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The Rehabilitation of Library and Information Services and Professional Education in the Post-Soviet Republics: Reflections from a Development Project

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Abstract

This paper evolved from a project supported by the European Commission that provided technical assistance for developments in Armenia, Georgia and Uzbekistan. The project sought to underpin the modernisation of library and information services by assisting the development of new Master's Degree programmes in Librarianship and Information Studies. The paper addresses a wide range of issues that were encountered during the project, including the dissemination of research information as well as the state of publishing, bookselling, libraries, and information services in those countries. It draws attention to the relatively poor international and bilateral support for library development compared with that formerly received by the 'developing' countries, despite their economic similarities. It notes that the activities of international governmental and non-governmental agencies to offset the catastrophic effects of the disintegration of the centralised Soviet system have lacked coordination, and emphasises the need for national governments to be encouraged to take a comprehensive, strategic approach to ensure more sustainable development of their library and information services, suggesting that this approach could be appropriate for the other post-Soviet Republics.

Introduction

Ignorance is the oppressor Knowledge is the liberator Know your limitations Know your vision To be the master of your destiny (Walsh-Tapiata 2003)

The 'book sector' plays a vital role in maintaining a country's cultural heritage, but is also economically important in supporting literacy, education, research, and innovation in industry and commerce, and can be a commercially significant contributor to a country's Gross Domestic product (GDP) (Schmidt-Braul 2004). The efficient and effective support which library and information services can provide for the development of learning, cultural understanding, and creativity that are an important part of the foundations for the knowledge-based societies required for countries to thrive in a global economy.

Library development in the Union Republics in the U.S.S.R. had followed a uniform pattern, with a 'State Republican Library' in each Republic; widespread provision of academic, public and school libraries; and specialist library networks serving the scientific and technical communities (Serov 1980). Although, to some eyes (e.g. Reed and Garcia 2005), Soviet libraries were little more than repositories of government information and approved literature, Soviet librarianship had secured access to books for nearly every citizen as means of supporting education and culture, and provided a framework for the flow of scientific information to academia, industry, and government agencies. However, statistics were often inflated to meet prescribed norms; and the libraries' collections were often full of redundant materials that no one wanted to read (Sochocky 1994).

The Soviet Union had existed for 70 years with an economy that was largely isolated from the rest of the world, and, despite its fundamental economic weakness, was thus able to focus its natural and human resources on the development of its social infrastructure without regard to external financial pressures and comparisons. Subsequently, the post-Soviet Republics have been exposed to the global economy, and now struggle to maintain their legacy of social infrastructure. Suddenly, after August 1991, instead of one rigid and homogenous system, there were 15 independent nations, each with its own particular needs for library and information services, and differing not only in the available resources, but also in the priorities and attitudes that have since influenced the attention and support given to them. Many of the libraries that the independent states inherited after the collapse of the Soviet Union have fallen victim to inadequate funding, neglect, and theft. Many librarians left the profession for better-paid jobs, especially those who knew foreign languages (Sochocky 1994). Moreover, after the dissolution of the Soviet Union, many of the economic, cultural and information connections among the Republics were discontinued (Lorkovic 2007), depriving the independent Republics of information resources and services that had been centralised or centrally coordinated within the U.S.S.R. In some cases the state is struggling, and in others failing, to keep the infrastructure intact. Many libraries in the region are often unable to provide heating and electricity, let alone books and journals; few offer Internet access (Skogen and Smith 2009).

Gibradze (2001) summarised the recent history of libraries in the newly independent Republics of the former U.S.S.R. as three stages: "breakdown of the entire library system in the country and of the acquisition system as well; desperate search for ways to overcome the crisis; and finally, taking real steps to rebuild a new and modern library system." The former Soviet Republics in the South Caucasus and Central Asia share several common challenges in the processes of nation building and modernising their economies, education systems, and society: ethnic, linguistic and religious diversity; and a growing population of young people. Libraries' efforts to date in providing unbiased access to information with meagre collections and a scarcity of technological resources have demonstrated the critical role that libraries can play in emerging democracies (Reed and Garcia 2005), but observation during this and other projects suggests that firm foundations for future development are not to be found in every post-Soviet Republic. There is determination to improve, but the economic reality has to be faced and appropriate adjustments made.

When everything was decided in Moscow, it made life simple, but librarians have faced the need to make a transition from being custodians of their collections, and agents of the state, to a new role as gatekeepers to knowledge. However, library directors had been spared most of the decision-making, being expected only to implement policies and procedures that were determined centrally, ultimately by the U.S.S.R. Council of Libraries. They were not trained to make decisions, and most believed themselves to have no power to do so. In particular, with the exception of those who for whatever reason – party membership, political astuteness, or, albeit rarely as a primary requirement, professional competence - rose to the highest levels in the central administration, they were unaccustomed to having to defend the usefulness of their services or to justify their budget allocations (Manoogian 2010). In the post-Soviet environment, librarians were, without any preparation, expected to make decisions about "what should be kept of the old ways and what should be thrown out with the old party slogans" (Sochocky 1994). It is disconcerting that at least one western commentator observed apathy among some librarians, as well as a naïveté among others in thinking that, if only they had the latest technology, all their problems would be solved (Sochocky 1994). Librarianship had to be reformed, but the professional and technical workforce largely lacked the relevant knowledge, skills and attitudes. This paper outlines one attempt to introduce change, set against a review of the context in which changes have to be accomplished.

Methodology

This paper has been based in part on data gathered as part of a project to develop new Master's Degree programmes in Librarianship and Information Studies in Armenia, Georgia and Uzbekistan. This paper draws upon minutes of project management meetings, reports of individual missions undertaken as part of the project, and the reports of the independent project monitor.

A needs assessment was undertaken at the commencement of the project, through visits to the partner institutions and a questionnaire completed by the representatives of the partner institutions. This was derived in part on the structure suggested by Simsova and McKee (1970) as the basis for comparative studies in librarianship, amended by experience in previous studies of education for librarianship in Eastern Europe. The initial responses were compared, and further information was elicited to fill gaps that had emerged in the data.

