If one compares the situation in Bosnia and Herzegovina from the time of its recognition as an independent state (March 1, 1992) to the signing of the Dayton Peace Agreement (November 15, 1995), in terms of oppositions, focusing on the areas of life covered by the most commonly-used “buzz words”, the following list could be proposed:

- United Europe vs. fragmented Bosnia and Herzegovina;
- Free travel, mobility of people, goods, money vs. ghetto, siege and divided cities;
- Human rights, especially minority rights issues vs. genocide and ethnical cleansing;
- Information highways vs. total collapse of basic telecommunications infrastructure;
- Revival of multicultural vs. the killing of traditionally the only multicultural country in Europe;
- Democracy vs. War

A complete list of what has been tragically destroyed is almost impossible to compile. According to the World Bank estimates (from 1995), war damage totaled 27 to 29 billion $, causing a decrease in GNP from $ 1,500 per capita in 1991 to $ 330 in 1995 and an estimated $ 540 in 1997.

This contribution will seek to be a case study and to describe specifics of the situation, war time developments, obstacles and steps needs to be taken in the areas of traditional media (newsprint and publishing), electronic media (radio, television), information highway Internet development, electronic publishing, and cultural heritage, focusing especially on libraries. These areas are closely related. We cannot discuss democracy without taking into account the means and communication channels that democratic development delivers and modifies. Being a trained librarian by profession, I hope that you will understand that traditionally the librarian’s best friends are books. Paper, microfilmed, or digital, it makes no difference in terms of the cultural and educational background and backbone of the society.

MEDIA OVERVIEW
In most of the books that focus on the Bosnian crisis, you will find that war violently erupted in the spring of 1992. In some of these books you will find that a war breaks out in early 1991 with illegal occupation of radio and television ground transmitters in Bosnia. News, radio and television could be used as deadly enemies of freedom, democracy and truth, and thus are the perfect companions to political dictatorship, non-recognition of otherness and xenophobic propaganda. None of these history books focuses on communication breakdown (of various types) as the basis of the understanding development of culture, democracy and society.
Radio and Television
Transmitting Radio and TV broadcasts is a difficult job during war circumstances. More than a hundred local radio stations were newly established, while at the same time the land of Bosnia and Herzegovina was also illegally covered by the television and radio broadcasts and re-broadcasts from the Federal Republic of Yugoslavia and from Croatia. Networking those stations will be a gigantic leap toward building democratic society in Bosnia. The process of re-registration and frequency allocations is now under control of Office of the High Representative and an Independent Media Council of the OSCE. Monitoring of the media, especially in the period of elections, has shown great progress in handling delicate issues of media independence and were generally positively regarded. Rebroadcast of major foreign news services (such as WOA, RFE, RFI, BBC and DV) in local languages was an important step in challenging the dominant local media propaganda.

Journals and Newspapers
In 1992 320 titles of serials (periodical publications) were registered in Bosnia and Herzegovina. This was part of a development that had seen steady growth since the 1960’s. Assuming the trend had continued, a total of 360 titles could be expected in the year 2000. The war period shows very interesting new developments. Only 65 titles of 320 had survived. However, the number of newly established titles from 1992 to 1997 grew at an average of 100 new titles per year, for a total of 582 periodicals.\footnote{1}

Even if we subtract the number of periodicals that cease to exist (including military and local bulletins and newspapers), this growth can be only understood as the product of a real need for information. The Bosnian phenomenon of a hunger for information during the war was symbolised by long lines of people trying to buy a copy of “Oslobodjenje” (Sarajevo based daily), a newspaper which against all odds appeared daily except on one day - January 12, 1993 - when an indoor temperature of 18 C turned print ink into ice.

But one sees a totally different trend by following the statistics of circulation volume, which could be compared with the situation in the early 50s. This huge gap cannot be closed even if the total circulation by some miracle triples or quadruples. Completely dead areas are professional or scientific journals, while newsprint could be compared with its circulation volume in the early 60s.

