

ELECTRONIC CONTRACT AS LEGAL CYBER COMMUNICATION

Ricardo Menna Barreto

ABSTRACT

THIS ESSAY SEEKS TO OBSERVE THE E-COMMERCE, CYBERSPACE AND THE CONTRACT ELECTRONICS FROM THE THEORY OF SOCIAL SYSTEMS OF NIKLAS LUHMANN. SOCIAL SYSTEMS ARE COMPOSED OF COMMUNICATIONS, WHICH ARE CHARACTERISTIC FEATURES OF SUCH SYSTEMS. HOWEVER, BASED ON THE CONCEPT OF CIBERSYSTEM, YOU CAN TALK ABOUT "CIBERCOMMUNICATION" (STOCKINGER). THUS, THE ELECTRONIC CONTRACT WILL BE OBSERVED AS LEGAL CIBERCOMMUNICATION. THE CONTRACT IS A FORM OF PRIVILEGED COMMUNICATION, ALLOWING THE STRUCTURAL COUPLING BETWEEN SOCIAL SYSTEMS AND CIBERSYSTEMS. THIS DYNAMIC VIRTUAL, THE SOCIAL SYSTEM, THE LEGAL SYSTEM AND CYBERSPACE ARE BUILDING A RELATIONSHIP OF MUTUAL INTERDEPENDENCE. OBSERVE THE CONTRACT SYSTEM MAY GIVE DIFFERENT POSSIBILITIES FOR MAKING DECISIONS IN THE FIELD OF CONTRACTUAL DOGMATIC.

KEYWORDS

CONTRACTS; E-COMMERCE; THEORY OF SYSTEMS; COMMUNICATION; LAW

INTRODUCTION

The scope of this article is to systematically study the electronic contract. Facilitated by the cyberspace, electronic contracting emerges as one of the most striking features of the e-commerce, portraying accurately the contemporary status of Law, a communicative reality increasingly intertwined with the virtual.

We understand that this hybrid contractual modality is yet bereft of a distinguished study by legal experts. Hence, from the perspective of this paper, we will address the electronic contract from a (new) category, referred to as "legal cyber communication."

It should be noted that the communication is a characteristic element of social systems (LUHMANN, 1998). Moreover, considering the notion of cyber systems, we may refer to communication in the cyberspace, i.e., to "cyber communication" (STOCKINGER, 2001). The electronic contract is, under this perspective, a distinguished form of communication, as it makes

it possible for virtual systems to couple to the process of reproduction of the elements composing the social system, especially the legal system.

Our analysis will firstly approach the aspects related to the Internet, the cyberspace and the communication (1). The Internet furthered the virtualization of our world, broadening the communicative capacity of the society, creating a virtual correlate which is translated into the notion of cyberspace. This cyberspace is characterized by the universe of digital networks, and may be considered as a new economic and cultural frontier, also embodying a wide open field, partially undetermined (LÉVY, 2007, p. 104), which must be incorporated by the Brazilian legal doctrine under a distinct perspective. The communication, in its turn, is seen behind the lenses of Niklas Luhmann's Systems Theory, as an element characteristic of social systems. Nonetheless, upon the insights of Gottfried Stockinger, this notion of communication undergoes significant changes. Such changes will lead us to the construct Stockinger baptized cyber communication.

Consequently, we will make some remarks on e-commerce (2). The e-commerce obeys a dynamics chiefly characterized by the communication beyond physical frontiers. Currently, buying goods via the Internet is possible in barely every country in the world. Therefore, we opted for a brief (albeit necessary) analysis of the legal aspects of this type of commerce. We will also underscore some legal efforts in Colombia; in addition to some related aspects in the Directive 2000/31/EC (European Union) and, lastly, the Model Law of UNCITRAL. The latter stands out as the broader normative effort currently, which also offers more flexibility relating to aspects of the e-commerce.

Lastly, we will address the electronic contract as a legal cyber communication (3). After an analysis of aspects of social communication in the first part of this essay, we will then demonstrate how the electronic contract may be explained with the notion of cyber communication. Under this perspective, the electronic contract is seen as a structural coupling, facilitating the interaction between social systems and cyber systems. It is, therefore, a hybrid entity.

The electronic contract is the outcome of a reality increasingly intertwined with the virtual. Reflecting on it, in light of the insights of Luhmann and Stockinger, we may point to different possibilities in the production of alternatives for decision-making in the field of contractual doctrine.

1 INTERNET, CYBERSPACE AND COMMUNICATION

After the advent of the Internet and the cyberspace, the computer lent the social relationships arrangements of notable complexity. In this vein, we understand that the Law did not manage to keep up with the social evolution in the field of information technologies, particularly with regard to the new means of communication, such as the Internet.

In this study, we assume that the Internet, as defined by Dimaggio, is "the electronic network of network that links people and information through computers and other digital devices allowing person-to-person communication and information retrieval" (DIMAGGIO, 2001, p. 307).¹ It should be noted that the 90s was decisive for the popularization of the use of the Internet, as the mass usage of it has begun exactly over those years.

According to Dizard, the network was doubling in size in each year of that decade: In 1995 alone, for instance, the Web offered more than “three million multimedia information and entertainment websites, most of them for free” (DIZARD, 1998, p. 24).