The development of the Master's Degree programmes was closely linked to the overall state of library development. That needed to be understood if the programmes were to respond appropriately to local needs. A thorough literature search was therefore made, and all the items available were identified. These were principally but not exclusively in the English language. The resulting synthesis of the evidence outlined the state of development of library and information services in each country, outlined international development assistance that they were reported to have received, and analysed their own

perception of their future needs, in particular the human resource requirements to sustain development. The complete bibliography has been published on the project web site¹, and the country reviews are to be published separately. The country analyses, this overview of the common issues, and recommendations for future strategies to support the sustainability of the project outcomes, were shared in draft with the project partners before and during meetings in Parma and Tashkent in 2011, and in Barcelona in 2012, and amended in the light of their comments. The sustainability report that is required by the European Commission (2006) will be published on the project web site.

This paper addresses the wide range of issues that were encountered during the project: the background and current state of publishing, bookselling, libraries, and information services in those countries as well as the dissemination of research information. It draws attention to the uncoordinated international and bilateral support for library development that has been relatively poor compared with that formerly received by the 'developing' countries in the era of decolonisation, and to the need for national governments to be encouraged to take a comprehensive, strategic approach to ensure more sustainable development of their library and information services. Similar issues seem likely to have occurred in the other post-Soviet Republics.

Publishing and bibliographical control

Publishing and printing in the U.S.S.R. were centrally controlled, with the Communist Party organs exerting influence on state organizations. Even the second-hand book trade was largely a state-run operation (Walker 1978). Despite an initial declaration that all languages and scripts would be treated equally in the U.S.S.R., in practice the Russian language and Cyrillic script became predominant. Russian terminology was also introduced, although by the 1960s this was beginning to be rejected and replaced by the vernacular (Bruchis 1984).

Publishing in the principal non-Russian languages of the Soviet Republics was limited. Before 1986, all titles had to be approved in Moscow before they could be published, as part of a complex bureaucratic system that even included the prescription of authors' fees. The allocation of printing time was controlled locally, but most paper was produced in Russia and supplies of paper to the Republics was controlled (Rosen 1990). In 1954, for example, the U.S.S.R. published 34,881 titles in Russian, 14,051 in all the other languages of the Soviet Union, and 1,177 titles in other languages. Of the overall output, 1,583 titles were in the fields of printing, bibliography, and library science, including 1,234 intended for free distribution (USIA 1955). The newly independent Republics were thus faced with the desire to develop library and information resources in their own languages while lacking substantial experience of publishing (Myhill 1997).

Electronic publishing began in the 1970s, and was stimulated by the creation of Web technologies and the expansion of the Internet in the 1990s. The western commercial publishers of scientific and scholarly journals quickly recognised several advantages in this new medium, and the reproduction of journal content

¹ NMPLIS Website URL - http://www.flib.sci.am/eng/Tempus/

in a digital format and its availability online transformed university libraries and university teaching in the wealthier countries. However, the economic circumstances in the former U.S.S.R. constrained the pace of development there.

Dissemination of research

Some bibliometric indicators were extracted from the *Web of Science* for 1996-2006, recording articles published in peer-reviewed, mainly English language, scientific and scholarly journals by researchers from these three countries (Moed 2007). While the underlying causes need to be investigated, it is clear that research outputs from these countries do not appear in substantial quantities in high quality English language journals. The former '*Meazdunarodnaia kniga*,' which procured printed materials and supplied them to research libraries outside the U.S.S.R. in a timely and systematic manner, no longer functions in the independent Republics (Lorkovic 2007), adding to the isolation of their scientists and scholars from their peers.

Little progress appears to have been made to raise international awareness of the research outputs published in the country by initiating the creation on online document repositories, or providing indexes and abstracts in major international languages to help integrate the research community into the 'invisible colleges' established by their peers, and raising the profile and standing of institutions. Even when action has been taken, as it has for example by the library of one private university in Kazakhstan that is compiling a current bibliography about the country from internal and external sources, there has been no action to make it available online.

Armenia and Georgia have established patent databases to raise awareness of scientific developments in their countries and to secure for their scientists an appropriate share of any income derived anywhere in the world from the exploitation of the concepts that they have developed. The government of Uzbekistan (and other Republics) probably needs to review whether similar action is necessary to protect their citizens' rights.

National Libraries and bibliographical services

In the Soviet system, the functions of National Libraries were distributed amongst several organisations, notably the Republic State Libraries, the Republic Scientific Libraries, and the Book Chambers. The 'State Republican Library' in each Republic received copies of the entire published output of the U.S.S.R. through a legal deposit system. In addition, each of the fifteen constituent Union Republics established a Book Chamber to register all kinds of printed publications, following a model initiated in Russia in 1917 (Nazmutdinov 1986).

The Book Chambers were unique institutions as regards their functions, and should not be confused with the enterprises in many other countries that go by the name of 'Book Chamber' but whose purpose is to promote the sale and export of books. Under the Soviet system, the Book Chambers evolved to include not only legal deposit functions and archival preservation of printed matter received, but also bibliographic control and the production of the national bibliography, a centralized cataloguing service, and other book-related responsibilities. Their archival responsibilities meant that their collections were not used as they might have been in a library (Harris 2010). The consequences for the Book Chambers of the collapse of the Soviet Union were summarised by Harris (2010):

"Before 1992 began, the centralized funding that Moscow had routinely sent to the Book Chambers ceased. The overwhelmed governments of the newly independent states did not automatically address the concerns of Book Chambers and national bibliography. Funding was often insufficient. Some publications of national bibliography ceased to appear, or even to be compiled, on a regular basis. The legal deposit system collapsed, and only a portion of all books and other publications from the early to mid-1990s reached book chambers or other appropriate institutions. A host of challenges loomed before the Book Chambers, and each Republic took a different path to meet them."

The collapse of the Soviet Union brought new questions about the role of the Book Chambers in relation to the National Libraries. The Republics have varied in their responses to these matters. Several Republics have maintained independent Book Chambers, with varying success, while six Republics have merged their Book Chambers' responsibilities and collections into their National Libraries, again with varying degrees of success. Of the three NMPLIS partner countries, only Uzbekistan has implemented a comprehensive reorganisation and merger of these bodies.

