THIRD INTERNATIONAL CONFERENCE "LINGUISTIC AND CULTURAL DIVERSITY IN CYBERSPACE"

Yakutsk, Russian Federation, 28 June – 3 July 2014

FINAL REPORT and FINAL DOCUMENT

The Third International Conference "Linguistic and Cultural Diversity in Cyberspace" was convened in Yakutsk, Russian Federation, from June 28 to July 3, 2014. This Conference is part of the activities of the UNESCO's Information for All Programme (IFAP) and is an important contribution to the implementation of the decisions of the World Summit on the Information Society (Geneva, 2003, and Tunis, 2005).

The Conference was organized by the Russian Committee of the UNESCO Information for All Programme, the North-Eastern Federal University in Yakutsk and the Interregional Library Cooperation Centre with the support of the Government of the Republic of Sakha (Yakutia), the Ministry of Culture of the Russian Federation, the Federal Agency for Press and Mass Communications of the Russian Federation, the Commission of the Russian Federation for UNESCO, and in cooperation with UNESCO.

This interdisciplinary forum was attended by leading experts from 48 countries: specialists working in the fields of science, culture, education, communication and information, researchers on philosophical, sociological and anthropological issues emerging from the growing use of Internet and other ICTs, representatives of international and national governmental and nongovernmental organizations, governmental policy makers in the field of knowledge societies development, managers of ICTs and media programmes from the private sector and civil society institutions, as well as executives from Russia's various governmental bodies.

The Conference was built on the recognition of the importance of cultural and linguistic diversity in the digital world. It addressed political, cultural, social, ethical and technological aspects of activities aimed to support and develop linguistic and cultural diversity. The discussions focused on policies, standards and tools necessary to ensure linguistic and cultural diversity safeguarding and preservation and on specific tools for promotion of multilingualism.

To accomplish their work the participants held two plenary sessions and eight sessions of four specific thematic sections:

- Section 1. ICT for linguistic and cultural diversity in cyberspace.
- Section 2. Socio-cultural aspects of linguistic diversity in cyberspace.
- Section 3. Preservation of linguistic and cultural diversity in cyberspace: national vision and experience.
- Section 4. Education for preservation of linguistic and cultural diversity in cyberspace.

Creation and implementation of policies to develop and preserve languages and identification of the best practices in these areas of activities were the conference crosscutting issues.

In conclusion of their work, participants of the Conference thanked the organizers and supporters of the event and adopted the final document – **Yakutsk Declaration on Linguistic and Cultural Diversity in Cyberspace**.

YAKUTSK DECLARATION ON LINGUISTIC AND CULTURAL DIVERSITY IN CYBERSPACE

Final document

of the Third International Conference
"Linguistic and Cultural Diversity in Cyberspace"
Yakutsk, Russian Federation 28 June – 3 July 2014

Preamble

The participants of the Third International Conference "Linguistic and Cultural Diversity in Cyberspace" are conscious that:

An overwhelming majority of peoples in the world have no statehood and sovereignty. As a rule, their languages are not the state languages of their country of residence because a majority of countries are multi-ethnic and multilingual. Even in the most beneficial situation, when the government and the larger, dominant ethnic entities display the utmost care of ethnic and linguistic minorities, most of languages are marginalized to varying extents. They develop or decline in the shadow of a major and fitter language dominant in its country and used in all spheres – political, economic, educational, cultural, scientific, etc.

The relationship between language and culture is one of interdependency. No language can develop outside the culture of the ethnos that created and speaks it. Culture is a function of language, and language is a vector for culture; no one exists without the other. Every time we talk about culture we are addressing language, and every time we look upon language we are reaching culture through it.

The linguistic and cultural diversity of humankind is the tip of an "iceberg" that includes cultural identities, the sense of belonging to a community, personal rootedness, intangible heritage, popular life-crucial knowledge and achievements over the centuries, proper interpretation of local content and much more.

The dissemination of multilingual information on the history, languages and culture of different nations enriches our ability to analyse facts, events and behaviours thanks to multiple viewpoints contributing to the promotion of tolerance and mutual understanding and a peaceful sustainable development of contemporary civilization. Cultural diversity and multilingualism are enablers of well-being and of the successful flourishing of humans.