Nowadays, we may aver that the Internet “virtualized” the world, duplicating it, i.e., creating an immaterial and virtual correlate for everything “physically” existing in the society. On account of that, the communicative capacity of the society has enlarged, relying on an exclusive space for communication, which was named cyberspace.

According to Lévy, cyberspace is “the space of communication opened up by a worldwide interconnection of computers and informational memories” (LÉVY, 1999, p. 92). The main consequence of this virtual space is the irrestrainable flow of communication yielded by the growing input of information on the Internet, on a daily basis. On that account, the virtual has permeated all the fields of life in society; as advocated by Quéau, “cela s’accompagne d’une modification radicale de notre regard sur le monde, de notre manière d’envisager les problèmes et de les résoudre” (QUÉAU, 1999, p. 371).²

The cyberspace may be considered as a medium which not only enhances the communication, but also as a way to increase (while paradoxically reduce) the social complexity. In this virtual space, complexity is always intensifying, owing to the fact that “anyone can set up a web page, anyone can use (for minimal cost) electronic mail, and anyone can access information that may or may not be appropriated to all users” (GROSSBERG, WARTELLA and WHITNEY, 1998, p. 381).³ A new world is concocted, organized in a structure which may be matched to a true worldwide neurological system, “una gigantesca rede de emissores y receptores, que interactúan mediante agentes ‘neurotransmisores’ electrónicos – que permite al ser humano comunicarse en tiempo y espacio real, a semejanza do cérebro humano” (STEFFAN, 1997, p. 162).

Within this scenario, we may assert, with no risk of overstating, that currently the cyberspace is the virtual correlate of everything which is founded in the physical world, as through it, the new space enters this communicative world: bank agencies, stores, organizations, meeting point/places etc. That is the reason why Lévy avers that “le cyberspace nous permet d’observer de manière de plus en plus directe à peu près tout ce que nous voulons voir, et cette tendance est évidemment appelée à s’accélérer dans l’avenir” (LÉVY, 2002, p. 40).⁴ Well, a great deal of the commerce is now established in virtual structures, expediting the circulation of the most dissimilar goods, in several aspects. The transactions handled through this space impact both the social realm and the cyberspace. And, immersed in these dynamics between the virtual and the material/physical, the society shapes its interdependent and communicative reality. From the systemic perspective, we may refer to a society composed of communications, where every communication is an operation inside the very society. Consequently, one question arises: may there be communication outside the society?

It is worth to underscore that, according to Luhmann, the communication is the core element of the society. According to this author, the communication is a synthesis of information, act of communication and comprehension (LUHMANN, 2001, p. 17). In this sense:

[...] si la sociedad está constituida por la totalidad de todas las comunicaciones, el resto del mundo está condenado a permanecer sin palabra. Se retira al silencio; aunque ni siquiera éste es un concepto adecuado porque sólo puede permanecer en silencio quien puede comunicar (LUHMANN, 2007, p. 119).

Therefore, the communication is a characteristic element of the social systems. These elements are shaped and interconnected communicatively — and only this way. Well, the society “is the system comprising all the communications, which reproduces in an autopoietic manner, insofar as it produces, within the network of recursive connection of communications, always new (and always other) communications” (LUHMANN, 1997, p. 83).

Nonetheless, upon the insights of Gottfried Stockinger, this idea of communication undergoes significant changes. In other words, there is a (new) differentiation which may (and need) to be made, namely, between social systems and cyber systems (STOCKINGER, 2001). In the logic of the differentiation system / environment employed by Luhmann, that means averring that both (social systems and cyber systems) are operationally closed, standing as the environment one of another. More precisely, Stockinger refers to a “cyber environment” every time a cyber system stands as an environment of a social system. The cyberspace, in the perspective of this author, may be conceptualized as a “media environment devised to receive certain virtual systems activated by software” (STOCKINGER, 2003, p. 127). Under this point of view, the communication remains, as for Luhmann, impersonal, which is to say that no subjects/individuals get into the play, as “the user is not the one to set the limits and the communication horizon. It is an electronic operating system, relating to which the users comprise only its environment” (STOCKINGER, 2001, p. 5).

This way, social systems are now establishing a relation of communicative interaction with cyber systems, creating a relation of dependency, given that this “mutual dependency also is reproduced in each system, becoming a part of it, by means of inter-penetration and structural coupling” (STOCKINGER, 2003, p. 127). The coupling of these distinct types of systems is exactly the scope of this article.

Grounded on the proposal of Stockinger to regard virtual systems as cyber systems, we may likewise refer to a communication in the cyberspace, i.e., to a “cyber communication.” This means averring that the social systems use communicative elements and relations operated by cyber systems in their autopoiesis, and these cyber systems then become integral parts of the social actions and communications. However, “the cyber communication multiplies and increases the deviations — the interpretations — in such a way that they depart from the original meaning and create areas of sense with their own meanings” (STOCKINGER, 2003, p. 131). This poses a hindrance to the legal system (seen as a social subsystem) relating to taking into consideration this virtual world, even when this is already coupled to the former one (and this leads to the “blindness of the law professionals” relating to these technological subjects).

We will consider in this essay that said coupling occurs by means of the electronic contract. This is what, in its turn, makes possible the structuring of the e-commerce. In view of this, before studying this type of contracting, we will swiftly address the aspects which belong with the e-commerce.

