DIRITTO DELLE NUOVE TECNOLOGIE

Collana diretta da

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High Tech Law: The Digital Legal Frame in Italy

An Overview of Contracts, Digital Content Protection and ISP Liabilities Emerging Issues



LEGAL SOURCES

I) LAWS

a) Italian

R.D. 16 March 1942, n. 262 (Civil Code); D.Lgs. 9 April 2003, n. 70 (eCommerce Law); D.Lgs. 7 March 2005, n. 82 (Digital Amministration Code); D.Lgs. 6 September 2005, n. 206 (Consumer Code); D.Lgs. 10 February 2005, n. 30 (Industrial Property Code); L. 22 April 1941, n. 633 (Intellectual Property Law); D.Lgs. 30 June 2003, n. 196 (Data Protection Code); D.Lgs. 1 August 2003, n. 259 (Electronic Comunication Code); D.Lgs. 31 July 2005, n. 177 (Audiovisual Code).

b) *EU*

EC Directive 1995/46; EC Directive 2000/31; EC Directive 2001/29; EC Directive 2002/19; EC Directive 2002/20; EC Directive 2002/21; EC Directive 2002/22; EC Directive 2002/58; EC Directive 2004/48; EC Directive 2006/24; EC Directive 2007/65; EC Directive 2009/136; EC Directive 2009/140; EC Directive 2011/83.

II) STUDIES

a) National

Alpa G., Chiassoni P., Pericu A., Pulitini F., Rodotà S., Romani F. (a cura di), Analisi economica del diritto privato, Milano, 1998; Alpa G., Compendio del nuovo diritto privato, Torino, 2000; Alpa G., I contratti di utilizzazione del computer, Milano, 1984, 1 ss.; Alpa G., La c.d. giuridificazione delle logiche dell'economia di mercato, in Riv. trim. dir. proc. civ., 1999, I, 725 ss.;

ALPA G., Toward the completion of the Digital Single Market: the proposal of a Regulation on a Common European sale law, in European Business Law Review, 2015, 347 ss.; Bassan F., Diritto delle comunicazioni elettroniche, Milano, 2010; BASSAN F., Tosi E., Diritto degli audiovisivi, Milano, 2012; Bocchini E., Introduzione al diritto commerciale nella New Economy, Padova, 2001; Borruso R., Civiltà del computer, Ipsoa, Milano, 1978; Camussone, Biffi, Il commercio diventa elettronico, Milano, 1999; Carignani, Mandelli, Fare business in rete, Milano, 1999; CLARIZIA R., I contratti informatici, Torino, 2007; Cooter R., Mattei U., Monateri P.G., Pardolesi R., Ulen T., Il mercato delle regole, Il Mulino, Bologna, 1999; Cunibert M. (a cura di), Nuove tecnologie e libertà di comunicazione. Profili costituzionali e pubblicistici, Milano, 2008; De Carli M., Internet. Memoria e oblio, Torino, 1997, 16 ss.; De Luca V., Autonomia privata e mercato telematico nel sistema delle fonti, Milano, 2004; DE Nova G., I nuovi beni come categoria giuridica, in Dalle Res alle New Properties, Franco Angeli, Milano, 1991, 13 ss.; Delfini F. (a cura di), Diritto dell'informatica, Torino, 2014; Delfini F., I contratti stipulati per via telematica nei Principi acquis del diritto comunitario dei contratti, in DE Cristofaro (a cura di), I principi del diritto comunitario dei contratti. Acquis communautaire e diritto privato europeo, Torino, 2009, 161 ss.; FINOCCHIARO G., I contratti informatici, in Trattato di Diritto Commerciale e di Diritto Pubblico dell'Economia, diretto da Galgano F., Padova, 1997; FINOCCHIARO G., DELFINI F, (a cura di), Diritto dell'informatica, Torino 2014; FORMENTI C., Mercanti di futuro. Utopia e crisi della Net Economy, Einaudi, Torino, 2002; Franceschelli V., Computer e diritto, Rimini, 1989 23 ss.; Franceschelli V., Premesse generali per uno studio del commercio elettronico, in Commercio elettronico, Milano, 2001; Franceschelli V., Il contratto virtuale. Diritto nel Cyberspazio: Franceschelli R., Il mercato in senso giuridico, in Giur. comm. 1979, I, 501; Franceschelli V., Convergenza. La convergenza nelle telecomunicazioni e il diritto d'autore nelle società dell'informazione, Milano, 2009; Frosini V., Riflessi sociali dell'informatizzazione, in Scritti Giannini, I, Milano, 1987, 353 ss.; Galgano F., Diritto ed economia alle soglie del nuovo millennio, in Contratto e impresa, 1, 2000, 195; GALGANO F., III, L'azienda e il mercato, Padova, 1988; Gambino A.M., Stazi A., Diritto dell'informatica e della comunicazione, Torino, 2012; GAMBINO A.M., L'accordo telematico, Milano, 1997, 70 ss.; Giannantonio E., Manuale di diritto dell'informatica, Padova, 2001; Hardt M., Negri A., Impero. Il nuovo ordine della globalizzazione, Mondadori, Milano, 2002; Irti N., L'ordine giuridico del mercato, Roma-Bari, 1998; Irti N., Norma e luoghi. Problemi di geodiritto, Bari, 2001; Maldonado M., Reale e virtuale, Feltrinelli, Torino, 1992; Menesini V., Internet e concorrenza, in PALAZZO A.-RUFFOLO U. (a cura di), La tutela del navigatore in Internet; Perlingeri P., L'informazione come bene giuridico, in Rass. dir. civ., II, 1990, 327; Perretti P., L'economia di Internet, Etas, Milano, 2000; Quadrio Curzio A., Globalizzazione: profili economici, in Atti della Accademia Nazionale dei Lincei, anno CCCXCVI-1999, Roma; Rossello C., Finocchiaro G., Tosi E.,