In the context of the post-Soviet Republics, such a merger can be seen to be a more efficient use of scarce resources. In present circumstances, it seems an essential step towards providing stronger visibility and advocacy for the development of library and information services. UNESCO and the IFLA Section of National Libraries have continually monitored the changes in national information needs and the consequences for the role of national libraries, and there is no need to repeat their advice here (Sylvestre 1987; Line 1989; Cornish 1991; Lor 1997).

Before and immediately after the collapse of the Soviet Union, libraries and information services, and publishing began to experience dramatic changes as a result of the expanding capabilities of new Information and Communication Technologies. Copyright becomes both more meaningful and more complex in a digital environment. Georgia began to commit to international copyright agreements in 1995, Armenia in 2000, and Uzbekistan in 2005. New Copyright Laws were approved in Armenia and Georgia in 1999, and both have subsequently been amended (Pilch 2005). It is not clear whether Uzbekistan's copyright legislation is in accord with contemporary requirements, nor is it clear that steps are being taken in all three countries to ensure that rights are respected.

The period of transition has understandably created challenges for legal deposit and bibliographic control, and it has been notoriously difficult to find reliable data on the bibliographic output of the independent Republics. New legal deposit legislation may also still be required in countries such as Georgia and Uzbekistan.

A TransCaucasian Workshop on Universal Bibliographic Control and UNIMARC was organized by the IFLA UBCIM Programme and the Library Automation Association of Georgia in September 1999 in Tbilisi, sponsored by the Soros Open Society Foundation and other organizations. The workshop was a response

to problems in Armenia, Azerbaijan and Georgia arising from lack of experience concerning non-Roman scripts, the need to replace abandoned Soviet standards with international or national bibliographic formats, the choice of integrated systems, the need for legal, organizational, technical and linguistic support, and finance (Plassard 2000). There may still be a need for a similar workshop in Central Asia.

There also appears a strong need for greater cooperation not only among these Republics, but also with the international community. In 1998, the Russian Book Chamber organized a new association under the name 'Assotsiatsiia knizhnykh palat SNG' [Association of CIS Book Chambers], with the purpose of sharing information among the Book Chambers of the former Soviet Republics, and many of them have held a few meetings in Moscow (Harris 2010).

School libraries

Although a more progressive approach seems to have been in initiated in Uzbekistan and perhaps Georgia, most school libraries in the TEMPUS project's partner Republics seem to do little more than provide storage for multiple copies of textbooks. The benefits of providing a range of reading materials and access to networked electronic resources to *supplement* the content of textbooks and teachers' notes do not yet appear to have been considered. The implication is that teaching in primary and secondary education was didactic, with pupils focused on memorising the contents of textbooks and teachers' notes. In the post-Soviet Republics, the growing emphasis on the use of local languages rather than Russian seems likely to have exacerbated this tendency, because of the shortage of books in local languages.

Although the private schools appear to have better libraries, reports suggest that the resources provided in state-funded school libraries are wholly inadequate to support these goals. It is not clear that the national children's library service in Armenia can serve as an alternative to proper school library provision, because it appears to be similarly underfunded. Public library services in the Republics appear equally unable to act as providers of alternative reading materials for young people.

It is not clear whether any efforts are made in the teacher training programmes to develop a cadre of teacher-librarians who are pedagogically skilled in mentoring their peers as well as children in the development of Information Literacy skills (the ability to find, evaluate and make effective use of information in print or electronic media), but the neglect of school libraries suggests that this is not happening.

Because this neglect undermines the foundation for the future effective use of libraries and information services, with significant consequences for limiting the development of an educated society and a stronger knowledge economy, action to remedy these deficiencies appears to warrant early action by national governments and the international agencies with which they collaborate.

Public libraries

Public libraries in particular appear to have suffered in the post-Soviet era. However, it seems that the serious reduction in their numbers is attributable more to neglect than conscious policy. This neglect is made all the more significant by the intellectual deprivation of each new generation that is a consequence of the neglect of school libraries.

In the U.S.S.R., public libraries played a major role in the enlightenment of the population, with their staff trained to act as cultural and literary *animateurs*. Their support for cultural activities breathing life into the national heritage is equally unrecognised, although it has been demonstrated to be a significant factor in local economies, and in social cohesion. The role of public libraries in sustaining literacy has been seriously under-estimated. With a few notable exceptions, the potential for them to act as public information points about government activities and services, and to support urban regeneration, has not been fully exploited in the Republics.

The managers of cultural/educational services such as public libraries clearly need up to become more effective in demonstrating their role in contemporary society, in encouraging the effective use of their actual or potential cultural resources, and in initiating new models of information service provision.

University libraries

The Soviet higher education system comprised some general academic universities, and also many HEIs with specialist research interests around which groups of staff teaching supporting disciplines had been built. Faculties retained a great deal of independence, and their libraries were not necessarily managed as part of a centralised university library service. Traditional cataloguing methods did not easily lend themselves to the creation and maintenance of the union catalogues of the library collections in a university that are necessary to support increasingly multi-disciplinary research and teaching. Moreover, a system with many independent acquisition budgets was not attuned to achieving the most efficient use of limited purchasing funds.

The application of computer systems to automate routine library processes became ubiquitous in Western Europe in the 1980s. The collapse of the Soviet Union cut short centralised efforts to develop computerized library systems (Dowling 2005). In the circumstances, it was almost inevitable that the major pre-occupation of university librarians after independence would focus on the development of computer-based cataloguing systems, and on the provision of computer hardware and a network infrastructure. In Uzbekistan, there appears clear evidence of planned development of systems, networks and hardware provision. Although there appears to have been some attempt in Armenia and Georgia to standardise systems to achieve economies in purchasing, training, etc., purchases were largely supported by short-term donations from external agencies. In both those Republics, there appears to be little evidence of strategic planning for the replacement and future development of systems, nor has there been any published evidence of efforts to integrate the library systems with other computer systems in the institutions.

The emerging roles of the contemporary university library appear to have received little attention. Universities anxious to build contacts with their peers

have recognised that traditional approaches to publication have often limited awareness of the research interests and capabilities of their staff, and have established Institutional Repositories to publish the research outputs of their staff on the Internet. Much more could be done to initiate and maintain such services.