2 E-COMMERCE

The e-commerce may be considered a development in market opening, as it crossed the limits of time and space. Tellini advocates the e-commerce “could be seen as every activity comprising the electronic exchange of data. Seen from this point of view, the notion of e-commerce covers all the contracts entered into through electronic means” (TELLINI, 2006, p. 46). Finkelstein, in his turn, defines e-commerce as a modality of distance purchase, consisting in the procurement of goods and/or services through electronic equipment (FINDELSTEIN, 2004, p. 53).

The expressions B2B and B2C are terms broadly used by the foreign doctrine, which was incorporated to the Brazilian⁵ system, to characterize this type of commercial legal relationship. B2B means Business to Business, i.e., refers specifically to the contracts executed between companies. B2C (Business to Consumer), in its turn, refers to those contract executed between suppliers and consumers.

As seen above, the cyberspace furthered the creation of a virtual correlate for nearly all commercial activities performed in the physical world. As an illustration, stores which were only physical in the past, now have opened their virtual analogs. We understand that the experience in these two worlds raises drastically the social complexity and contingency, posing risks and creating the need for establishing trust relationships.⁶ The unrestrained increase in the possibilities of virtual purchases is one of the main players to be accountable for an increment in the risk of the e-commerce; and, additionally, according to Yao-Hua, the “Electronic Commerce environment is obviously an environment with risk, simply because commerce in general involves risk” (TAN e THOEN, 2000).

Notwithstanding this, “this medium offers an unprecedented opportunity to increase the number of voices in the marketplace” (GROSSBERG, WARTELLA e WHITNEY, 1998, p. 381).⁷ Well, after the advent of the Internet, purchasing became more convenient to consumers than in any other time in history. The most different types of goods may be found through the e-commerce nowadays. CD’s, DVD’s, Books and Magazines are among the most sold goods on Brazilian on-line commerce, just to name a few.⁸

One striking characteristic of this type of commerce is the propensity for the conveyance of information relating to the very virtual structuring. Said information is conveyed freely in the cyberspace with the purpose of optimizing the commercial activity, generating, for instance, consumers’ profiles. Rodotà states:

[...] elaborando le informazioni ottenute in occasione della fornitura dei servizi, possono creare informazione nuova (profili di consumo individuale

o familiare, análisis de preferencias) que interesa otros sujetos, a los que puede ser vendida (RODOTÁ, 1995, p. 47).⁹

In this same way, it is not a coincidence that we receive emails (spams)¹⁰ disclosing goods of our interest days after we searched/researched about them in the Internet. The navigation through certain websites leaves the most varied personal data registered (translating into consumers' profiles). Sibilía advocates the following:

[...] cada vez más, la identificación del consumidor pasa por su perfil: una serie de datos sobre su condición socioeconómica, sus hábitos y preferencias de consumo. Todas estas informaciones se acumulan mediante formularios de encuestas y se procesan digitalmente; luego se almacenan en bases de datos con acceso a través de redes, para ser consultadas, vendidas, compradas y utilizadas por las empresas en sus estrategias de marketing. De ese modo, el propio consumidor pasa a ser un producto en venta (SIBILIA, 2005, p. 34-35).

The virtualization, hence, is a phenomenon which impacted different aspects of the commercial activity. This may happen until the point where, according to Lévy, "in the future commerce, most of the goods will be designed and purchased before they are actually manufactured or assembled" (LÉVY, 2001, p. 57).

Still, it is worth to underscore that the dynamics of this type of commerce refers chiefly to communicating beyond the physical frontiers. Currently, buying goods via the Internet is possible in barely every country in the world. This led some countries to consider the virtual commerce in a distinct way.

For illustration purposes, we may unearth the Colombian example. Colombia, over the last years, has been gradually structuring its legal system to keep up with the developments of the digital era, creating a regulation (Law no. 527 of 1999) for the E-commerce (VILLAMIZAR, 2001, p. 55-114). This law¹¹ regulates the access and use of data messages, of the e-commerce and digital firms, among other aspects concerning the virtual world. As a matter of fact, in its article 2, this law defines the e-commerce as the type of commerce which:

Abarca las cuestiones suscitadas por toda relación de índole comercial, sea o no contractual, estructurada a partir de la utilización de uno o más mensajes de datos o de cualquier otro medio similar. Las relaciones de índole comercial comprenden, sin limitarse a ellas, las siguientes operaciones: toda operación comercial de suministro o intercambio de bienes o servicios; todo acuerdo de distribución; toda operación de representación o mandato comercial; todo tipo de operaciones financieras, bursátiles y de seguros; de construcción de obras; de consultoría; de ingeniería; de concesión de licencias; todo acuerdo de concesión o explotación de un servicio público; de empresa conjunta y otras.

Some defend (CARVAJAL) that this law follows rather closely the Model Law of UNCTRAL. Carvajal, addressing the critiques made to this law, concludes averring the following:

[...] es claro que la nueva ley de comercio electrónico no es tecnológicamente neutra porque adopta como esquema de seguridad la Infraestructura de Clave Pública (Public Key Infrastructure). Esta tecnología está basada en la existencia de entidades certificadoras, legalmente facultadas para generar firmas digitales, sobre la base de un par de claves, una de conocimiento público y otra secreta (CARVAJAL).