Commercio elettronico, Torino, 2007; Sammarco P., I nuovi contratti dell'informatica, Padova, 2006; Sartori G., Homo videns, Laterza, Bari, 1999; Sica S., Zeno Zencovich (a cura di), Manuale di diritto dell'informazione e della comunicazione, Padova, 2009; Tosi E., I contratti di informatica. Tipi, formazione, responsabilità, Milano, 1993; Tosi E., Il contratto virtuale. Procedimenti formativi e forme negoziali tra tipicità e atipicità, Collana di studi di Diritto dell'economia dell'Istituto di Diritto privato dell'Economia dell'Università degli Studi di Milano Bicocca, Milano, 2005; Tosi E., Diritto privato dell'informatica e di Internet, I beni - I contratti, Le Responsabilità, Collana "Diritto delle Nuove Tecnologie", diretta da Vincenzo Franceschelli ed Emilio Tosi, Milano, 2006; Tosi E., Contratti informatici, telematici e virtuali, Collana "Diritto delle Nuove Tecnologie", diretta da Vincenzo Franceschelli ed Emilio Tosi, Milano 2010; Tosi E. (editor), I problemi giuridici di Internet, Collana "Diritto dell'informatica", diretta da Guido Alpa, Milano, 3ª ed. 2003; Tosi E. (editor), Commercio elettronico e servizi della società dell'informazione. Le regole giuridiche del mercato interno e comunitario: commento al D.Lgs. 9 aprile 2003, n. 70, Collana "Diritto delle Nuove Tecnologie", diretta da Vincenzo Franceschelli ed Emilio Tosi, Milano, 2003); Tosi E. (Editor), Tutela dei consumatori in Internet e nel commercio elettronico, due tomi, Collana "Diritto delle Nuove tecnologie", diretta da Vincenzo Franceschelli ed Emilio Tosi, 2012; Tosi E., La tutela della proprietà industriale, in Tosi E. (a cura di), I problemi giuridici di Internet, Milano, 2003; Tosi E. (a cura di), Commercio elettronico e servizi della società dell'informazione, Milano, 2003; Tosi E., Nomi di dominio e tutela dei segni distintivi in internet tra "domain grabbing", "linking" e "Meta-tag", in Riv. dir. ind., 2, 2000; Tosi E., Nomi di dominio Internet e segni distintivi tipici, in Trattato di diritto industriale, diretto da Franceschelli V., Torino, 2003, 1185 ss.; Tosi E., La responsabilità civile per fatto illecito degli Internet Service Provider e dei motori di ricerca a margine dei recenti casi "Google Suggest" per errata programmazione del software di ricerca e "Yahoo! Italia" per "link" illecito in violazione dei diritti di proprietà intellettuale, in Riv. Dir. Ind., 2012, 44 ss.; Tosi E., La tutela della proprietà intellettuale nelle comunicazioni elettroniche: pirateria digitale degli audiovisivi e responsabilità degli Internet Service Provider, in BASSAN F.-Tosi E., Diritto degli audiovisivi, Milano, 2012, 69 ss.; Tosi E., La tutela degli audiovisivi e dei contenuti digitali nelle reti di comunicazione elettronica tra diritto d'autore online responsabilità civile degli Internet Service Provider, in Finocchiaro G.-Delfini F., Diritto dell'informatica, Torino, 2014; Valdani E.-Ordanini A.-Verona G., L'impresa e-based, Egea, Milano, 2002; Zeno Zencovich V., in Dir. informazione e informatica, 1996, 604 ss.; Zeno Zencovich V., Sull'informazione come "bene" (e sul metodo del dibattito giuridico), in Riv. crit. dir. priv., 1998, 485 ss.

