Jasna Horvat, PhD
Faculty of Economics in Osijek
Gajev trg 7, 31000 Osijek, Croatia
Phone: 00385 31 224 441   Fax: 00385 31 211 604
E-mail address: jasna@efos.hr

dr. sc. Martina Mikrut
Faculty of Law in Osijek
S. Radića 13, 31000 Osijek, Croatia
Phone: 00385 31 224 500   Fax: 00385 31 224 540
E-mail address: mmikrut@pravos.hr

Ivana Ljevak Lebeda, MA, PhD student
Naklada Ljevak, Ltd
Kopačevski put 1c, 10000 Zagreb, Croatia
Phone: 00385 1 4804 000   Fax: 00385 1 4804 001
E-mail address: ivana.ljevak@naklada-ljevak.hr

COMMUNICATION PROCESSES OF THE INFORMATION AGE AND SEMIOTIC COMMUNICATION USING THE GLAGOLITIC SCRIPT IN PUBLISHING

KOMUNIKACIJSKI PROCESI INFORMACIJSKOG DOBA I SEMIOTIČKO KOMUNICIRANJE GLAGOLJICOM

ABSTRACT

Communication processes of the Information Age demand the implementation of all civil legacies of comunication, their integration into a well-organised communication system and the construction of new communication methods, channels and technics. This paper analyses features of communication processes of the Information Age as well as the influence of new e-technologies on methods of communication, notably in regard to organisation, management and the market. The emphasis is on analysis of those communication processes that are based on script and written word, that is, on those technical aids which use a Latin alphabet keyboard for communicational purposes. The Latin alphabet is, therefore, viewed as a means of communication and its character potential, especially that which relies on information age technology, is examined.

The research of the character potential of the Latin alphabet includes comparison of features of the Latin script to the writing system known as the Glagolitic script. Glagolitic is described in its genesis as well as in the ability of the Glagolitic system of characters to convey a threefold message with a single character (each character is simultaneously a grapheme, a number and a symbol). Also discussed is the ability of Glagolitic characters to form a „symbolic sentence", whichis a resultof the order in which they are placed in a character unit and their ability to convey a twofold message: a) „a word" or „a symbolic sentence", which communicationally is more demanding and complex. The said attribute of Glagolitic characters (graphemes) indicates their ability to create, unlike the letters of the Latinic alphabet, communication by variations in the order in which they are placed within a single

meaningful unit and according to their place in the „symbolic sentence" (the order accorded to them in a character sequence) and according to their graphemic-phonetic meaning when they are read and interpreted as a „word" that is an integral part of the language. This shows how the Glagolitic script effectively creates semiotic communication and thus is observed as a model for setting a paradigm for potentials of Latin and other written characters in communication processes of the Information Age.

Key words: *communication processes, Information Age, management, semiotics, Glagolitic, publishing*