Students almost certainly arrived at university with little previous experience of using libraries, and the teaching practices and university libraries' premises, collections and services that they encountered were unlikely to encourage use. The growing global availability of published output and particularly the availability of electronic journals has focused attention on the need to develop - in the population as a whole - the Information Literacy skills required to identify and retrieve information in any format, to evaluate its relevance and reliability, and to use it effectively in making informed judgments. Libraries, particularly in universities, have a significant role to play in working with academics to develop these skills. Although information user education has been promoted by IFLA and UNESCO since the establishment of the UNISIST programme, and Information Literacy now appears to be receiving significant attention, it is not clear that this challenge has been addressed by the universities in the partner countries.

Specialist libraries and information centres

In the U.S.S.R., information provision was integrated with other elements of national plans, with categories of information users and their information needs clearly identified so that appropriate forms of information service could be developed. The Soviet Union had been building its scientific and technical information (STI) system in 1951, but many of the Republics' STI institutes were not founded until the management of the U.S.S.R's industry was organised on a regional principle in the 1960s, when the need to modernise its economy was recognised. The state scientific and technical information system (VINITI) had been built up since then, with tasks assigned and differentiated between the various units. It combined the principles of centralisation and decentralisation, with clearly delineated guidelines for its structure, management, information service organisation, automation of information processes, personnel, and relevant continuing education (Arutiunov 1976). In the mid-1970s, VINITI was each year abstracting and disseminating more than 1 million articles from 25,000 journals in 65 languages. This system collapsed after the U.S.S.R. was dissolved in 1991 (Richards 1999).

The disintegration of the U.S.S.R., independence, and the transition to a market economy led to a drastically changed attitude to information; it became, potentially but seemingly not actually, a real instrument in local decision making, although there was no experience of using it in this way. Moreover, formerly centralised services, such as the translation of foreign technical information, disappeared (Shatberashvili 1993).

Health care systems and agricultural research institutions suffered from unprecedented shortages as many foreign publications had to be cancelled, and library cooperation and networking between former Soviet Republics, especially interlibrary loan, became nearly impossible. Perhaps unsurprisingly, significant international efforts have been made to support the modernisation of specialist library and information services, and various non-governmental agencies have subsequently provided assistance, but this has generally been short-term funding for specific projects (e.g. Teplitskaia 1997). However, the identification and resolution of the problems that arose in the post-Soviet Republics in key areas of specialised information provision such as agriculture and medicine appear to have largely been left to international Non-Government Organisations.

Implementation of electronic resources

The national governments, therefore, needed to adopt appropriate responses to enable libraries and information services to play a more substantial role in promoting economic development. This requires governments to ensure that, as a national priority, researchers, professionals and administrators in their country can freely access current information in print or electronic formats. Awareness of the new electronic resources grew rapidly amongst academics as well as librarians. The establishment of purchasing consortia in many of the Republics has been encouraged by eIFL, an independent not-for-profit organisation with a global network of partners.² It assists national consortia that have 29 member libraries in Georgia; 49 in Armenia; and 79 in Uzbekistan, but consortia do not yet exist in every former Soviet Republic. It not only supports the development of consortia able to negotiate best prices for subscribing to electronic databases, but also has a wide range of programmes and events designed to increase access to knowledge, including encouraging the creation of digital repositories for open access publishing of scientific and scholarly material on the Internet. Its efforts have significantly contributed to maximising the acquisition and availability of electronic resources.

Public interest in accessing the Internet appears to be limited to some extent by the cost. However, little appears to be being done so far to create content in vernacular languages, which would attract more users.

The provision of electronic media requires that the technical infrastructure and library systems operate effectively to support global information flows; and that the country's stock of human resources for library and computer work are qualified to these maintain these modern information services.

Archives and rare books

All three TEMPUS partner Republics have a rich history, and substantial collections of archival materials and rare books. These are not only of interest to a small group of local scholars, but are of international interest and form as significant a part of the national heritage as buildings, artefacts and archaeological and natural heritage sites. UNESCO's 'Memory of the World' programme seeks to encourage governments to pay due regard to the conservation, preservation, and dissemination of the written heritage in digital form. A particular role that has emerged amongst national libraries in more developed countries has been leading and coordinating efforts directed at the digital preservation and universal availability of the national heritage. Some efforts have been made in this direction, but the benefits in providing educational material appear to have not been realised because of the weak network infrastructures, particularly in schools and public libraries. Libraries in Armenia

² eIFL - Electronic Information for Libraries: http://www.eifl.net/

and Uzbekistan appear to be fully conscious of their responsibilities and are taking appropriate actions, but government-led policies for the conservation, preservation, and dissemination of the national heritage appear to be lacking, regardless of whether it is in a traditional format or electronic media.

Library cooperation

A regular theme in discussions between the librarians of the former Soviet Republics was cooperative interaction and collaboration (Lorkovic 2007). In the former 'Warsaw Block' (the U.S.S.R. and countries allied to it), libraries collaborated closely within a framework that was subsequently maintained by the Intergovernmental Committee on Standardization and Certification of the Commonwealth of Independent States (CIS), of which Armenia, Georgia and Uzbekistan were members (Avakyan 1999). Libraries in the partner countries in this project have also continued to engage in cooperative activities at a regional level, in the Caucasus or Central Asia. These fora provide a useful medium for the exchange of experience, no less so than in the rapidly changing field of library, information and archival studies (LIS) education, in which the post-Soviet Republics face many common challenges.

Education for librarianship and information work in the Soviet Union

Almost until the dissolution of the U.S.S.R., its system of education for librarianship had been little known or understood outside the country and its satellite states. In the Western languages, there was little other than a few brief reports as part of broader descriptions of the nation's library and information systems (e.g. Sikorsky *et al.* 1979; Serov 1980; Nazmutdinov 1986) and equally few, even briefer abstracts from reports in Russian language journals. To an extent, the veil was lifted during the IFLA Conference in Moscow in 1991 (Johnson 1995), but that event coincided with the failed *coup d'état* that signalled the beginning of the end of the U.S.S.R.