Book Production
Seventeen of 21 printing houses in Bosnia ceased to exist or were not working during the war period. Two of the most important former Yugoslav publishing houses from Bosnia produced fewer than 50 new titles. In the last seven years only 820 titles were produced at an average of 1,500 copies each. The major projects of book production were school (elementary and secondary) textbooks. In early 1995 1.5 million textbooks were distributed, printed on light-yellow pigmented paper with 20 percent enlarged font sizes so they could be easy readable by candlelight. Major contributors to this project run by Ministry of Education were UNICEF (donating 200 candles for 75 authors and 75 sheets of 50 gram paper and one typewriter ribbon to each author), the Open Society Foundation and the Bosnian Government, matching with 4 million dollars. These textbooks were produced in Slovenia and transported to Bosnia with the help of the US Embassy in Sarajevo.

In early 1993 the UN and UNESCO rejected a request from Bosnian authorities that 300 tons of print quality paper should be included in humanitarian assistance and delivered in Bosnia, citing as excuse that “paper is considered by UN standards to be a strategic material” (virtually the same status as weapons and munitions) and such deliveries are either banned or under
Those few NGO’s that supported Bosnian newspapers with donations of printing material were forced to deliver their cargo illegally using various excuses.

Book production is now almost dead due to three important factors; the reduction of the market from 20 million to 4.1 (really 2.8) million potential readers; low living standards and the high costs of small runs of titles, plus total dependence on grants and the absence of strategic general planning. The ratio of translated books to local languages has dropped down from 7 percent of titles to 2 percent, covering only those books that focus on the recent Bosnian conflict, with a few mere exceptions. Even if we expect the rapid growth of the printing and publishing industry in future years, parallel electronic publications will not be a realistic alternative to book production.

KILLING OF MEMORY
The number of cultural monuments of all religions destroyed or damaged during the war exceeds 1,500. A special feature of killing the cultural heritage was the deliberate destruction of libraries: the Oriental Institute in Sarajevo and the National and University Library of Bosnia and Herzegovina also located in Sarajevo. This brings the country into very desperate position, not only in that the “convicenca” was rejected, but that the cultural genocide or “killing memory” has turned the land into a cultural wasteland. The effect of these aspects of the war will prolong Bosnia’s recovery, will definitely slow down normal cultural and educational development, and - needless to say - the integration of Bosnia and Herzegovina into what is usually called Europe.

Oriental Institute (died May 18, 1992)
The deliberate destruction of the Oriental Institute, which held huge collections of oriental manuscripts and archive files from the Turkish period of Bosnian history, confronted us with the problem of reconstructing “unique originals”. Due to the enthusiasm of the Institute’s scholars and their relations with friendly, partner institutions (mainly in Turkey, Germany and Austria) the reconstruction of the reference library is progressing, while the reconstruction of the lost original manuscripts is almost impossible.

Andras Riedlmayer, a bibliographer at Harvard Fine Arts Library has established a project to undertake the nearly insurmountable task of re-gathering manuscripts, based on the assumption that there are scholars who might have microfilm or photographic copies of the manuscripts taken from the Oriental Institute collections. In November 1998 he delivered a first set of 600 pages of re-assembled copies on a single CD as well as acid-free Xerox copies. Despite that effort less than one per cent of the Oriental institute collections now exists as microcopies. The prospects of finding another set that — as tiff images — might fill a single CD aren’t optimistic. And still the results would reproduce less than 0.2 per cent of what once was one of the richest oriental manuscript collections in the Balkans.

The National and University Library (died August 26, 1992)
Collections of the NUL (approximately 1,200,000 books and 10,000 sets of periodicals) went up in flames. An especially challenging part of the reconstruction will be the restitution of core Bosnian collection (a.k.a. “Bosniaca”). The replacement (regardless of the format) of approximately 70,000 book titles and about 1,200 sets of periodical publications will be an expensive and long-term process.