SAŽETAK

Komunikacijski procesi informacijskog doba zahtijevaju implementaciju svih uljudbenih stečevina komuniciranja, njihovu integraciju u promišljen komunikacijski sustav te izgradnju novih komunikacijskih sredstava, kanala i tehnika. U radu se analiziraju odlike komunikacijskih procesa informacijskog doba i utjecaj novih e-tehnologija na načine komuniciranja posebice u organizacijskom, upravljačkom i tržišnom smislom. Pri tome se naglasak stavlja na analiziranje onih komunikacijskih procesa koji su temeljeni na pismu i pisanoj riječi, odnosno, na onim tehničkim pomagalima koja za pretpostavku komuniciranja koriste tipkovnicu označenu slovima latinice. Latinično se pismo, dakle, promatra kao sredstvo komuniciranja te se razmatra njegov znakovni potencijal, posebice onaj koji se naslanja na tehnologiju informacijskog doba.
U cilju istraživanja znakovnog potencijala latiničnog pisma uspoređuju se odlike latiničnog pisma sa sustavom pismena poznatim pod nazivom glagoljica. Glagoljica je opisana u svojoj genezi kao i u sposobnosti glagoljičkog sustava znakova da jednim znakom istodobno prenesu trovrsnu poruku (svaki znak istodobno je grafem, broj i simbol). Pri tome se ističe sposobnost glagoljičkih znakova da tvore „simboličku rečenicu", odnosno, da, ovisno o poretku kojima su nanizani u znakovnoj cjelini, uspijevaju ostvariti dvojaku poruku: a) „riječ" ili, b) „simboličku rečenicu" – komunikacijski zahtjevniji kompleks. Ovo svojstvo glagoljičkih znakova upućuje na sposobnost glagoljičkih znakova (grafema) da variranjima u svojim poretcima unutar jedne smislene cjeline, za razliku od slova latiničnog pisma, ostvaruju komunikaciju i svojim položajem kada čine „simboličku rečenicu" (poretkom koji im je dodijeljen u znakovnom nizu) i svojim grafemsko-fonemskim smislom kada se čitaju i tumače kao „riječ" koja je sastavni dio jezika. Cilj rada jest pokazati kako glagoljičko pismo uspješno ostvaruje semiotičko komuniciranje te se na taj način promatra kao model za postavljanje paradigme o potencijalima latinice u komunikacijskim procesima informacijskog doba.

Ključne riječi: *komunikacijskih procesi, informacijsko doba, upravljanje, semiotika, glagoljica, latinica, tipkovnica*

1. Communication processes

It is not easy to define communication unambiguously since it permeats human society and is used in many different ways. Most generally speaking, communication can be verbal or non-verbal. „Communication" is defined in the Merriam-Webster Dictionary[107] as (1) the act or process of using words, sounds, signs, or behaviours to express or exchange information or to express one's ideas, thoughts, feelings, etc., to someone else, and (2) as a message that is given to someone: a letter, telephone call, etc. Communication is extremely vital to any

---

[107]http://www.merriam-webster.com/dictionary/communication, accessed 4.25.2014.

discipline and even more so when disciplines come together. Defining communication depends on the goal of the investigation and on the specific context and, as observed from scientific investigations, investigators approach communication processes from different perspectives. So, for instance, communication is viewed as communication within the workplace (Argenti and Forman, 2002; Whittaker et al, 1994; Clyne and Clayne, 1996), communication with consumers (Givens, 2006; Kuksov et al, 2013), communication in the service industry (Neo, 2011; Santana et al, 2010), etc.

If a communication process is viewed as the transfer of information from sender to receiver under the condition that the receiver understands the message (Weihrich and Koontz, 1998), we come to an assumption made by Turunen (2005), which states that communication forms society and is based on signs of communication.

The Information Age changes communication processes and demands new deliberations on communication based on a script. Ivas and Žaja (2003) indicate that New technologies may, and for the most part do, change human communication and in the long run human society. Computer communication is no exception in this respect. Persons communicating by computer try to make the most of its advantages, while at the same time attempting to overcome its constraints as much as possible. One of the drawbacks of communicating by computer is the physical absence of the interlocutor and the actual communication setting, and thus of an enormous amount of both non-verbal and co-verbal information signals.

2. Communication processes of the Information Age

The Internet is the latest in a long succession of communication technologies. During the past two decades, Internet technology has facilitated a large amount of nearly instantaneous interpersonal communication, not only between strangers, but also between those who have already established a face-to-face relationship (Lenhart et al., 2001). Although a number of studies have examined the impact of the Internet as a tool for synchronous and dyadic conversational interaction through different services such as Instant Messenger (IM) and ICQ ("I Seek You"), the major focus has been on the dynamic of the anonymous relationships Internet users form with strangers (Bargh et al, 2002),both areas of which illustrate that the new era makes communication not only more complex and more important, but more challening in terms of the sending of the message. Ivas and Žaja (2003) observe that the majority of communications on the Internet are written communications; if they do not communicate by audio or even audio-visual channels, which have become available in recent times, participants in conversation do not see or hear each other. This phenomenon affects communication, especially its efficiency. Ivancevichand Matteson (2002) mention that for efficient communication it is necessary that the receiver understands the meaning of the message and indicates it to the sender through some expected reactions. Ivas and Žaja (2003) also show how in the Internet age new communication symbols are being created (using emoticons as an example[108])whose communicativeness is achieved by non-graphic,