On the other hand, also concerning the legal initiatives with respect to the e-commerce, it is worth to mention the Directive no. 2000/31/EC¹² of the European Parliament and Council, dated June 8, 2000, regarding the legal aspects of the services of the information society, notably the e-commerce. The European Union, identifying the need to regulate the most varied aspects of the “Information Society”, enacted said Directive. It states as follows:

(2) the development of the e-commerce in the information society allows the development of significant opportunities of employment in the Community, particularly in small and average-sized enterprises, and will spur the economic growth and the investment in innovation by European enterprises, and may likewise strengthen the competitiveness of the European industry, provided that the internet is available to everyone.

The main purpose of this directive is to contribute to the proper operation of the domestic market, making sure free circulation of services of the information society among Member States, as asserted in its Article 1 (1). In its Article 2, the directive outlines a series of important concepts, such as: services of the information society, service providers, consumer, commercial communication etc., in such a way to enlighten on any hermeneutical issues which may arise.

Another point worth of note relating to the Directive 2000/31/EC is the one which establishes the contracts executed via electronic means (Section 3), an important issue to our study. In its Article 9 (1), the directive states that the Member States shall make sure their legal systems allow the execution of contracts via electronic means. This poses the need for the legal system applicable to the contractual process “not to pose obstacles to the use of contracts executed through electronic means, resulting in the privation of legal effects or validity of these contracts, owing to the fact of the execution through electronic means.” Notwithstanding this, there are exceptions, as, according to Article 9 (2), there are contracts to which, if the Member States so determine, the Article 9 (1) is not applicable, among them standing the contracts which create or transfer rights on real property, escrow agreements etc.

Still, similarly important is the fact that this Directive, while it regulates the activities of the information society, did not address rules for the international legal competence — refer

to Article 1(4) — thus leaving the Member States free to regulate the matter (TELLINI, 2006, p. 132).

Lastly, we may analyze the Model Law of UNCITRAL¹³ (United Commission on International Trade Law) of 1996, on the E-commerce. This Law stood as a manner of pursuing a given uniformity with regard to this type of commerce. We may positively assert that, at least in normative terms, said Model Law is one of the major initiatives carried out over the last years — and the fact it was an initiative by the United Nations is worth of note.

In other words, we may regard this as one of the main references of the matter, being the foundation of several regulations addressing the e-commerce. Several countries have been grounding the structuring of their internal rules about the e-commerce on the Model Law of UNCITRAL. This is an evidence of the importance of this law. However, it should be noted that this Model Law serves only as a model for countries associated with the United Nations, and, therefore, stands as a suggestion for the associated countries to base their laws on (FINKELSTEIN, 2004, p. 90).

The Model Law of UNCITRAL may be seen as the clearest and most flexible normative effort regarding the e-commerce currently. Its open nature allows the inclusion of new virtual forms of contracting which may arise, and which may generate, in their turn, new manners of contracting in the near future, different from the ones we know currently.

Having duly considered general aspects of the e-commerce, we may now go further to the next point, in which we will outline a systemic concept of electronic contract, more suitable for the virtual reality posed to the legal system currently.

3 ELECTRONIC CONTRACT AS LEGAL CYBER COMMUNICATION

The advent of the cyberspace and the electronic commerce led the binding relations of a contract to increase their complexity, as the entity undergoes structural changes compared to the traditional form. In other words, the contract is differently embodied physically: it is immaterial, virtual, as a result of the use of the computer, which is currently used for all stages of the contracting.

As a matter of fact, this cybernetic scenario which is unfolded, before the astonished look of traditionalist law experts, is not news anymore, as, over almost four decades, the possibility of the computer to be used in the actual lives of law professionals was already estimated. In this vein, Tenório averred that “the computer is a concern of the Law. The cybernetics is not a matter to be taken for granted. Brazil needs to use the high-end to overcome the obstacles for its growth” (TENÓRIO, 1970, p. 91). Hence, there is nothing that new; the computer in the lives of law professionals was a reality arising barely 40 years ago.

The electronic contract is, however, a relatively recent reality. Its use has gained momentum in Brazil by the end of the 90s and beginning of the 2000s. Indeed, to begin addressing the electronic contract, we will shortly consider a more doctrinal notion of contract, constructed recently by the Brazilian doctrine. Only after this we will consider the systemic aspects of the contract, aiming to reach the notion of legal cyber communication, key element of this study.

First of all, it is important to note that the electronic contract is the output of a reality increasingly intertwined with the virtual, notably operated by the computer. This type of contracting has the employment of the electronic medium as the main characteristic for its execution, which is the reason for the expression (FINKELSTEIN, 2004, p. 187). It should be underscored that we are herein referring to electronic contracts in a broad sense. One subspecies of this type of contract, which is rather common nowadays, is the Contract Performed Online.¹⁴

Thusly, an electronic contract between two communicating parties, the commitment of which is fully contracted online and which has the provision of an electronic service as object, will be considered directly electronic, namely, a Contract Performed Online (CPO) (TELLINI, 2006, p. 57).

In view of this new contractual configuration, the civil legal / consumption doctrine has not addressed fully the construct referred to electronic contract for normative purposes. Notwithstanding this, this type of contract has already been concerned by the doctrine (even though incipiently).