During the Soviet era, the typical pattern of education for librarianship in the U.S.S.R., as represented by the programme at Moscow State Institute of Culture, appears to have comprised 4 years of academic study, followed by 3 years practical experience before the final degree (a Higher Diploma) was granted. These higher vocational courses, offered in the Republics at Institutes of Culture or Pedagogical Institutes, admitted students who had completed their secondary education (i.e. 10-12 years after commencing primary education at age 7) (Fang, Nauta and Fang 1985). Scholarships provided free tuition, textbooks, and - if needed - accommodation for students.

There were two main specialisms: one for librarian-bibliographers for all kinds of libraries; the other for librarians for children's' and school libraries. However, by the late 1970s, increasing attention had begun to be given to the particular requirements of public libraries and scientific and technical information services. Information technology applications had begun to be referred to in library science courses from the mid-1960s. In the early 1970s, computers began to be made available to Higher Education Institutions, but it was not until 1983-85 that courses in informatics began to be introduced. In 1985, courses in computing, with an emphasis on programming, began to be taught in secondary schools, as part of an initiative across the whole U.S.S.R. (Abbasov 1989). Similar

significant changes took place that year in introducing the teaching of computer applications in library science courses (Petrikina 1995).

The core curriculum covered not only the expected professional subjects including printing and publishing, but also aspects of history, philosophy and politics from a Marxist perspective. Students were required to complete three theses during the course, and to take a final examination in 3 subjects: scientific communism, library practice, and bibliography. All instruction in the Republics was in the vernacular languages (Fang, Nauta and Fang 1985). Three major libraries acquired a number of foreign journals and books, and a bulletin was published regularly with summaries of reports on developments outside the U.S.S.R. From the mid-1960s, there were occasional conferences on 'modern librarianship abroad.' However, before the system was influenced by '*perestroika*' and '*glasnost*' in the late 1980s, curricular content seems to have been designed to exclude most references to professional practice outside the U.S.S.R., and the teaching methods may have been didactic. Those limitations on academic and professional development seem to have been swept away as the state's control was relaxed (Richards 1995).

Moscow State Institute for Historians-Archivists offered courses in scientific and technical information, and in archives studies (Fang, Nauta and Fang 1985).

Postgraduate education was also available for those who entered the profession after graduating in other disciplines, and a system of continuing education was well-established (Richards 1995). Advanced training was provided only in Moscow, where a 3-year course and the presentation of a thesis led to admission as a Candidate of the Academy of Science. The highest award was the Candidate of Pedagogical Sciences (Fang, Nauta and Fang 1985). Thereafter, suitable individuals were provided with training for research or for higher administrative positions.

The U.S.S.R. also had a well-developed system of education for paraprofessionals, sometimes known as library technicians, in institutions that formed part of the secondary education system (Terioshin 1995). Vocational training courses at the secondary level were given at Technical Secondary Schools, with a duration of 2 years (from age 15) (Fang, Nauta and Fang 1985).

An All-Union Council on Library Professional Education was established by the U.S.S.R. Ministry of Culture in 1988, at a time when rigid centralization was being rejected and individual institutions were seeking increasing independence in what they taught. It sought to provide a degree of unity in addressing the recognised need to modernise professional education in LIS, while acknowledging the socio-cultural diversity to be found in the regions of the country. It aimed to be representative of all the HEIs teaching the discipline, and worked through a series of Commissions tasked with reviewing specific subjects or areas of library and information work (Ioffe 1995). However, by the time that the U.S.S.R. began to break up, its work was largely unfinished. For example, plans for 1992/93 included the introduction of a new specialisation in scientific and technical information (Petrikina 1995). It is not clear how well developed these plans were, or whether they were actually implemented in the newly independent Republics.

Librarianship as a career is not in demand among graduates in the TEMPUS project's partner countries, and those who had undertaken the available undergraduate courses were not satisfied with the level of teaching and the knowledge obtained. In the early years of the new Millennium, the existing undergraduate curricula were, in their form, content and teaching approaches, still based on 1960s practices. Even so, many graduates in librarianship failed to obtain jobs in libraries. Library administrators tended to prefer graduates in languages, history and sociology as being much more advanced in their intellectual development, but library and information work in these countries was making no significant progress (Hopkinson and Zargaryan 2009a) despite the intellectual level of these recruits, probably because of the heavy handed control of library affairs exercised from Moscow.

National strategies

The social and economic changes in Armenia, Georgia, and Uzbekistan since the breakup of the Soviet Union have caused great upheaval in libraries there. Libraries are currently undergoing reforms to try to make their collections more accessible, but are challenged by the costs of entering a global information network from which they were previously shielded (Gibradze 2001). A large financial investment is needed, but libraries, even the largest, currently have financial difficulties. There seems little reason to disbelieve an earlier assessment that funding levels may not be sufficient to maintain donated equipment, let alone replace it (Myhill 1997), and of the three TEMPUS partner countries only the government of Uzbekistan appears to have an agreed development plan, albeit limited to its educational libraries.

UNESCO's Member States, at the 34th session of the General Conference in 2007, adopted five overarching objectives for the Medium-Term Strategy 2008-2013. By including the objective of "building inclusive knowledge societies through information and communication" (Overarching Objective 5), they clearly recognised the strong links between the creation, access, preservation and sharing of information and knowledge and the building of peace, eradication of poverty, sustainable development and intercultural dialogue. These statements were important for post-Soviet Republics such as Armenia, Georgia and Uzbekistan. To be successful in the realisation of this objective, it was, however, necessary for them to provide libraries, archives, and community information and knowledge resources are preserved and made freely available.

During its early years, UNESCO focused its efforts on improving the situation in the former colonial countries in Africa, Asia, and Latin America. Recognition by UNESCO officials that piecemeal actions by external agencies were no substitute for determined action by national governments, and that the planned economic, educational and social development of the Soviet Union appeared to be successful, led UNESCO to formulate and promote principles for national planning of library and information services development, including the preparation of the requisite human resources. Some evidence may be seen in some of the post-Soviet Republics of a reaction against Soviet-style centralised planning. However, the NATIS principles set out by UNESCO (1974) remain relevant, and governments in the Republics need to review them and consider appropriate mechanisms for their implementation.