---

[108]"Emoticons or smileys are graphic expressions of emotions, moods and opinions (usually schematically representing certain facial expression), actions, situations, living creatures and objects. The term 'emoticon' is a combination of the English words *emotion andicon*. Perhaps, for a more precise definition, all of those signs in a broader sense should be called emoticons, and only those emoticons which show emotions with a picture of a face should be called [?] and, in an even narrower sense, only smiling faces should be called smileys. They are the result of redesigning graphic textual signs, letters, numbers, punctuation marks and numerical symbols, so that those signs in different combinations serve as material for creating schematized pictures ... Most often they are used for commenting on verbally (linguistically) expressed messages, that is, a text in a narrower sense" (Ivas and Žaja, 2003: 82).

conventional signs – letters, numbers, punctuation marks, mathematical symbols and other characters available on a computer keyboard. The said authors see this as the practice of redesignation or reinterpretation of signs, namely, iconisation of arbitrary signs and naturalisation of conventional signs.„It is the mixture of graphics (naturalness) and conventionality (sociability) that makes emoticons diagrams, the sort of iconic signs that were first defined by Charles Sanders Pierce as an instrument for a graphic presentation of relations in an object or a phenomenon they represent and whose functioning furthers a certain degree of conventionality (Jakobson, 1966: 170). Conventionality enabled the reduction of graphics, that is, the stylisation and schematisation of a picture.Emoticon pictures have different proportions of graphics and schematisation.“ (IvasandŽaja, 2003: 83).The said attributes of new communication symbols suggest the phenomenonof the need to create a *multiple sign script*. Following this assumption, the authors consider the Glagolitic script as a *multiple sign script* and continue to explore its basic communication features.

In so doing, the authors aim to show how the inclination of the Glagolitic script to convey symbolic messages is akin to Internet communication which is (according to Ivas and Žaja, 2003)analogous to artistic language. The authors state that Internet communication is inclined to the creation of"special worlds" – so-called *possible worlds*, that are called *phantasmic or virtual worlds* in computer communication, and what they have in common is detachment from customary, functional communication. "While playing with available keyboard characters, features that were once considered to be predominatly features of artistic language are appearing, namely the so-called *poetic function* – or, as Jakobson (1960) defined it, a pronounced orientation to the form of a message.However, such messages confirm some of the critiques of Jakobson's division of verbal (linguistic) functions.One critique indicates that it is impossible to talk about a "function" since that term means "informative-practical" functioning, while that which Jakobson calls a poetic function is completely different from all other verbal functions, since it is "worldcreating" (Užarević, 1990: 92-98).The other critique supplements Jakobson's lapidary definition of the metalinguistic function as an orientation to a code with the purpose of verifying the meaning of a message, and claims that the connotation of a code is important for artistic-language communicationbecause of the need to compensate for a specific verbal situation, and for determining the affiliation of a message to a certain type of message (genus, species, genre) also indirectly, and for determining the affiliation of a sender to a group that creates such messages (Kravar, 1983: 398-402)" (IvasiŽaja, 2003: 89-90).

3. Glagolitic script – a multiple sign script

The Glagolitic script (azbuka) wascreated for the Old Church Slavonicin the second half of 9th century (862/863) for the Slavic people in Moravia, and it became a unique script for all Slavic peoples and spread together with the Old Church Slavonic at one part of their history ina part of their original territory.By the 12th century it was no longer being used by most Slavic peoples, except in a part of the Croatian national territory where it continued to be useduntil the mid 19th century.Glagolitic letters are at the same time phonemic signsin (the Old Church Slavonic)language, numeral signs and symbols[109](in a philosophical-theological system) which, in and of itself, suggests an extraordinary potential for semiotic communication (Lukić andHorvat, 2013).