b) International

Benkler Y., From Consumer to Users: Shifting the Deeper Structures of Regulation, in Federal Communication Law Journal, 52, 2000, 561 ss., spec. 562-563: Berners T., Lee, Information Management: A Proposal, CERN, March 1989, May 1990; Berners T., Lee, Weaving The Web: the Past, Present and Future of the World Wide web by its Inventor, 1999, Orion Business; BOYLE J., Shamans, Software and Spleens: Law and the Construction of the Information Society, Harvard University Press, Cambridge Massachussets, 1996; CAIRNCROSS R., The Death of Distance: How the Communications Revolution Will Change Our Lives, Harvard Business School Press, Boston, 1997; Dodge M.-Kitchin R., Mapping Cyberspace, Routledge, London, 2001; Gib-SON, Neuromante, 1984; HIMANEN P., The Hacker Ethic and The Spirit of the Information Age, Random House, 2001, trad. it., L'etica hacker e lo spirito dell'età dell'informazione, Feltrinelli, Torino, 2001; Katsh E., Software Worlds and the First Amendment: Visual Doorkeepers in Cyberspace, in University of Chicago Legal Forum, 1996; Kehoe, Lo zen e l'arte di Internet, Milano, 1996; LESSIG L., The Future of Ideas, Random House, New York, 2001, 241 ss.; LESSIG L., Code and Other Laws of Cyberspace, Basic Books, New York, 1999; LESSIG L., The Law of the Horse: What Cyberlaw Might Tech, in Harvad Law Review, 1999, 501 ss.; MITCHELL W.J., Cuty of Bits: Space, Place and the Infobahn, MIT Press, Cambridge Massachussets, 1995, 111 ss.; Negroponte N., Being Digital, 1995, trad. it. Essere Digitali, Sperling & Kupfer, Milano, 1995; NORA MINC, L'informatisation de la societè, in Convivere con il calcolatore, Milano, 1979; Reidenberg J., Lex Informatica: The Formulation of Information Policy Rules Through Technology, in Texas Law Review, 1998; SAMU-ELSON P. et al., A Manifesto Concerning the Legal Protection of Computer Programs, in Columbia Law Review, 1994; Shapiro A., The Control Revolution, Public Affaire, New York, 1999.

Summary: 1. An introduction to Italian High Tech Legal studies: from Computer Law to Internet Law and far beyond. — 2. Key issues of the Italian Digital Legal Frame. — 3. Italian High Tech Law from unity of Civil Code to special sector regulation. — 4. Virtual space markets regulation: From the commercialization of the Internet to the EU Digital Single Market (DSM). — 5. Electronic Commerce and Digital Enterprise in Italy: an overview of legal emerging issues.