International assistance

After the dissolution of the U.S.S.R. and the collapse of the allied Communist regimes, the number of the newly independent states was comparable to the number of states emerging in the post-colonial era in the 1950s. Although these countries mostly fall, according to their GDP per capita, in the same economic range as many of the 'developing' countries, there was no need for creating the fundamental infrastructure of a library system in the post-Soviet Republics that there had been in the former colonial territories. The need was for the rehabilitation and modernisation of the systems and personnel that existed (Shatberashvili and Maru 2008). However, the international community does not generally seem to have recognised the need or been able to make available guidance and support for the post-Soviet Republics that is on a scale anywhere near comparable to the efforts of UNESCO and other inter-governmental organisations in establishing libraries, documentation and archives services, and the scientific and technical information sector, in the former colonial countries in the thirty years after the end of the Second World War.

The collapse of Soviet support for international information development in the Republics was paralleled by a reduction in support by Britain and the U.S.A., whose governments no longer felt under pressure to counter the spread of communism (Richards 1999). British government involvement was further reduced by the Department of International Development's focus on a narrow interpretation of the UNESCO Millennium Development Goals, and the elimination of most of the British Council's activities in the field. UNESCO's ability to intervene had already been severely curtailed by the budget reductions enforced in the mid-1980s, and was further hampered by specific weaknesses that had emerged, resulting in UNESCO ceasing to be a significant international player in the Information field, including:

- the Communication and Information Sector's emphasis on the Communication area
- a focus on ICT as a tool instead of on the content that it delivers and the outcomes that can be achieved from use of that content
- the Sector's poor grasp of effective capacity building methodologies
- not only the funds but also the people available in the Sector not matching up to UNESCO's complex range of responsibilities in the information field (Carpenter *et al.* 2010).

Since then, a number of the recommendations that that critical independent review made are slowly working their way into UNESCO's future policies and programmes. These include measures to raise awareness of policy-makers and communities of the value of information in addressing development issues, stressing not only the importance of access to information, but also the relevance and usefulness of the information. They are supposed to be supported by training and capacity building for information professionals in the former Soviet Republics (UNESCO Intergovernmental Council 2012). It remains to be seen how effective this is.

During the last twenty years, the European Commission has supported many projects in the post-Soviet Republics' universities directly or as part of regional projects. These have aimed at the development of new curricula and teaching

methods, the enhancement of IT provision, and the development of quality assurance systems. Some of these have included funds for purchasing books and short-term subscriptions to journals; few have been solely dedicated to improving library service, even though the sustainability of all these efforts depended to a greater or lesser extent on the ability of the university libraries to sustain the provision of not only appropriate but also adequate resources and services.

In the 1990s, the European Commission supported a number of reviews of LIS education in Eastern Europe, and worked with UNESCO (1995) to move the agenda forward. The Commission also supported a wide ranging study of library economics in that region (Ramsdale and Fuegi 1997) as a basis for reviewing its strategy for future support. Subsequently, the Council of Europe's STAGE programme of cultural policy reviews assessed policies in its member states in the Caucasus at the request of the Ministers of Culture. No comparable programme of guidance seems to have been directed at most of the former Soviet Republics.

While external assistance may be necessary to initiate change, it could also lead to a reduction in the local funding allocated for library development that needs to be sustained over a longer period to ensure that those changes are fully embedded. It is not clear that there has been any expectation that the beneficiaries of aid needed to make a forward commitment to continue support after foreign assistance is withdrawn. Much of the library development that has taken place in the NMPLIS partner countries has depended on external Foundations' funding, but some, such as the Open Society Institute and national Soros Foundations,³ already have a clear exit strategy (Schmidt-Braul 2004). Real and lasting development can only be achieved on the basis of local effort and determination. The progress of library development depends essentially on commitment by the people who control the state budget, which in turn depends in part on the existence of a body of enthusiastic, professional librarians – who are responsible not merely for operational matters, but also for raising awareness of the role and value of libraries and information services. The absence of national government strategies has played a part in permitting uncoordinated and largely unsustainable external assistance.

TEMPUS project NMPLIS

The TEMPUS programme (*Trans European Mobility Programme for University Studies*)⁴ was established in 1990 in the wake of the termination of the Communist regimes in Eastern Europe, aimed at creating co-operation between the European Union and its neighbouring countries. The remit was subsequently extended, and TEMPUS now supports the modernisation of higher education institutions and systems (HEIs) not only in Eastern Europe, but also in the Western Balkans, and in the Mediterranean countries of North Africa and the Middle East. Following the dissolution of the Soviet Union, it also supports, through a sub-programme TEMPUS-TACIS (*Technical Assistance for the Commonwealth of Independent States*), partnerships between HEIs in the European Union and in the former Soviet Republics in the Caucasus and Central

³ OSI - Open Society Foundations: http://www.opensocietyfoundations.org/

⁴ TEMPUS - http://eacea.ec.europa.eu/tempus/index_en.php

Asia. This provides assistance for the HEIs to develop and introduce new curricula, teaching methods or materials, as well as enhancing academic quality assurance procedures and generally modernising the management of higher education at national and institutional level.

A requirement for a TEMPUS 'Joint European Project' is establishing a partnership comprising several institutions from member states of the European Union and from eligible countries. Recently, TEMPUS has encouraged projects that target institutions with similar interests in more than one of the European Union's neighbouring states. There was a clear acknowledgement in several post-Soviet Republics of the need to revise current educational programmes, and/or develop new programmes aligned with current theory and practice in LIS. This project brought together a number of institutions from three countries: Fundamental Scientific Library, and the International Scientific Educational Centre of the National Academy of Science, Yerevan, Armenia; Ilia Chavchavadze State University, Tbilisi, Georgia, and the Georgian Library Association; Tashkent Institute of Culture, and Tashkent University of Information Technology, Tashkent, Uzbekistan. The project, NMPLIS (New Master's Programmes in Librarianship and Information Studies), received funding of €606,912 to facilitate developments between 2009 and 2012. It was supported by Middlesex University (Project Head), and the Robert Gordon University, both from the U.K.; University of Parma, Italy; Rezekne Higher Education Institution, Rezekne, Latvia; and University of Barcelona, Spain.