---

[109] What is meant is a symbol in a narrow sense as when it is viewed as a subclass of signs.There are three main types of definitions in a narrow sense: a symbol as a *conventional sign,* as a type of *iconic*(graphic) sign, and as a sign laden with special *connotations*. Glagolitic letters as symbols can be defined by all three definitions.

Glagolitic is a multi-communicative scriptwhose symbolic-philosophical structure is still the topic of research papers (Žagar, 2013; Sambunjak, 1998; Sambunjak, 2007; Velčeva, 2009;LukićandHorvat, 2013;Horvatet al, 2009). One can communicate with grapheme (letter/signs) forms, but also with a letter module –a form out of which graphems arise.Žagarstatesthat there is "no doubt that it is precisely Byzantine 9th century visual art and spirituality in general that brought about the creation of the geometrically transparent unique module within which the letters of Glagolitic alphabet were composed" (Žagar, 2013: 110).In fact, it is a module in the form of a rosette, or a circle divided into eight equal parts,which was considered for centuries to be Christ's monogram and was used in the days of the persecution of Christians in the Roman Empire in the same capacity as the fish, that is, as a sign of recognition.

Actually, Christ's monogram is an „acronym into which the Greek word ΙΧΘΎΣ(fish) could have been inscribed – which symbolically (with an outline of a fish) and by the composition of letters of the word itselfsignified the person of Jesus Christ through the letters in the order: Ι = Ιησούς – Jesus[110], Χ =Χριστός – Christ/Annointed One, Θ = Θεού– of God[111], Υ = Υιός – Son[112], Σ = Σωτήρ – Saviour[113]" (Žagar, 2013: 110).[114]

Scheme 1 Symbolic meaning of a rosette – letter module into which Glagolitic graphemes were inscribed

I^{115} X^{116} Θ^{117} Y^{118} Σ^{119}
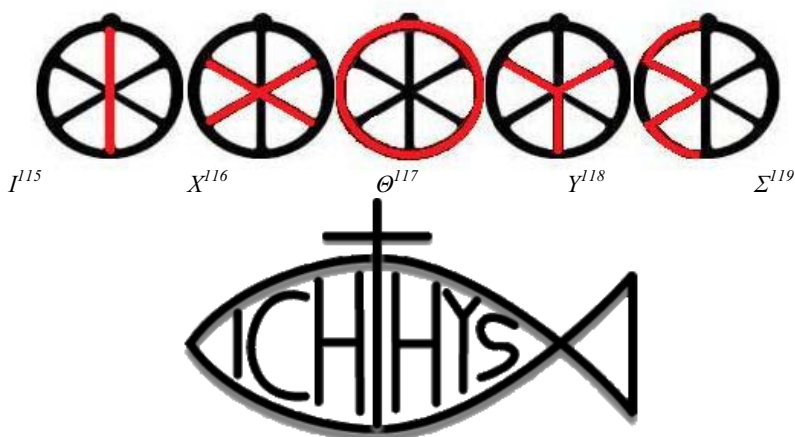
Source: authors

---

[110] ΙΗΣΟΥΣ (Iēsoûs „Jesus")

[111] ΘΕΟΥ (Theoû „of God")

[112] ΥΙΟΣ (Hyiós „Son")

[113] ΣΩΤΗΡ (Sōtér „Saviour")

[114]„However, the same author states that that form „was known in the age of pre-Christian civilizations, and was constant in symbolising divine and human values and wasengraved among the ruins of Ephesus and, it is presumed, marked places in which Christians gathered. Interestingly, a mosaic of the same form exists in front of a parish church in Vrbnik, a town on the Glagolitic island of Krk." (Žagar, 2013: 110)