 An introduction to Italian High Tech Legal studies: from Computer Law to Internet Law and far beyond

The Italian legal debate on the interaction between information

technology and law — IT Law — was triggered by the study *Computers and social control* (Bologna, 1973) by Stefano Rodotà.

Subsequently, the growing attention paid by the Italian civil law doctrine to information law has been demonstrated, since the early eighties, by three particularly significant events.

In 1984 Giuffrè published the inaugural volume of the series Information Law, founded and directed by Guido Alpa, entitled *Contracts for the use of the computer*, with an introductory essay on the theme of *Computer law*.

In 1985 the inaugural issue was published of the journal Information and IT Law sponsored by the Center for Legal Initiatives of Piero Calamandrei in Rome and directed by Guido Alpa, Mario Bessone, Luca Boneschi, Corrado De Martini, Pietro Rescigno and Giovanni Tarello (the latter, replaced, since 1991, by Vincenzo Zeno Zencovich).

In 1989 Vincenzo Franceschelli published the study *Computers and Law* (Rimini, 1989), which addresses the complex subject of computing with an innovative interdisciplinary and comparative approach.

This first cycle of introductory studies of information law was followed by additional cycles of more specialist works; the stage of further consideration of the new types of contracts was inaugurated in 1993 by the volume of the present Author entitled *Computer contracts* (Milan, 1993).

The first phase of the study of the legal problems posed by the new computer technologies — briefly outlined above — is to be placed, then, tentatively, in the period 1984-1994.

Private law aspects — considered by the branch of "Computer Law" or "information law", which can be defined more precisely as "Private IT Law" — range from the study of computer contracts, to civil liability, up to protection of the confidentiality of the person and the protection of new IT goods.

However, the unstoppable technological evolution is bringing a further mutation of the issues and problems that the lawyer has to face: a change that is not failing to make the international headlines.

Whereas in 1983 the computer, the "computer", and not a man, a sign of the scale, far-reaching indeed, of the computer phenomenon was designated by Time Magazine as "Person of the Year", later — in 1994 — at a distance of slightly more than a decade, the Internet was to occupy the cover of Time.

From the second half of the nineties, the Italian doctrine on civil and commercial law, has begun to deal with the new themes: one of the first contributions is the article by Vincenzo Franceschelli, *The virtual contract. Law in Cyberspace* (in *Contracts*, 1995, 569) followed by the fundamental monography of Alberto Maria Gambino, *L'accordo telematico*, Milan, 1997 — deep analysis of contract formation rules through website access end e-mail — and later by the collection of studies — edited by Vincenzo Franceschelli — *Electronic commerce* (Milan, 2001).

Now as then, the Italian doctrine — stimulated by the most advanced US legal experience — is opening up a new phase of studies devoted to aspects of private enterprise "Cyberlaw" or "virtual law".

The legal problems considered by what we could define more precisely as the private law of the Internet "are — we repeat — partly new and partly inherited, although with the peculiarities of the new medium of communication, from information law.

It was necessary to wait until 1999 for a first, interdisciplinary reconnaissance of the topic of Internet law contained in the collection of studies — curated by the present author — *The legal problems of the Internet* (Milan, 1999 Collana "Information Law" edited by G. ALPA).

Regarding negotiations, the legal regime applicable to contracts concluded by using the virtual space of the Internet was studied with particular reference to the asymmetry of negotiation, its validity and effectiveness: the peculiar technological structure of the Internet and the virtual space causes, in fact, significant interactions from the procedural, formal and probative perspective with the contract thus formed.

We should also regarding symptomatic the problem of the unequivocal manifestation of the will to conclude a contract with access to the website and the unambiguous identification of the contractual party, as well as that of the significance of the place and the time of conclusion of the contract within a system which is essentially free — as already noted above several times — in time and space: these are the issues addressed in the collection of studies edited by Salvatore Sica and Pasquale Stanzione, *E-commerce and civil legal categories* (Milan, 2002).