UNESCO was the first international organisation that offered help in the form of a special “assistance program for NUL BH”. But numerous fact-finding missions did not result in major achievements in this area. It turns out that the UN and its specialised agencies such as UNESCO
basically do not have a relevant mandate and efficient procedures to handle catastrophes such as this. The total sum of the money spent directly on reconstruction is only one fifth of the sum offered to the library community in Bosnia and Herzegovina by the other NGOs.

A major frustration was the complicated administrative procedure, which was highly politicised in all steps: from money raising, collecting expert opinions, fact-finding procedures and the start-up and launching the program. In one of many reports and recommendations demonstrating this problem, it was stated in late 1994, that “it is a responsibility of the [Bosnian] Government to provide temporary premises of 2,000 to 6,000 sq. meters for the Library” and an offer of untested OPAC software was made without any certificate that the software would work. The demand for temporary premises obviously could not be met in a siege city with more than 120,000 refugees or displaced persons. An “Open door” procedure was suggested as a specific answer to the Bosnian library reconstruction problem but was not stated in the official documents, meaning that the major libraries that might have core Bosnia material should accept a specific or targeted query or respond to a Bosnian librarian searching for specific work.

Other forms of involvement did not come from international organisations but from individuals and libraries all over the world. The major trouble was, and still is, the donation of books and the computer equipment that we don’t need. 58 tons of useless book material was transported to Bosnia without our knowledge and or approval. Only one NGO has offered first a list of its intended donations, and then, according to our needs, delivered the books. It was Sabre Foundation Inc. (Cambridge MA), a program for Bosnia, running since 1996.

“Virtual Library”, “The Bridge” and “The Crossroads”
The first partly promising result of the “open door” procedure suggested in late 1994 was a private initiative for downloading the bibliographical references from OCLC WorldCat resources that might be of importance for the retrospective bibliography of Bosnia and Herzegovina launched by Yale University librarian Mrs Tatjana Lorkovic. In 1996 this project was accepted by OCLC under the title, “Bosnian Virtual Library”. We still have not made any progress in getting a set of CDs with the downloaded files (aprox. 100.000 records) due to various unresolved problems.

Following the “open door” procedure and mutual frustration over the gap between “possibilities” and “realities”, a group of scholars gathered by accident at Lora Caffe in Sarajevo to commemorate the 1,000th day of the Sarajevo siege (January 1995) and decided to set-up an informal and non-institutional group called “Cuprija (The Bridge) Friends of the National and University Library of Bosnia and Herzegovina”. It was envisioned that a new library journal “Bosniaca” dedicated mainly to the reconstruction of core Bosnia collections would be published. In November 1997 The University of Michigan presented the “Michigan Bosniaca Bibliography” (compiled by Janet I. Crayne and Donna E. Parmelee), the first concrete result of a search for Bosnian copies in the US based libraries. In December a modest website was created containing only this bibliography as a startup, while publication of “Bosniaca” journal was given over to the National and University Library.

In February 1998 The Bridge group launched “Crossroads”, a project of digitalisation of Bosnian travelogues as a full text Internet SGML resource. Although travelogues of the foreigners visiting Bosnia in past should not be regarded as the main priority from among the country’s needs for reconstruction or collection, we chose the topic for the simple reason that it might be easier to find a donor who would be interested enough to support our efforts. It turns out that least 60 per cent of the money needed is not spent for digitalisation itself, but for cutting and rebinding the books before and after the process. If “Crossroads” attracts any grants it will, we
believe, lead us to a more universally generated virtual Bosnian full-text digital archive. We would like to name this archive “Crossover”. Some chances also exist that the Harvard University owned Millman-Parry collection of Bosnian traditional epic poetry could be included as joint or co-operative project.