[115] ΙΗΣΟΥΣ (Iēsoûs „Jesus")

[116] Christ/Anointed One

[117]ΘΕΟΥ (Theoû „of God")

[118] ΥΙΟΣ (Hyiós „Son")

[119] Σωτήρ – Saviour

The Glagolitic system of characters has the ability to convey a threefold message with a single character (each character is at the same time a grapheme, a number and a symbol). It is important to keep in mind that Glagolitic characters convey a very specific message (of Christianity) and also that Constantine Cyril the Philosopher (the creator of Glagolitic script according to endogenous theories) promoted ideas of Christianity with the alphabet, which is why he systematically imbeded the idea of Christianity into the „visual and contextual identity of each individual character, but also into all of the characters aligned in alphabetical order" (Horvatet al, 2009: 161).

The appearance of graphemes support this theory since in their initial form (Proto-Glagolitic) they consisted of combinations of a triangle, a circle and a cross inscribed in a rosette as a letter module. The triangle, circle and cross are also the basic characters of the Glagolitic scriptand their interpretation is also related to the religious concept it conveys:the triangle signifies the Holy Trinity, the circle signifies the wholeness of Divinity, and the cross signifies Christ and his suffering (Bratulić, 2009: 41).

Accordingly, Glagolitic characters have the capacity to create a „symbolic sentence". Namely,in respect to the meaning they create individually and in the order in which they are aligned in a character unit, Glagolitic character formations[120]communicatein two ways: a) as a word[121]and b) as a symbolic sentence[122].Schematising their communicational doctrine results in Table 1:

Table 1 Communication features of Glagolitic characters

Letter module for construction of Glagolitic characters	rosette[123] (circle with 8 sections – symbol of Christianity)
Dominant symbols	3 characters: circle cross triangle
Level of construction	tetragonal (ones, tens, hundreds, thousands)
Structure of levels	based on number 9 (9 ones, 9 tens, 9 hundreds)
Character communicativeness	threefold each character is simultaneously a letter, a number and a symbol
Communicativeness of character formations	- word - symbolic sentence
Story interpreted by and conveyed by system of characters	Christianity
First letter	A (azъ)
Last letter	Ï (ižica)
Meaning of first 9 characters as a symbolic sentence	names of first letters of azbuka: a, b, v, g, d, e, ž, 3, z, convey the message: *I, who know letters, say it is good to live on earth*, Damjanović (2007: 9)
Estimated number of of characters	30

Source: authors

---

[120] The term *character formations (character unit)* implies sets that consist of more than two characters.
[121] Explanation: a spoken word is written by arranging characters (graphemes) according to their phonemic sonority.
[122] Explanation: the names of the first letters of azbuka: a, b, v, g, d, e, ž, 3, z viewed in their symbolic order make a character set that conveys a message: *I, who know letters, say it is good to live on earth.*.
[123] According to the theory developed by Vasil Jončev in the 1980s.

Bearing in mind the fast spread of the Glagolitic script[124] and that the Glagolitic presentation of Christian thought can be observed as a precursor to contemporary semiotical marketing (Horvat et al, 2009), the discussion on the communication capabilities of the Glagolitic script opens up a number of questions, including the following: how to send a letter, numerical and symbolic message with only one grapheme/logo/sign?; how to use the arrangement of logotype expressions as a communication signal?;how to persuade a user of a message to adopt that message as an object of personal identification?;how to expand a message within a family or some other communication circle, etc.?

Furthermore, the knowledge of Glagolitic signs also opens up questions related to the communication ability of the Latin script, its semiotical potential in the Information Age and investigative challenges that derive from it.