The further areas of investigation are the protection of intellectual and industrial property on the Internet, with particular reference to the protection of domain names, software, musical works, works of mul-

timedia databases on the Internet and the phenomenon of "browsing" intrinsically connected to Internet usage.

There has been a resurgence, with renewed focus, of the crucial issue of the protection of personal data collected using ICT tools (Vincenzo Franceschelli, *Protecting information privacy*, Milan, 1998). The operational flexibility of the Internet — which can be used by the consumer to purchase goods or services, and just as easily be used by unreliable operators as a powerful instrument of control of the private sphere of the consumer — accentuates the risk of unlawful behaviour, which is particularly insidious because it is often undetectable by the victim of the violation.

Concerning the liability related to the illicit use of the Internet, there have been studies, in particular, of the civil liability for unlawful processing of personal data, the civil liability of providers of information society services — Internet Service Providers (ISP) — and the new disinformation practices of domain grabbing, framing, linking and abusive use of meta tags, new illegal activities achievable only through Internet.

Evidence of the renewed attention to the issue by the private law doctrine on the relationship between new technology and law can be seen in the inauguration of the new series of studies "High Tech Law" — edited by Vincenzo Franceschelli and by the present Author — which joins the now historic series of studies "Information Technology Law" founded and edited by Guido Alpa, with the volume — edited by the present author — E-commerce and information society services, Milan, 2003; followed by the monograph Virtual Contract. Formation procedures and forms between typical and atypical (Series of studies in "Economic law" of the Department of Law for the economy in the University of Milan-Bicocca, Milan, 2005), the subsequent study Informatics, Telematics and Virtual contracts, Milan, 2010 and by the latest selection of studies Consumer protection in Internet and e-commerce, Milano, 2012.

Without aspiring to be exhaustive, we wanted to give an account, in a nutshell, and with some simplification, of the essential doctrinal path that has led over the decades first 1984-1994 and then 1995-2005 to the formation and consolidation, respectively, of private IT law and the private law of the Internet.

In parallel, there has developed, over the years, up to the present, thanks to the strong momentum of the European legislation, the *corpus juris informaticae et telematicae* — albeit still in formation and frag-

mented — which will be described briefly in the following section with reference — ex multis — to the main sources of private law interest.

This development is also evidenced by the work of organic selection, again by the present author, in the first regulatory collection on the sector of IT and the Internet: *The code of computers and the Internet* (published for the first time in 2000, now in its eight edition, Piacenza, 2011).

So too — in terms of teaching — there have sprung up in recent years in Italian universities courses on Information Technology Law: an independent regime attested by the Ministry of Universities and Scientific Research in 2000 with the inclusion of information law in the Scientific Subject Group of Private Law (IUS/01).

The time is therefore ripe to recognise the scientific — and not just educational — autonomy of IT Law and the Private Law of the Internet, which is the natural evolution of the former and which is closely connected with it.

The above reasons — in particular, the fragmented legislation and the need to order methodically the complex subject — have led us to consider appropriate a unified treatment — from a private law perspective — of Computer Law and the Internet of which an account has been given in the monograph edited by the present author *Private Law and Internet. Goods — Contracts — Responsibilities*, Milan, 2006.

2. Key issues of the Italian Digital Legal Frame

It seems correct to observe that the start of the process of formation of a true Italian digital legal frame was offered by the 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) in respect of electronic commerce: from that moment Italy has also begun to regulate the emerging phenomenon of the new technologies of electronic communications networks and dematerialization contracts and assets with subsequent sectoral interventions.

The following major sources regulating the Italian Legal Digital Frame may be mentioned:

— Consumer Code (Legislative Decree 206/2005), in relation to contracts with the consumer;

— Electronic Commerce Law (Legislative Decree 70/2003), on telematic contracts and civil liability of providers of information society services;

- Digital Administration Code (Legislative Decree 82/2005 as amended by Legislative Decree 159/2006), in the field of electronic signatures and digital signatures;
- Industrial Property Code (Legislative Decree 30/2005), concerning distinctive domain names;
- Intellectual Property Law (L. 633/1941) concerning protection of eights of Author of intellectual works;
- Data Protection Code (Legislative Decree 1196/2003), concerning the protection of personal data, control of telematics data for purposes of crime prevention and data retention;
- Electronic Communication Code (Legislative Decree 259/2003) in the field of regulation of electronic communication;
- Audiovisual Code (Legislative Decree 177/2005) in the field of television and radio broadcasting also through electronic communication networks.