Newton de Lucca distinguishes computer contracts and telematic contracts. The electronic contract as regarded in this essay refers to which this author names telematic contract, i.e., those “contracts which has the computer and a communication network as the basic support for its execution” (DE LUCCA, 2003, p. 93). Seeking to explain this new modality of contracting, Lorenzetti avers that “once the digital means are found to support the execution, performance or enforcement of an agreement, we will be dealing with an ‘electronic contract’” (LORENZETTI, 2004, p. 287). Wielewicki, in his turn, understands that electronic contracts may be defined as “binding instruments of digital conveyance. They refer to all species of electronic signs transmitted through the Internet which allow the determination of legal duties and liabilities” (WIELEWICKI, 2001, p. 198).

The insights of these authors converge to demonstrate that the contract, after the advent of the computer, has been gradually dispensing with the traditional physical form which characterizes it. The expectations that the parties now have are input in a virtual (digital) tool, by virtual parties (!) thus facilitating much more flexible legal constructions.

After these doctrinal opinions have been approached, we may begin to address the contract systematically. The contract, speaking in Luhmann terms, may be primarily defined as a normative expectation¹⁵ that the parties have, i.e., in view of conflictive, intricate and contingent situations, it is maintained, translating the intentions of the contracting parties. The contract, as an entity, contributes “to the increase of the degree of abstraction, elasticity, adaptability and capacity for differentiation of institutionalised behavioural expectations” (LUHMANN, 1983, p. 90). In this vein, an effective manner of preventing normative forecasts for every type of legal constructions which may arise, thus being a manner of translating behavioral expectations normatively and flexibly.

On the other hand, we may regard the contract as a structural coupling, understanding the Law and Economy as autopoietic systems, i.e., as systems operationally closed, operating with

their own (binary) codes and having cognitive openness to disturbances of the environment. The contract, under this standpoint, is simultaneously a legal and an economic operation. Under this aspect, the contract has distinct effects not only in these systems, but likewise in any partial system which is taken as point of observation (ROCHA and DUTRA, 2005, p. 296). Nonetheless, we still need to shed some light on the following question: what is a structural coupling?

Structural coupling is a way to explain how communicating between two different systems is possible. According to Luhmann, “el acoplamiento estructural es una forma, una forma constituida de dos lados; con otras palabras: una distinción” (LUHMANN, 2002, p. 508). The contract, from this perspective, is a privileged form of structural coupling, which couples the systems of Law and Economy, reconstructing it within themselves, as an operation inherent to each of these systems. Regarded under this perspective, the contract exists in both systems.

The intent is to substantiate, however, that the contract, specifically the electronic contract, couples both social systems and cyber systems, and, therefore, is a hybrid entity. As seen above, the electronic contract is mediated by computers, given that these are the facilitators of the development of these technologies. This is the reason why it is important to underscore, even if briefly, the computer from the perspective of Niklas Luhmann’s Systems Theory.

According to Luhmann:

[...] hoy día se usan computadoras cuyas operaciones no son accesibles ni a la conciencia ni a la comunicación; es decir, no son accesibles ni en la simultaneidad de tiempo ni en la reconstrucción. A pesar de ser máquinas producidas y programadas, tales computadoras trabajan de tal modo que para la conciencia y la comunicación resultan intransparentes. Son máquinas (...) invisibles (LUHMANN, 2007, p. 86).

The meaning behind what Luhmann has stated is that computers are machines which have no autonomy, i.e., “own life.” They are machines constructed and operated by human beings. Likewise, its internal operations may not be considered as communication, in the systemic sense ascribed by Luhmann. Notwithstanding this, Luhmann understands that the computer is capable of offering other forms of structural coupling different from those already known (LUHMANN, 2007, p. 87). And this is the very lane to be crossed to surpass the shadows involving the communicational aspect of the electronic contracting, and approach the concept of electronic contract as legal cyber communication.

As referred to above, considering the proposal of Gottfried Stockinger, the notion of communication undergoes some changes. In spite of this, the theoretical presuppositions of Luhmann outstandingly adapt to the communication through the cyberspace (STOCKINGER, 2001, p. 2). Considering these presuppositions, we may point that social systems and cyber systems are deemed as operationally closed, standing as the environment one for another. Operationally closed refer to those systems which, for their production, resort to the network of their own operations and, in this sense, reproduce themselves (LUHMANN, 2002, p. 98-100). They are, therefore, autopoietic systems.¹⁶

We are dealing with a scenario where social systems (such as the Law) start to use, for their autopoiesis, communicative elements and relations (for instance, emails) operated by cyber systems, which become, since then, integral parts of the social actions and communications (STOCKINGER, 2003, p. 127). The electronic contract is just one of these communicative elements, or, more than this: a hybrid entity, concomitantly social and virtual, operating not only in social systems, but in virtual systems as well. It is just owing to this that “the speed of the social change increases to the extent that the cyberspace interacts with the process of social communication” (STOCKINGER, 2003, p. 136).

As a matter of fact, the electronic contract is a distinct manner of communication. We refer to this type of contract as legal cyber communication. It makes it possible for virtual systems to couple to the process of reproduction of the elements constituting the social system, specifically the legal system. In this vein, this contract is understood as a structural coupling.

