per se* create legitimacy. Transparency is but one element of legitimacy, substantive limits (basic rights), democratic participation and procedural safeguards are other, equally important ones.

More and more international lawyers will find themselves asking questions of governance: Who governs a particular rulemaking? Can one change a rule in question and if so, how?

The legal system may keep responding to such governance issues by resorting to antitrust and competition laws. It is doubtful, though, whether such tools, developed for quite different matters, will be sufficiently effective. The legal practitioners may quite possibly be well advised to push instead for more stringent rules of corporate governance. Irrespective of these subtleties, however, the challenge as stated by Lessig to law and legal practice, is real.

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[14] Lawrence Lessig, *Code: and Other Laws in Cyberspace* (1999); but see also Joel R. Reidenberg, 'Lex Informatica: The Formulation of Information Policy Rules Through Technology' (1998) 76 *Tex L Rev* 553; Viktor Mayer-Schönberger, Das Recht am Info-Highway (1997), pp. 40–41.

[15] See generally Frederick Schauer, *Playing by the Rules: A Philosophical Examination of Rule-Based Decision Making in Law and in Life* (1991).

[16] Chris DiBona, Sam Ockman and Mark Stone, *Open Sources – Voices from the Open Source Revolution* (1999); Eric S. Raymond, *The Cathedral and the Bazaar – Musings on Linux and Open Source by an Accidental Revolutionary* (1999).

C. Cyberspace as a Challenge to the Traditional Practice of Law

Modern information and communication technologies, especially the Internet as a global digital network, may not only challenge the application of existing legal rules, they also provide powerful tools to be used in legal practice.

Fifteen years ago people were still talking about the automated judge – a computer that would, after being 'fed' legal facts, render 'correct' decisions. This naïve euphoria is gone. The substantive use of technologies and networks in the legal world has a different focus today.

The old image of the corporate lawyer dictating for hours on end, and a small army of secretaries typing these tapes, is distant history – especially in large American firms. The successful young international attorney today is expected to be a fast typist and to know intimately the dominant word processing software. Eighty-four per cent of large firm attorneys in the US already had a PC on their desk in 1994 and two-thirds of them did their own word processing. Europe is not lagging behind much: 85 per cent of similarly situated attorneys in Germany had a PC on their desk in 1995. Numbers utilizing email and accessing online databases are similar.[17]

Information technologies then have already changed the way lawyers do business. American law firms have striven to flatten hierarchies, reduce support staff and pool secretaries to save cost and increase efficiency. But such efficiency gains are only a very preliminary first step.

The Internet and networks in general permit law firms to tackle the 'holy grail' of legal practice: managing legal knowledge. From the outset, lawyers have been practicing alone. Teamwork is not only not emphasized in legal education, it is quite openly discouraged. Early on, lawyers are instilled with the idea that their real value is derived from the knowledge they have. Tightly guarding this know-how is seen as the lawyer's best strategy for success (or survival).

Law firms have long attempted to increase the pooling of information and knowledge within firms, but rarely have they succeeded. Today many law firms are still divided up in delineated fiefdoms, with every lawyer or at least each small group of lawyers carefully keeping their knowledge to themselves.

Such behaviour is quite understandable, of course, as few existing law firm compensation schemes provide any financial incentives for the sharing of knowledge. On the contrary, sharing knowledge would not only permit others in the firm to provide a similar service (and bill it) but would also at least initially use up the most valuable resource attorneys have – their time.

So far, sharing knowledge has not only been financially unattractive for the

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[17] See Viktor Mayer-Schönberger, 'Der Jurist am Info-Highway' in Mayer-Schönberger and Schneider-Manns-Au (eds), *Der Jurist am Info-Highway – Über die Zukunft eines Berufsstandes* (1997), pp. 13–25.

individual attorney, it has also been incredible difficult to implement structurally, on the level of the law firm itself. Even if attorneys could be forced to write internal memos describing their insights and thus externalizing their knowledge, it would be almost impossible for others to tap into this information treasure without easy search capabilities and fast access. Moreover, many of these insights would be even more powerful if they could be thematically grouped and linked together, so that a true whole that is larger the sum of its individual parts could be created.

Digital networks provide such a tool to achieve this goal – at least technically. Large law firms across the globe have already started 'knowledge management' initiatives, similar to the ones under way at large accounting and consulting firms.[18]

The central theoretical idea behind the drive for 'knowledge management' is what Internet experts refer to as 'Metcalfe's Law' and what economists call 'network externalities'. It is the fairly simple truth that the overall value of a network increases not linearly but with the square of the number of new participants added. This most important value increase can only be realized, however, if the network participants actively communicate with many others on the net, thus releasing the synergies inherent in the network topology.

The Internet permits law firms, particularly in international practice, to implement this network paradigm and thus to change legal practice in at least three different dimensions:

I. Networks Within Firms

This is the obvious application of the network paradigm. By effectively networking the legal expertise within a firm, practice will not only become more efficient through a more suitable division of labour, but also increase in quality as specific client issues can be better linked up with appropriate experts.