INTERNET AND OPAC

The idea of establishing Internet connectivity in Bosnia dates from late 1992. During late 1993 this turned into reality with the introduction of the ZaMiR (“For Peace”) network BBS service based on a single satellite telephone line (“Do not call server - server will call you”) from Zurich to Sarajevo, establishing (theoretically) one or perhaps two connections daily. There was a time when this connection was successful once a week. (The Government of Bosnia and Herzegovina was connected to the outside world by three satellite lines, while the telephone traffic in most of the Bosnia was dead). The FP BBS node in Sarajevo in 1995-96 had 2,500 user accounts covering at least twice that many users who employed its e-mail services and 4 dial up lines. The Tuzla node had 10 dial lines to Zagreb node in January 1995. The Mostar (East part) node was in function less than a month and was not supported by EU Mostar Administration. The Banja Luka node was established thanks to co-operation with the OSCE office in late 1995. At that time this part (entity) of the country did have Yugoslav providers for the commercial Internet (.yu), while Mostar (West part) was using the Croatian domain (.hr) as a internet connection.

In March 1995 a campaign for full Internet access led to the establishment of UTIC (University Tele Informatic Centre), which became fully operational in April 1996 as the administrator of Bosnia and Herzegovina domain (.ba). The Open Society foundation (with $250,000) and the Dutch government (through the Free University in Amsterdam with 600,000 Gouldens) made the feasibility study and matched funds. USIS, USAID and EU did not want to participate in this project. Deutsche telecom satellite equipment and a 128 Kb beam was installed directly from Sarajevo to Amsterdam. Sun Computer (UK) refused to sell servers to Bosnia but Silicon Graphics did deliver the equipment. After two years, in 1997, the evaluation reports were to be submitted to OS Foundation and in 1998 to FU Amsterdam. Both of these reports were not accepted, and the whole project was extended for one year, until April 1999, when a newly established BIHARNET (Bosnian and Herzegovinian Academic Network) would take over the responsibilities of UTIC and administration of the BA domain with a new 2 Mb dedicated line to Slovenia.

Disappointed with such a development the OS Foundation itself has built its own parallel network, taking over the connection between universities and other educational institutions as an independent provider. CroNet and HTP (Croatian Telecom) covers most of Herzegovina area and Mostar with a 2 x 4 Mb fibre optic connection to Split using the Croatian domain, while RS is covered by the Yugoslav domain. In 1997 PTT Sarajevo was connected with 2 x 2 Mb to UUNet, while UTIC made a redundant link of 128 K to Austria.

However it interesting that the international agencies operating in Bosnia had separate internet access: OHR had 2 x 128 K channels while OSCE, the World Bank, EU, and USAID had 128 K via various providers in Europe and US. The direct cost of maintaining these facilities is far greater than the investment in Bosnian Internet providers, and counteractive to the framework of support for reconstruction of the telecommunications sector as promised by the World Bank and international community.

This rather complicated communication structure and rudimentary capacity might have several
side effects that will lead to rapid migrations and the urgent need for complete reconstruction of the Internet providers in the country. Although envisioned as hierarchical, the BA domain becomes more and more flat in structure, while covering Bosnia with Croatia and FR Yugoslavia domains is not only illegal but also humiliating.

In late 1997, five larger libraries in three cities of Bosnia and Herzegovina (including the NUL) restarted work on an on-line catalogue (Unimarc based). A new institution, COBISS BH, was organised as a joint venture of all existing universities in Bosnia which will coordinate and develop OPAC in the whole of Bosnia and Herzegovina. This is the same system that was operational in the former SFR Yugoslavia from 1988. This year there are plans to connect another group of 5 to 10 libraries into the system that is complementary to the BIHARNET.

CONCLUSION
1 We need to seriously rethink the strategy of EP development in Bosnia and Herzegovina. Either to emphasize the medium development itself, or to bypass the situation by introducing new electronic opportunities. It is early even to suggest a feasible strategic solution, and certainly these options must developing parallel to each other.

2 We need to establish a permanent solidarity program for the needs of the Oriental institute, National and University library and relating institutions or projects. This solidarity must be generously supported by European and other international institutions.

3 Development of media and democracy should be followed on the basis of changing attitudes and raised from the basic, local level to higher levels of interest networking.

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