Well, if, on one side, the contract is coupled to the legal system and the economic system, on the other, it likewise couples these systems to cyber systems. The complex interaction arising as a result thereof produces disturbances in both systems. Said disturbances sometimes generate (in the case of the Law system) problems in view of which the legal doctrine (still) did not find a solution. In spite of this, according to Luhmann, every system necessarily conforms to its environment, as, otherwise, it would not be able to exist. “Within the space of the possibilities available, it performs its operations with absolute autonomy. The environment may impact the system only when it produces disturbances. The disturbance is a form of perception of the system itself” (LUHMANN, 2002, p. 510-511).

Nonetheless, even in view of the difficulty of the Law system to translate these disturbances, we may observe that, jointly and reciprocally, there is an evolution of social systems and cyber systems. The commerce and, consequently, the electronic contract, surely stand as an incorporation of this virtual reality by the social system. This way, “the structural coupling between social systems and cyber systems, under the format of cyber environments for social use, becomes constitutive for the genesis of both of them. It strengthens the relations between its elements” (STOCKINGER, 2003, p. 127).

The Internet, in this social and virtual scenario, plays an outstanding role. We understand that the wide web makes these (virtual) legal/social constructions possible, amplifying enormously the communicative capacity of the society. Still, in concert with Stockinger, we may observe the following:

[...] the Internet or web not only amplifies the formation of fields of social communication while “tools”: it is capable of making new cultural and social constructions arise, and they become agents, gain their own “life”, a virtual life equipped with artificial intelligence (STOCKINGER, 2001, p. 4-5).

Just because of this, the well-known (and cliché) critique that the Internet created isolation between people¹⁷ is not reasonable, as it helped enlarge the communicative capacity of the society, impacting all the realms of social life, even getting individuals of different parts of the globe closer.

Finally, we may observe that there was an increase in the social complexity owing to this virtual scenario which has been incorporated to the society. Something we may refer to as cyberspace complexity, seen as a virtual correlate of infinite possibilities, created by the cyberspace for everything existing in society. This way, in the dynamics between the virtual and the material, the society (social system), the social subsystems (notably the Law) and the cyberspace are communicatively formed in a relationship of mutual interdependence, in a constant process of reduction and increase of complexity.

FINAL CONSIDERATIONS

The electronic contract, yet bereft of a distinguished approach by the Law, was studied in this essay as “legal cyber communication.” We understand that this contract is a privileged form, which couples not only the social systems (for instance, Law and Economy), but social systems as cyber systems as well. The electronic contract is, in this vein, a hybrid entity.

We may note, in this dynamics between the virtual and the material, the society (seen as social system), the social subsystems (notably the Law) and the cyberspace are communicatively formed in a relationship of mutual interdependence. This dependency is reproduced, thus becoming a part of each system, which happens by means of inter-penetration and structural coupling.

It should be noted that the electronic contract, as a legal cyber communication, is a form of structural coupling, once, from this type of contract, the virtual systems may couple to the process of reproduction of the elements which comprise the social system, specifically the legal system.

Hence, in this essay, we pursued the treatment of the electronic contract in keeping with the configurations of a society we may refer to as complex. The perspective outlined in this study is only one, among so many possible ones, which is to point the possibilities of construction of alternatives for decision-making in the field of the contractual doctrine.

: MANUSCRIPT APPROVED ON OCTOBER 1, 2009 : RECEIVED ON MARCH 17, 2009

NOTES

* This article is the outcome of a research which has been developed over four years under the Law Graduate Program of UNISINOS, campus of Rio Grande do Sul, under the advising of Professor Doctor Leonel Severo Rocha (EHESS-Paris, 1989), under the Research Project Direito Reflexivo e Policontextualidade (Reflexive Law and Policontextuality), supported by the National Council of Scientific and Technological Development (CNPq). This research aims to observe, in a systemic/complex perspective, the civil/consumption legal doctrine, specially the aspects connected to the contract and e-commerce. We would like to thank the CNPq for the support.

1 "the electronic network of network that links people and information through computers and other digital devices allowing person-to-person communication and information retrieval."

2 (this is followed by a radical change in our vision of the world, our way to face problems and solve them) Free Translation.

3 (anyone can create a webpage, any person can use (with a minimum cost) the e-mail and any person can access information which may or may not be proper for all of the users) Free Translation.

4 (the cyberspace allows us observing more and more directly barely anything we want to see, and this tendency is evidently determined to speed up the future) Free Translation.

5 In this vein, refer to, for all of them: MARQUES, Cláudia L. *Confiança no comércio eletrônico e a proteção do consumidor: um estudo dos negócios jurídicos de consumo no comércio eletrônico*. São Paulo: Revista dos Tribunais, 2004.

6 The subject of trust in the e-commerce from the pragmatic/systemic theoretical matrix was already developed in: MENNA BARRETO, Ricardo e ROCHA, Leonel Severo. *Confiança nos Contratos Eletrônicos: uma Observação Sistêmica*. In: Revista Jurídica Cesumar. Maringá (PR): vol. 7, n., 2, jul./dez. 2007.

7 "this medium offers an unprecedented opportunity to increase the number of voices in the marketplace"

8 Information available at: www.e-commerce.org.br. Accessed on: August 20, 2008.

9 (the development of the information obtained during the provision of services may create new information (individual or family consumption profiles, the analysis of preferences) which impacts other entities, which may be sold).