The aims of the project were to modernise LIS education through:

- enhancement of skills sets to support the growing educational needs of the partner countries' universities in terms of curriculum development in library information and archives studies, the adoption and engagement with innovative teaching and facilitation methods, and the production of relevant teaching and learning resources;
- encouragement of innovative pedagogy and the development of a diverse range of instructional materials and facilitation methods to suit a variety of learning contexts and learning development needs;
- development of academic staff in appropriate assessment methods and practices;
- underpinning and maintaining standards of education and training through the introduction of a quality assurance and enhancement system.

To achieve these aims, it was intended to:

- 1. undertake training and development needs analyses in order to ensure an adequate human capacity development for LIS education and training.
- 2. create human capacity and enhance skills sets to support management of modern well-run traditional and digital libraries and archives in the partner universities through curricular development.
- 3. develop an innovative pedagogy and a diverse range of instructional materials and facilitation methods to suit a variety of learning contexts and learning development needs.
- 4. develop academic staff in aspects of the pedagogy of teaching, learning and assessments methods and practices through gaining a Master's Degree in Library, Archive and Information Studies.
- 5. establish ICT clusters in the partner university Faculties for organising effective teaching and learning

- 6. enhance the libraries of the institutions with essential published learning materials, mostly online and digital but including some printed books.
- 7. introduce quality assurance and enhancement systems to help ensure maintenance and improvement of the quality and standards of provision commensurate with current practices in the European Union.

The project proposed three main activities.

1. Training and development of academic staff from the partner Universities to develop and deliver the new programmes in LIS at Master's Degree level.

The development of the teaching, learning and assessment skills and the knowledge-base of faculty members were essential activities, without which it is improbable that the academic staff of these Universities would be able to contribute to the development and delivery of new curricula. Two 6-week workshops were organised at the Robert Gordon University, during which seminars were held not only on the core content of the University's Master's Degree programmes, but also on the organisation, management and guality assurance of Master's Degree programmes. These workshops were attended by participants who had been identified as teachers for the new Master's Degrees, and who had demonstrated sufficient competence in English, developed as needed through language training provided as part of the project, to ensure that they could take part effectively. The participants were encouraged to follow the online distance learning material for the Master's Degree after their return home, and a number actually completed the assessments for the award of the Diploma at the end of the taught part of the course (which is recognised by the British Chartered Institute of Library and Information Professionals as the academic qualification eligible for professional membership). Although, because of Commission regulations, funding was not available for them to undertake the final dissertation leading to the Master's Degree, several found alternate sources of funding and did complete the Degree.

In addition, a number of short workshops on various themes took place in Tbilisi and Parma, and short placements were arranged in London, Parma and Rezekne.

The benefits from this project are wide-ranging. The new curricula have been designed by the staff teaching them to meet their perception of local needs, and differ from country to country; they are not slavish replicas of the western partners' curricula, and it is recognised that they will need to be subject to continual review and revision. The sustained success of the new Master's Degrees would not only contribute to filling skills gaps in the specific labour market, but also facilitate more effective and efficient library and information support for education, research, and social and economic development in the partner countries. The project has strengthened the relationship between the partners, not only between the European Union and the European 'neighbours' but also, for example, within Uzbekistan where the two partner institutions are now working closely together, whilst addressing different sectors of the market for courses. A notable innovation in course content is the introduction of teaching about management and leadership. These programmes develop the human resource capacity required to deliver advocacy for the continuing modernisation of library and information services, and contribute to the future effective development of these services in the partner countries.

The need for a succession plan for replacing the new programmes' teachers in due course is a recognized concern. The proposed introduction of western style Doctoral programmes in the Uzbek universities seems to offer a solution there, and the NMPLIS project partners have had preliminary discussions about how to support similar developments across the other former Soviet Republics.

2. Establishment in each partner university of an educational development hub for the continuing professional education of librarians and archival workers.

The region's aged professional workforce impedes the development of new skills (Skogen and Smith 2009). An important challenge facing the library communities in these three Republics was the absence of lifelong learning programmes and advanced skills courses for librarians who require professional retraining (Hopkinson and Zargaryan 2009a).

There was an evident and urgent need for modern professional texts in vernacular languages (Brown 2003). Online access to the programmes' open educational resources will contribute to the continuing professional education of the existing workforce. This will raise the general level of professional competence, and thus enhance public confidence in the ability of library and information services to contribute to national progress.

3. Training and development of academic staff from the partner Universities to work in the Virtual Learning Environments.

This is necessary for developing the capacity to deliver the new curricula as distance learning modules for lifelong learners. It proved one of the most difficult parts of the project's aims to fulfil. The problems were not solely practical, as had been anticipated, but theoretical and conceptual. The planned short familiarisation visits to Britain proved insufficient, and there was no scope within the budget for further training.

Future challenges

Although the published evidence is incomplete, library and information services in the former Soviet Republics appear to have developed unevenly since independence.

There can be no assurance that the external assistance that has made a significant contribution to developments to date will continue indefinitely. Book aid is notorious for providing materials which are inappropriate for local needs and whose cataloguing further absorbs scarce professional time. The regular replacement of computers represents a new and particular challenge for budgets that are already stretched. Dependence on short-term grants from international governmental agencies and foundations is no substitute for winning the support of the people who control the regular state budget.

At the time of independence, the library system was not faulty, but was entirely oriented to the circumstances of the Soviet Union. The collapse of the Soviet Union's centralised system had a catastrophic effect on the library and information services of the newly independent Republics. In particular, the

previous dependence on the U.S.S.R. resulted, after independence, on a "lack of management strategy and policy, lack of know-how, and finally the lack of people able to analyse the problems and accomplish indispensible changes" (Garibashvili 2004).

The key to success and stability in the region depends on creating an environment where the internal and international flow of information is more effective. It is clear that the Internet offers a critical part of the solution to current problems. Embedding the use of ICTs in education, the economy, government, and social development does not rely solely on the supply of technology. It seems that a high-level forum needs to be created in each Republic in which a regular dialogue could be maintained to enable the development of library and information services and the associated education and training activities to be integrated with government policies and priorities in all sectors of the economy and society, and to ensure that they are allocated sufficient resources to enable them to fulfil their agreed role. This is unlikely to be created, or to be effective, unless or until there is a cadre of people who not only understand how ICTs and the information that they carry could be used, but who also have the skills to make contact with decision makers in government and institutions and explain this to them in a convincing manner, and then to plan its strategic development.