4. The potential of semiotical communication in the Information Age

As opposed to the Glagolitic script – created in the 9th century for the purpose of Christianisation and the spreading of literacy (Lukić and Horvat, 2013) and whose creator, purpose and mission are known, the Latin script[125] is a much older script whose character order is called *alfabet[126]*, and which, in its most distant form, often unknown to those who use the script in everyday life, is the story of a bull (alef) and his qualities. Thus today's letter *a* initially represented the head of a bull ($\mathcal{V}$- aleph), which has been reshaped over the course of time and laid sideways (α – alpha) to be finally turned upside down and put "on its horns" in the Latin script (A), but the knowledge of its origins is lost and today's spelling books commonly match it with a picture of an automobile or an airplane. In light of what has been

---

[124] „Soonafteritscreation, Glagoliticscriptbecameanefficient instrument ofsemioticcommunicationandwasused for Christianisationand for promotingliteracy, initiallyamongSlavicpeoplesof Great MoraviaandPannoniaandeventually, togetherwith Old ChurchSlavic, extendedamong all Slavicpeoples / countries, whereitcontinued to beusedduring at least one partoftheirhistoryand on one partoftheir original territory. Only on Croatiannationalterritoryitcontinued to exist for almost one thousandyears – fromthe 9th to 19th century, and a numberofmonuments (liturgical, literary, judicial) speakofitsgreatimportancein all segmentsoflife." (Lukić andHorvat, 2013: 25)

[125] The Latin script 1. General designation for every script derived from ancient Roman Latin script (eg. *Croatian Latin script*). 2. Group designation for all such scripts. (http://proleksis.lzmk.hr/7885/, accessed 7. April 2014.)

[126] Alphabet, a system of written characters (letters) in which one character is assigned to one sound (phoneme). The fundamental principles of the alphabet were established in the 3rd millennium BC in Ebla (today's Tel-Mardih in Northern Syria), on the basis of Mesopotamian syllabic cuneiform script. The script has developed from syllabic, through alphabetic syllabic and consonant syllabic to the true alphabet.It seems that prototype characters were a schematic graphic of a consonant type, and that the West Semitic alphabet appeared in the beginning of the 2nd millennium and that it derived from some cuneiform characters with some added characters. The script spread quickly, and since there were no strong political and cultural ties among city-states, variations of the proto-alphabet were created. There were two groups of scripts in XVI/XV centuries BC: South Semitic and North Semitic. In the XVth century BC the Ugaritic script was created on the basis of the North Semitic script.In the XIIIth century BC, due to changes in the phonological system in northern central languages, there appeared a markedly simpler Phoenician script. Since it is generally accepted that the Greek script has derived from the Phoenician script, the Phoenician script would then be the source of all alphabetic scripts in the world, except Korean, Armenian and Georgian (the latter two are adapted from Aramaic and Greek; the Glagolitic script and Cyrillic script are also derived from the Greek script). However, it is thought that the Greek script did not derive directly from the Phoenician script and that there were many influences, such as interactions with the alphabets of Asia Minor, which have also derived from Semitic alphabets. From the Greek script also sprung the Etruscan script and some other scripts of ancient Italy, and from the Etruscan script arose the Latin script. The Aramaic script is a branch of West Semitic scripts. From it - in the Vth century BC – the Hebrew script arose, as well as the Middle Persian script Pehlevi, Farsi, Sogdian, Khawarezmian and other scripts. From the Aramaic script sprung the Indian script Brahmi which gave birth to other Indian scripts. The Arabic script is also of Aramaic origin. (http://proleksis.lzmk.hr/7885/, accessed 7. April 2014.)

said, a need arises for a comparison of communication qualities of the Glagolitic azbuka and Latin alphabet to establish whether the communication basis of a letter system has changed. We should bear in mind that the Glagolitic azbuka is „older"[127] than the Latin alphabet and could in itself have corrected possible deficiencies of the Latin alphabet.