But as mentioned before, the network architecture permits more than just efficiency gains through better resource utilization. It will also enable the firm to 'externalize' implicit, internal knowledge of individual attorneys and make it easily accessible to co-workers. If such knowledge networks are implemented, the firm can substantially strengthen its hand vis-à-vis single attorneys and create a cohesive, firm-wide knowledge culture independent of individual protagonists. Likely, this network 'pull' is strongest in large firms covering the entire scope of legal practice, as they are to gain most from externalizing knowledge from its diverse attorney base and internal practice groups.

Thus the Internet provides the key technology to implement firm-wide knowledge networks which in turn profoundly change the way legal practice is done.

II. Networks Between Clients and Firms

Knowledge networks are not limited to changing information transfer and communication within law firms. More and more large clients will demand being

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[18] For an account of the issues, visit <http://www.subtech2000.ksg.harvard.edu>.

tightly integrated into the firm's knowledge network – at least as it pertains to their legal interests. Law firms are under increasing pressure to establish virtual subsets of their knowledge networks for specific clients and to link these with their clients to form numerous intertwined networks.

These 'extranets' create virtual networks to share information and knowledge between legal counsels and departments of large clients and lawyers in law firms working with them. The advantages of such networks across traditional company boundaries are quite obvious: information bottlenecks decrease and keeping everyone involved in a large and complex transaction up-to-date becomes much easier.

But shared knowledge networks also pose vexing questions about ownership of the knowledge jointly created and shared. Will the client be able to take the knowledge along when changing law firms? Will the law firm be able to use some of the jointly created knowledge for other clients and deals, even if there is no leak of confidential information? Clearly and as all players involved will come to understand the value of knowledge, they will strife to control and make use of it.

III. Networks Between Firms

The last years have seen the dawning of the 'mega-deal': very large mergers and acquisitions, huge IPOs. To clear the many regulatory hurdles of such transactions requires involving not just one law firm, but a number of them, in addition to a whole bouquet of other experts and consultants. To move ahead they have to all work together properly and usually under substantial time-pressure.

Creating networks and sharing knowledge within firms proves to be difficult, sharing it with clients creates even more open questions. But sharing the most valuable asset law firms have – their expertise – openly with other consultants and possibly even with competing law firms, sounds absurd.

Yet, strong incentives exist for all involved in a large transaction to pool their information, knowledge and expertise. Metcalfe's Law does apply to these situations as well, and linking up and sharing with everyone may unleash the power of network externalities.

Once more than one law or consulting firm are involved, ownership issues become even more intricate. It is not just a matter of finding a balance between claims from the client and from the consultant anymore, but one of balancing competing claims among numerous consultants.

The Internet provides a robust and efficient infrastructure to share knowledge in a network topology, but it does not provide an easy way to enforce claims of ownership. The gains from knowledge networks are indisputable. But not only the legal, the technical framework to administer individual ownership claims has not been developed. Until such a framework evolves, the path to knowledge networks will be difficult and slow, affecting legal practice only in limited ways.

As soon as these hurdles have been overcome, however, legal practice, especially in large firms and with a cross-jurisdictional component, will experience a very

significant change. Knowledge, the long-time wealth of legal practice, will become much more ephemeral. For large transactions, general legal expertise and concrete factual information will be welded together temporarily by a knowledge network, in which all the parties involved – the clients, the law firms and other consultants – will equally participate. Once the project is over, the partners will take their 'shares' of the net and incorporate what can be abstracted back into their firms' own networks. Undoubtedly, this may entail losing some knowledge as well as having knowledge being used and appropriated by more than one party.

In the very long run, law firms may thus have to give up complete control over what they have only recently discovered as the glue that makes them thrive: the knowledge their lawyers share. Instead, law firms in times of true cyberspace may have to conclude that all they have that differentiates them from others is not the knowledge itself, but a sort of meta-knowledge: knowledge on how to network and process knowledge. This meta-knowledge may in turn become the law firms' best-guarded secrets, their new 'Holy Grail'.

In conclusion, we find that cyberspace challenges legal practice both as a legal phenomenon and a tool of practice. Law will not become useless in cyberspace, but the challenges to its supremacy are real. At the same token, networks are fantastic tools to share knowledge. They permit law firms to evolve beyond what they still largely are today: temporary organizational holding structures for legal practitioners.

But networking does not stop with the firm. Incentives exist to reach out and incorporate client(s) and even other law firms. Thus the expanding knowledge networks may even endanger the very entity they were designed to strengthen: the firm, which may have to look at meta-rules for further differentiation. And legal practitioners retaining in their heads their very own knowledge remain the most potent vehicles for information and knowledge transfer.

So one might be tempted to conclude that much stays the same – but as is often the case in cyberspace, at the same time almost everything will change.[19]

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[19] Marc Lauritsen has eloquently argued that lawyers are suited to turn into surveyors and even agents of change; see Marc Lauritsen, 'Ein Jurist für die Zukunft – Rechtsanwendung auf dem Weg nach vorn' in Mayer-Schönberger and Schneider-Manns-Au (eds), *Der Jurist am Info-Highway – Über die Zukunft eines Berufsstandes* (1997), pp. 205–213.