The issue of legal regulation of the Internet can, of course, given the complexity, be only briefly sketched in its main features.

Suffice it here to remember that it is now considered that we have got past the most outmoded doctrinal assumption of substantial anarchy of the Internet in favour of a more complex position in which — recognising the need for legal regulation of the virtual space as an artificial order — it is rather a matter of identifying the source of regulation between the extremes of total self-regulation under private and technical law and total external regulation by the state, both national and supranational.

The delocalisation of the Internet and the virtual space without borders definitely causes a crisis for the territoriality of law.

The virtual space of the Internet, as a delocalized, ubiquitous, overall non-place of pure simultaneity, highlights the emergence of a problem of regulation which is exclusively for the Internet, but for every phenomenon of a global nature of which the network is certainly an emblematic reference.

Just as we respond to the problem of identifying a source of regulation of the Internet phenomenon we end up responding to the problem of which law is applicable to the phenomena of social and economic globalisation.

Virtual space as artificial order is subject to constitutional provisions, laws and regulations, both EU and international. But not only them: the sources of law are varied and include virtual international agreements, contracts, the new lex mercatoria, computing law and soft law of self-disciplinary rules and codes of conduct.

Given a definition of virtual space (9), it is necessary, at this point, to provide a definition of the law of virtual space.

It is observed in the literature (1) that virtual law or Internet law, whatever you want — as well as information technology law, of which the law of the Internet is nothing more than the evolution for telematics — has the following characteristics: synchronous formation, international reach and interdisciplinary nature.

By *synchronous formation* we mean to refer to the genesis of the corpus juris of information technology, telematics and virtual space, which has developed in parallel in several states following common principles regardless of the legal systems applicable.

Just think — without limitation — of some significant regulatory actions at European level:

- in addition to the above Directive 2000/31/EC of 8 June 2000 on Certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce),
- legislation, of American inspiration, for protection of software by copyright (Directive 91/250/EEC wich has been replaced and repealed by Directive 2009/24/EC);
- legislation on the protection of databases (Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases); or
- the recent European framework for electronic signatures (Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a European framework for electronic signatures);
- Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 Concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications) under review at

⁽¹⁾ Franceschelli V., *The virtual contract: law in cyberspace*, Parma Conference of 17 April 1998 on "Electronic contract and digital signature".

the European level together with the mother 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.

In this respect, the phenomenon of the codification of the rules of the information society is rivalled only by the codification of the great nineteenth international conventions on intellectual and industrial property (2).

International scope is meant to refer to the fact originally characteristic of computer law, before and after virtual law, that the legal systems of the various states must make choices which coordinate with each other to avoid the risk of asymmetric regulation harmful to the development of the virtual market.

It should also be noted that the phenomenon of *commercialization phase* of the Internet is not without effect on the applicable law. The law of the Internet has, in fact, immediately, from its origins to today, caused a profound "genetic" change.

It has, in fact, pointedly been noted that the first historical phase of network usage for non-commercial exchange of goods and services between private individuals — on both side of contract — corresponds, from a legal perspective, to the application of the civil law of the network, since do not apply specific legal rules regarding contracts betwen individual subject and subject with status of entrepreneurs (Commercial Rules and Confemer Rules).

The actors of the virtual space — since the early eighties — are, in fact, essentially private individuals.

It is the so-called *ludic phase* of use of the network: the analysis of user behaviour — including predominantly the younger generation — has led to the perception and use of the Internet as a vehicle for entertainment rather than as an economic vector subject to a legal frame.