Scheme 3 Comparison of communication qualities of Glagolitic and Latin scripts

	Glagolitic script	**Latin script**
Background story	The story of God Christ.	The story of the bull god.
Familiarity of the story	Extreme	Rare
Communicativeness		
Of the letter module	Extreme	Nonexistent
Of the letter code	Extreme	(forgotten)
Of the number code	Extreme	Nonexistent or imbalanced
Of the symbolic code	Extreme	In formation

Source: authors

Without going intoa broader discussion, and on the basis of what we see in Scheme 3, it is possible to conclude that the Latin alphabet, when compared to the Glagolitic azbuka, contains fewer active communication transgenerators. For the purpose of quick adoption and further dissemination,the Glagolitic script has used "the story of God Christ" which was, as shown, imprinted in its letter module and all three communication codes of Glagolitic graphemes (letter, numeral, and symbolic). The Latin alphabet of today does not use any of the mechanisms (except the letter code) that were initially present in old scripts. With that being said, we are inclined towards the conclusion that the communication potential of the Latin script is not being sufficiently used, which in turn opens up a space for future multidisciplinary discussions.

5. Discussion

The Information Age brings new rules of communication and simultaneously creates new symbols which influence the efficacy of the communication process. New symbols (eg. emoticons) that have been studied in this work show that in their combining of text and picture (eg. when communicating on Facebook, ICQ and other platforms for social networking and communication) there are «similarities to some earlier ways of combining symbols of different meaning systems. In "serious" or elite communication this is exemplified by poetic calligrams, while in mass and popular communication we have comics and rebuses. If we look deeper in the past, we find similarities in early endeavours to record messages in less transient mediums than speech. The first scripts, pictograms, were sequences (comics) of schematised pictures in which a natural (motivated) connection between a designator and designated was still strong, but in the course of time, and further schematisation, that connection became weaker and conventionality took over. This led to a type of script – ideograms – and gradually to syllabic and, finally, phonemic script. However, the image of historical "development" is disturbed by periodical renovations of old solutions in new media (Ivas and Žaja, 2003: 90).

The Glagolitic characters (graphemes) with their variations in arrangement within a meaningful unit, as opposed to letters of the Latin script, also realise communication through

---

[127]The year 863 AD is thought to be the year of creation of the Glagolitic script.

their position by forming «a symbolic sentence» (by an arrangement assigned to them in a character sequence) and by their graphemic-phonemic meaning when they are read and interpreted as a «word» which is a constitutive part of a language. In this way,Glagolitic characters distinguish themselves among old scripts, especially compared to the Latin script, and affirm once again that a "new medium quickly replaced old ones" but "with usual communication contents and old communication solutions. This process of usualisation of the unusual was followed by the process of unusualisation, which derived mainly from the particularity of a new medium"(Ivas and Žaja, 2003: 91).

No matter the technological advancements that occur in science, communication among individuals is imperative to progress in science. The field of communication has always emphasised the future. In an attractive and challenging piece of research the authors designate communication solutions and actions similar to those of older media which are included in the new medium, but which also possess elements of innovation. The work shows that the Glagolitic script successfully realises semiotical communication, which is why it is observed as a model for a new paradigm of potentials for the Latin script and other written characters in communication processess in theInformation Age.

REFERENCES

Argenti, P. A., Forman, J. (2002): *The power of corporate communication: Crafting the voiceand image of your business,*McGrawHill Professional, NY, USA

Bargh, J.A.; McKenna, K.Y.A.; Fitzsimons, G.M. (2002): *Can you see the real me? Activation and expression of the "true self" on the Internet,* Journal of Social Issues, Vol. 58, No. 1, pp. 33-48.

Bratulić, J. (2009):**Hrvatski jezik, hrvatksa pisma I hrvatske književnost – svjedoci identiteta Hrvata**, *Croatica, Zagreb*

Clyne, M., Clyne, M. G. (1996): *Inter-cultural communication at work: Cultural values in discourse*, Cambridge university press, Cambridge

Damjanović, S. (2007): *Tri najstarije tiskane hrvatske početnice*, Hrvatski, Vol. 2, pp. 9-21.
Givens, B. (2006):*Activists: communication with consumers, speaking truth to policy makers,* RFID applications, securityandprivacy, AddisonWesley, 432

Horvat, J.; Tomašević, N.;Lendić, S. (2009): *Semiotički marketing Konstantina Ćirila Filozofa: glagoljičko prezentiranje kršćanstva kao preteča suvremenog semiotičkog marketinga*,Libellarium: časopis za povijest pisane riječi, knjige i baštinskih ustanova, Vol. 2, No. 2, pp. 161-180.