Government's ability to support the development of library services will depend on the state of the economy. Demonstrations of how libraries and information services can foster economic development are also essential. It is important to recognise that the creation of appropriate database services can help to overcome one problem that may have stood in the way of an increase in international investment. One of the principle reasons why organizations have channelled less money than they might into the former Soviet Republics seems likely to have been their inability to conduct accurate feasibility studies for such projects. The libraries and information services need to consider what they can do to meet the need to make up to date business information about their countries more readily available and to make their efforts to this end more visible. This might go some way to instilling confidence in government that the profession has a useful contribution to make to national development.

A test for the new Master's Degree programmes will be the extent that it is judged, over time, to have produced graduates with skills appropriate for meeting these challenges. Conventional wisdom suggests that a large number of graduates need to be produced from the new degree programmes for them to make an impact on the quality of services and public perceptions of them. The course teams could make a further impact on professional development in the country by offering courses, particularly during the vacation periods, to upgrade the knowledge, skills and attitudes of existing members of the library and information workforce. Currently there is almost no specialized professional literature published in Armenian (Kazaryan 1999; Plassard 2000). A further contribution to professional development would be made if teaching materials prepared by the course team could be made available online for the benefit of the library community in each country. Given the significant need for continuing education for the existing library workforce, and the shortage of professional resources in local languages, open access on the Internet to some of these resources may have a wide impact on development.

Concluding remarks

Librarians in the region are confronted by an increasingly diverse user population, growing demands for both traditional and new services, and declining funds to support these services, and challenged by the rapid redundancy of their professional knowledge and skills and the need for continuous learning (Gibradze 2001). However, in many of these countries, there appears to be little appreciation at government level of how libraries and documentation centres could serve their nations by providing a constant flow of the information that is crucial to educational development, in supporting scientific and technological research, and in providing essential sources of information for government, public and private sector organisations, and society in general, and by the dissemination of information about government programmes and development plans. Moreover, there is no apparent or transparent decision-making process for determining the priorities to be attached to the development of library and information services. Indeed, there appears to be no clear, overall strategy emerging from the governments of Armenia and Georgia that seeks to transform their countries' economies by providing a stronger knowledge and information base. While this may reflect structural deficiencies in the government machine, it is equally unclear whether librarians have made any attempt to represent their services' potential contribution to the achievement of the government's broader objectives. If they have done so, they have not been effective.

The competition for the external funding that may be available in the immediate future seems to have taken precedence over long-term planning. A report for a STAGE project in the Caucasus concluded, correctly, that the major requirements are to introduce strategic planning and management of the nations' library and information services, and to modernise the educational curricula and staff skills, especially leadership skills (Schmidt-Braul 2005). Some library professionals working in the Republics' library and information services have recognised that attention must be given to the analysis of the information demands to ensure the efficiency of the system (Chkhenkeli and Shatberashvilli 1989). However, the governments of many of the post-Soviet Republics still seem to need encouragement and guidance to plan the development of their library and information services, not least to ensure that any future external assistance in this field can be more effective. In the case of Armenia and Georgia, it seems to be necessary to offer some encouragement or assistance to progress the reviews undertaken with support from the Council of Europe to prepare and publish the necessary strategic development plans. In the case of Uzbekistan, there seems to be a plan emerging for some library and information services, but not for others, and a more comprehensive or transparent approach seems necessary. Each Republic needs to develop a system and strategic plan appropriate to its particular information needs and existing information infrastructure.

The modernisation of education and libraries has received financial and technical support from numerous international and national governmental and non-governmental organizations. These agencies and their initiatives seem to exist in an information vacuum of their own making; access to information on their activities is limited and fragmented. The apparent absence of a mechanism for aligning their support with the overall strategy for the countries' information and education infrastructure does not necessarily allow the Republics to achieve their

main purposes. There is clearly a need for some mechanism at national or international level to try to coordinate the efforts of external bodies, to try to ensure that they address the priorities perceived by the national governments, or at least to publicise what is being done. Proposals to strengthen regional cooperative mechanisms for the development of the information infrastructures in the Caucasus and in those Central Asian Republics using the Turkic languages also need further support.

Continuing development depends not only on external assistance or pressure to conform to peers in terms of implementing international standards and norms, but also on appropriate advice about how to achieve them. The infrastructure built by the Soviet Union may have led to misconceptions on the part of external agencies offering assistance and misguided advice to them and to national governments in the Republics. The Western countries' libraries and information services had taken many decades to reach their level of development. Much of what had underpinned the Soviet system ceased to be at the disposal of the Republics. It is not possible to start developing from the point that the Western countries have reached, because the foundations are not similar, and the prior knowledge and implicit beliefs are wholly different. The studies undertaken for this project especially served to highlight the lack of reliable, current, published information, and point to the need for thorough guantitative and gualitative reviews of the situation of library and information services to be undertaken as the basis for any future developments in the post-Soviet Republics. If they are to confront these challenges, national governments need the will to take the necessary action to assemble or review the facts and have the confidence to act on them, but not all the Republics' governments seem to have engaged with this. The structural mode of TEMPUS may offer an existing mechanism for delivering the requisite support for undertaking the necessary surveys and drafting plans for approval by governments. Such surveys could also provide a basis for policy development by the European Commission, which appears to lack a comprehensive strategy for the development of the library and information services required to underpin a knowledge-based economy in these Republics.

It is also important to recognise the enormous replacement of civil servants in recent years. Many people who have entered government or the senior levels of public administration and now hold influential positions lack any deep understanding of the challenges they face. While issues such as the need for advocacy at the ministerial level within countries are fully recognised, it does not necessarily mean that such efforts are always appropriately focused. A primary need in post-Soviet Republics is to raise the awareness of these decision makers in government of the need for a framework for planning library service development and to convince the principal stakeholders to adopt national information policies and develop strategic plans. The efforts of international intergovernmental, governmental and non-governmental organizations might most usefully be initially focused on this task. It certainly seems to demand attention.

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The origins of the project, and an initial, formal evaluation, are summarised in a forthcoming paper by Elena Corradini.

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