The technological evolution of the Internet from a mere medium of

⁽²⁾ See in this respect the consolidated text of the regulation project of European Parliament and the Council regarding a Common European Sales Law (CESL). The proposal was issued on 2011 COM (2011) 635 def. While the text with amendments was issued on 26 February 2014 (P7-TA-PROV(2014)0159). On this theme see Alpa G., Towards the Completion of the Digital Single Market: The Proposal of a Regulation on a Common European Sales Law, in European Business Law Review, 2014, 347 ss.

communication in the international virtual market (the so-called *electronic marketplace*) is to be placed in the period following the end of the eighties: the so-called second phase of the Internet.

This transformation has been followed the stable entrance in the digital scenario of a new actor, the entrepreneur, who becomes the star of the virtual space and achieves a genuine ontological transformation of the Internet.

In this new phase of contractual relationships between entrepreneurs and consumers (B2C) and entrepreneurs (B2B) it is correct to apply the legal rules that we can define as the commercial law of the network.

We can, therefore, consider, in the light of the above findings, as a further characteristic of the virtual law, its *interdisciplinary nature*.

The law of the Internet or virtual law raises, in fact, both problems of civil and commercial law, as well as constitutional, criminal, procedural, administrative and tax issues.

In the private law of the Internet, in particular, we study the aspects of contracts, such as the regulation of business and contracts with consumers, the protection of competition and the market, misleading advertising, the crisis of the enterprise, the protection of intellectual and industrial property and civic responsibilities.

3. Italian High Tech Law: from unity of Civil Code to special sector regulation

The development of special rules for the virtual space — think of the regime of electronic signatures and digital signatures as well as the regulation of the liability of Internet Providers — does not necessarily lead to the resignation of the jurist from the duty to rebuild — in the light of general principles of civil law — a systematic overview, removed from mere regulatory arbitrariness.

The centrality of the system of Civil Code must be confirmed without underestimating the effort needed to reinterpret the traditional categories and regulate completely — in the spirit of reasonableness, adequacy, appropriateness and proportionality — the new substrate technology of the virtual space.

The opportunity — in some cases the need — to introduce special sector rules arises both from a perspective of internal law — given that the technological evolution for certain aspects, of high technology,

requires regulatory intervention *ad hoc* — and from the perspective of European and international law — given that the actors in the global virtual market increasingly need to have strong transnational and clearly harmonised rules to limit the risks of law *à la carte*.

I refer in particular to the sector interventions in the regime of electronic and digital signatures, consumer protection, the protection of personal data, the liability of Internet service providers, the security of the means of payment, the new properties, the protection of intellectual and industrial property, applicable law and jurisdiction.

It is observed that the regime of the virtual space derives from the collaboration of several sources of regulation: legal rules, social rules, market rules and technical rules.

As regards, in particular, the legal rules, the problem that arises is to sort out the plurality of sources of regulation: state, European and international standards and the parastate standards of independent authorities, the new commercial law, the UNIDROIT principles and codes of conduct.

The theme of the plurality of sources governing the virtual space is very complex, and in this study dedicated to formation processes and forms of electronic commerce, can be only briefly outlined.

Suffice it to say that the breakup of the unity of the system of sources for the production of law generates a plurality of technical-rational forms which like the positive law assert their autonomy and exclusivity in the governance of the global economy.

The local — global dualism is matched by a *rupture of national law* — the Civil Code — between civil law and commercial law which are required respectively to regulate local and global relations.

The breakdown of the unity of the Civil Code finds a composition in the theory of micro-systems that makes it possible — if we cannot reduce the system to unity — to seek unity in plurality: no longer reductio ad unum but unitas multiplex (3).

⁽³⁾ N. Irti, Regulations and places, cit., 64 notes that "Fragmentation and globality are not incompatible: it is only one world, but, to quote Emanuele Severino, a world of separate and isolated parts. Economic actions can happen anywhere and be distributed in one place or another; but this mobility and flexibility is not a whole, does not reveal a meaning as a whole. Each action is only itself". According to V. De Luca, Autonomy and private electronic market in the system of sources, cit., 72 the Irtian methodological still has an unexpected incisiveness: "Just as the technicality and neutrality of special laws in the past disintegrated the unity of the Civil Code, so today the global phenomena are shattering the "unity of the world". Just as then microsys-