Ivancevich, J.; Matteson, M. (2002):**Organizational Behavior and Management**, *McGraw-Hill, NY, USA*

Ivas, I., Žaja, L. (2003): **Znakovi usmene komunikacije u pisanoj komunikaciji na IRC-u i ICQ-u**, *Medijska istraživanja, Vol. 9, No. 1, pp. 77-97.*

Jakobson, R. (1960): **Linguisticsandpoetics,** *inU T. A. Sebeok, ed.: StyleinLanguage,MIT Press, Cambridge, pp. 350-377*

Kravar, Z. (1983): *Lirska pjesma*, inŠkreb, Z. andStamać, A., ed.: *Uvod u književnost: Teorija, metodologija*, Globus, Zagreb, pp. 379-412

Kuksov, D.;Shachar, R.; Wang, K. (2013):*Advertising and consumers' communications*, *Marketing Science*, Vol. 32, No. 2, pp. 294-309.

Lenhart, A.;Rainie, L.; Lewis, O. (2001): *Teenage life online: The rise of the instant-message generation and the Internet's impact on friendships and family relationships,* http://www.pewinternet.org, accessed 10. March 2014.
Lukić, M.; Horvat, J. (2013): *Glagoljica Konstantina Ćirilai Ars magna Ramóna Lulla – paradigme semiotičkog komuniciranja*, Lingua Montenegrina: časopis za jezikoslovna, književna i kulturna pitanja, Vol. VI, No. 2, pp. 25-46.

Merriam-WebsterDictionary,http://www.merriam-webster.com/dictionary/communication, accessed 4.March2014.

Neo, L. F. (2011):*Working toward the best doctor-patient communication*, *Singapore medical journal*, Vol. 52, No. 10, pp. 720-725.
Proleksis enciklopedija, http://proleksis.lzmk.hr/7885/, accessed 7. April 2014.

Sambunjak, S. (1998): *Gramatozofija Konstantina Filozofa Solunskoga*, Demetra, Zagreb

Sambunjak, S. (2007): *Gesta blagoslova kao Kristov lik*, Croatica et SlaviaIadertina, III, Zadar, pp. 181-190

Santana, S.; Lausen, B.; Bujnowska-Fedak, M.; Chronaki, C.; Kummervold, P. E.; Rasmussen, J.; Sorensen, T. (2010): *Online communication between doctors and patients in Europe: status and perspectives*, Journal of medical Internet research Vo. 12, No. 2.

Turunen, A. (2005): *Innovations as Communication Processes. A Legal Architecture for Governing Ideas in Business*, Vol. 94, Lapland University Press, Rovaniemi

Užarević, J. (1990):*Književnost, jezik, paradoks*, IC Revija, Osijek

Velčeva, B. (2009): *Znakovata motiviranostna glagolicata*, in: Zbornik radova s Međunarodne konferencije „Glagolicaikirilica – historija i pismeni pametnici", 6-7. VII. 2007. (ur. EvgeniZašev). Bratislava: B'lgarskijakultureninstitut v Bratislava

Weihrich, H; Koontz, H. (1998): **Menadžment***, Mate, Zagreb*

Whittaker, S.;Frohlich, D.; Daly-Jones, O. (1994), *Informal work place communication: What is itlikeand how might we supportit?*, in: Proceedings of the SIGCHI conference on Human factors in computing systems, ACM, pp. 131-137

Žagar M. (2013):*Uvod u glagoljsku paleografiju 1*, Institut za jezik i jezikoslovlje, Zagreb