10 Spams are unwanted messages containing mostly advertisement content. Unfolding the etymological sense of this word, Steven Pinker asserts that Spam is not, "as some believe, an acronym of 'Short, Pointless and Annoying Messages'. The word is, indeed, related to the name of the canned food sold by Hormel since 1937, a fusion of 'Spiced Ham'." A sketch of the TV show Flying Circus, of Group Monty Python (where, at a cafe, "a waitress" (a member of the group) serves a couple repeating several times the word spam), inspired hackers of the end of the 1980s, which began to use it as a verb to flood discussion groups with identical messages. In: PINKER, Steven. *Do que é Feito o Pensamento: a língua como janela para a natureza humana*. São Paulo: Companhia das Letras, 2008, p. 30-31. For those who may be interested, watch the video of the TV program of the group Monty Python on the Internet at the YouTube, through the link: <http://www.youtube.com/watch?v=cFrtPT1mKy8&feature=Playlist&p=BFE998419382DC02&index=5>.

11 For those who want to access it in full, refer to the website: http://www.secretariasenado.gov.co/leyes/L0527_99.HTM.

12 Legal text available fully at the website of the European Community in several languages, including the Portuguese language: www.europa.eu.int.

13 Website: www.uncitral.org

14 This will not be addressed in this study for limits of space.

15 It should be noted that, for Niklas Luhmann, expectation is understood as the time aspect relating to communication, and not only to the current state of consciousness of a given individual. LUHMANN, Niklas. *El Derecho de la Sociedad*. Trad. Javier Torres Nafarrate. Mexico: Universidad Iberoamericana, 2002, p. 182. Luhmann estimates, this way, two opposite possibilities of reaction to disappointments. The subject addressed is the differentiation this sociologist makes between cognitive/normative expectations. Said differentiation is not defined in semantic or pragmatic terms, but in operational terms. In other words, one may assert that it deals with the anticipation taking into account the solution of a given problem. With regard to the cognitive expectations, there is a certain flexibility, and changing the expectation is possible. Or even, "at the cognitive level, expectations are experienced and treated and, if there is disappointment, they are adjusted to reality" LUHMANN, Niklas. *Sociologia do Direito I*. Rio de Janeiro: Tempo Brasileiro, 1983, p. 56. In the case of the normative expectations, in view of disappointments, they are maintained. Frustration is something even estimated, as there is (always) the possibility of frustration; but the expectation is not abandoned in view of it.

16 It should be noted that Niklas Luhmann was strongly influenced by Chilean biologists Humberto Maturana and Francisco Varela (MATURANA, H.; VARELA, F. *El Árbol del Conocimiento: las bases biológicas del entendimiento humano*. Buenos Aires:

Lumen, 2003.). Based on the constructs of these two authors, Luhmann launches its Autopoietic Social Systems Theory in: LUHMANN, Niklas. *Soziale Systeme. Grundrisse einer Allgemeinen Theorie*. Frankfurt: Suhrkamp Verlag, 1984.

17 On the impact of the Internet on the interaction between individuals, refer to, specifically, DIMAGGIO, Paul et al. *Social Implications of the Internet*. Op. cit., p. 314 e ss.

REFERENCES

- BROWN, G. Spencer. *Laws of Form*. New York: E. P. Dutton, 1979.
- CARVAJAL, Mauricio. Ley de Comercio Electrónico in Colombia (Ley 527 de 1999). AR: *Revista de Derecho Informático*. Disponível em: <http://www.alfa-redi.org/rdi-articulo.shtml?x=406>. Acesso em: 23 de ago de 2008.
- DE LUCCA, Newton. *Aspectos Jurídicos da Contratação Informática e Telemática*. São Paulo: Saraiva, 2003.
- DIMAGGIO, Paul et al. Social Implications of the Internet. In: *Annual Review of Sociology*, vol 27, (2001). Disponível em: <http://www.jstor.org/stable/2678624>. Acesso em: 21/07/2008.
- DIZARD, Wilson P. *A Nova Mídia: a comunicação de massa na era da informação*. Rio de Janeiro: Jorge Zahar, 1998.
- FINKELSTEIN, Maria E. *Aspectos Jurídicos do Comércio Eletrônico*. Porto Alegre: Síntese, 2004.
- GROSSBERG, Lawrence; WARTELLA, Ellen; WHITNEY, D. Charles. *MediaMaking*. Mass Media in a Popular Culture. Thousand Oaks/California: SAGE Publications, 1998.
- LÉVY, Pierre. *A Inteligência Coletiva*. Por uma antropologia do ciberespaço. São Paulo: Edições Loyola, 2007.
- _____. *Cibercultura*. São Paulo: Ed. 34, 1999.
- _____. *Cyberdémocratie*. Paris: Éditions Odile Jacob, Janvier, 2002.
- _____. *Filosofia World*. O Mercado, O Ciberespaço, a Consciência. Coleção Epistemologia e Sociedade. Lisboa: Piaget, 2001.
- LORENZETTI, Ricardo L. *Comércio Eletrônico*. São Paulo: Revista dos Tribunais, 2004.
- LUHMANN, Niklas. *A Improbabilidade da Comunicação*. Lisboa: Vega, 2001.
- _____. *Complejidad y Modernidad: de la Unidad a la Diferencia*. Edición e traducción de Josexo Beriain y José María García Blanco. Madrid: Editorial Trotta, 1998a.
- _____. *El Derecho de la Sociedad*, Trad. Javier Torres Nafarrate. México: Universidad Iberoamericana, 2002.
- _____. *La Sociedad de la Sociedad*. Tradução de Javier Torres Nafarrate. México: Ed. Herder/Universidad Iberoamericana, 2007.
- _____. O conceito de sociedade. In: *Novos Desenvolvimentos na Teoria dos Sistemas*. In: NEVES, Clarissa Eckert Baeta e SAMIOS, Eva Machado Barbosa. *Niklas Luhmann: a Nova Teoria dos Sistemas*. Porto Alegre: UFRGS, Ed. da Universidade, 1997.
- _____. *Sistemas Sociales: lineamientos para una teoría general*. Barcelona: Anthropos, 1998b.
- _____. *Sociologia do Direito I*. Rio de Janeiro: Edições Tempo Brasileiro, 1983.
- _____. *Soziale Systeme*. Grundrisse einer Allgemeinen Theorie. Frankfurt: Suhrkamp Verlag, 1984.
- MARQUES, Cláudia L. *Confiança no comércio eletrônico e a proteção do consumidor: um estudo dos negócios jurídicos de consumo no comércio eletrônico*. São Paulo: Revista dos Tribunais, 2004.
- MATURANA, Humberto; VARELA, Francisco. *El Árbol del Conocimiento: las bases biológicas del entendimiento humano*. Buenos Aires: Lumen, 2003.
- MENNA BARRETO, Ricardo e ROCHA, Leonel Severo. Confiança nos Contratos Eletrônicos: uma Observação Sistemática. In: *Revista Jurídica Cesumar*. Maringá (PR): vol. 7, n., 2, jul./dez. 2007.
- PINKER, Steven. *Do que é Feito o Pensamento: a língua como janela para a natureza humana*. São Paulo: Companhia das Letras, 2008.
- QUÉAU, Philippe. *Cyberculture et info-éthique. Relier les Connaissances: le défi du XXI siècle*. Journées thématiques conçues et animées par Edgar Morin. Paris: Éditions du Seuil, 1999.
- ROCHA, Leonel Severo; DUTRA, Jéferson L. D. Notas Introdutórias à Concepção Sistemista de Contrato. In: ROCHA, L. S., STRECK, Lenio Luis; MORAIS, Jose L. Bolzan. *Constituição, Sistemas Sociais e Hermenêutica: programa de pós-graduação em Direito da UNISINOS: mestrado e doutorado*. Porto Alegre; São Leopoldo: Livraria do Advogado Ed.; UNISINOS, 2005.
- RODOTÀ, Stefano. *Tecnologia e Diritti*. Bologna: Il Mulino, 1995.
- SIBILIA, Paula. *El Hombre Postorgánico: cuerpo, subjetividad y tecnologías digitales*. Buenos Aires: Fondo de Cultura Económica, 2005.

- STEFFAN, Heinz Dieterich. Globalización, Educación y Democracia. In: CHOMSKY, N; STEFFAN, H. D. *La Aldea Global*. Taffala: Txalaparta, 1997.
- STOCKINGER, G (2001). *A Interação entre Ciberistemas e Sistemas Sociais*. Disponível em: www.bocc.ubi.pt.
_____. (2003). *Para uma Teoria Sociológica da Comunicação*. Texto disponível em: www.bocc.ubi.pt.
- TAN, Yao-Hua; THOEN, Walter. *Formal Aspects of a Generic Model of Trust for Electronic Commerce*. In: Proceedings of the 33rd Hawaii International Conference on System Sciences – 2000.
- TELLINI, Denise Estrella. *Regime de Direito Internacional Privado na Responsabilidade dos Provedores de Internet: (Content Services Providers e Intermediary Service Providers) pela qualidade dos serviços executados online*. Porto Alegre: Sergio Antonio Fabris Ed., 2006.
- TENÓRIO, Igor. *Direito e Cibernética*. Brasília: Coordenada Editora de Brasília, 1970.
- VILLAMIZAR, Francisco Reis. *Comércio Eletrônico – Recentes Avanços Jurídicos na Colômbia*. In: *Comércio Eletrônico*. Organizadores: Ronaldo Lemos da Silva Junior, Ivo Waisberg. São Paulo: Revista dos Tribunais, 2001.
- WIELEWICK, L. *Contratos e Internet - Contornos de uma breve análise*. In: *Comércio Eletrônico*. Organizadores: Ronaldo L. da Silva Jr., Ivo Waisberg. São Paulo: Revista dos Tribunais, 2001.

Ricardo Menna Barreto

Av. Unisinos, 950
Cristo Rei – 93.022-000
São Leopoldo – RS – Brasil
ricardomb@terra.com.br

UNDERGRADUATE STUDENT IN THE 10TH TERM AT THE LAW
SCHOOL OF UNISINOS, STATE OF RIO GRANDE DO SUL
UNDERGRADUATE RESEARCH STUDENT RECEIVING SCHOLARSHIP FROM
THE INSTITUTIONAL PROGRAM OF UNDERGRADUATE RESEARCH
SCHOLARSHIP OF THE NATIONAL COUNCIL FOR SCIENTIFIC AND
TECHNOLOGICAL DEVELOPMENT (CNPQ/PIBIC)
MEMBER OF THE LEGAL THEORY RESEARCH GROUP — CNPQ