Languages are stores of a rich and vast amount of human heritage and life-crucial knowledge, i.e. the knowledge necessary for health, well-being, and participation in the local and worldwide community and economy, as well as necessary instruments for social life, the expression and dissemination of social and cultural traditions, self-identification and preservation of human dignity of their speakers, whether these are native to the territory or migrants.

Urbanization and globalization promote the assimilation of ethnic cultures and challenge their majority status, moving them ever farther into the margins. Knowledge and historical and cultural experience stored by these cultures vanish gradually, and the potential of those cultures and languages is reduced. Cultural and linguistic marginalization is an interrelated and interdependent process. A unique culture vanishes with the death of its languages. Meanwhile forecasts say and UNESCO has been continuously warning that more than half of the currently alive approximately 7,000 languages may become extinct within several generations.

Migration and human mobility have experienced an unprecedented increase over the past few years. For the first time ever in 2010, the majority of the world's population was predominantly urban, and this proportion continues to grow. By 2050, more than 70% of the world's population will live in a city. The high concentration of people in urban settings has resulted in an increasing linguistic diversity, a trend that will continue over the next years.

An increasing number of studies show that a well-planned strategy on managing diversity, including the languages of migrants, can lead to social and economic benefits for the society as a whole. Diversity can also create benefits as it increases the variety of goods, services and skills available in urban environments. The increased level of competences provided by diversity can also foster creativity, innovation and economic growth.

The role of ICTs

The global information society is forming rapidly, and the recent relevant social impact of improvements in Information and Communication Technologies (ICTs) makes this a turning point for the preservation of cultural and linguistic diversity.

Ever more people become active users of ICT, particularly of the Internet. It has become an inalienable and essential part of the life of the young majority, due to the extensive opportunities for communication, access to information and knowledge, self-expression, education, leisure and a greatly extended picture of the world. However, Internet services and information are mainly available in the dominant languages and the current absence of certain languages in cyberspace contributes to the widening of the already existing digital information gap. While globalization encourages the merging of cultures and languages into a de facto standard, at the same time emerging ICTs potentially enable the exploitation of different languages and cultures and the flourishing of new alphabets and writing systems.

One of the main issues that is against the strengthening and diffusion of indigenous languages is that they are languages with no written tradition. In the context of our modern world, only a written tradition allows a language to become recognizable and useful. Cyberspace offers a unique opportunity for creating a writing tradition at low cost and with maximal possibilities of diffusion.

The digital era in which we live nowadays provides a unique opportunity to support the active promotion of well being, inter alia via the enabling of multilingualism and preservation of cultural diversity in cyberspace. Existing ICTs offer new opportunities to promote linguistic and cultural heritage for equal and universal access to life-crucial knowledge.

Being aware, in addition, that the increasing number of social media applications available and accessible may offer a relevant contribution to minority languages and cultural preservation and promotion thanks to services, communities and crowd initiatives, we must support initiatives to encourage them further.

Of course "availability" does not always mean "real use"; free or affordable access to ICTs is still a problem in many areas of the world and for many potential users. However, thanks to smart and mobile solutions both the new generation, and even those previously digitally excluded, have entered the digital age. Furthermore we are aware of the potential opportunities and threats connected to this process.

Guaranteeing linguistic and cultural diversity and the survival of every language and culture must be a common goal for humanity. Institutions ought to make commitments and assume responsibilities in relation to linguistic diversity and coexistence between languages.

Differences of languages and cultures should not create either manifest or hidden artificial obstacles for reasonable and fruitful cooperation among nations. This cooperation should be based on the equal treatment of all parties and it should not be governed by any cultural or linguistic prejudices.

The protection of linguistic and cultural diversity should include promoting and sustaining it in cyberspace, by enforcing digital opportunities for all languages.

Taking into account all the above and recalling the

- Outcomes of the First and the Second International Conferences on Linguistic and Cultural Diversity in Cyberspace (Yakutsk, Russian Federation, 2008 and 2011) as well as the Bamako International Forum on Multilingualism (Bamako, Mali, 2009), the 1st International Symposium on Multilingualism in Cyberspace (SIMC I – Barcelona, Spain 2009), the 2nd International Symposium on Multilingualism in Cyberspace (SIMC II – Brasilia, Brasil 2011) and the 3rd International Symposium on Multilingualism in Cyberspace (SIMC III – Paris, France, 2012);

- Universal Declaration on Cultural Diversity which says that "cultural diversity as a source of exchange, innovation and creativity is just as indispensable for humanity as biological diversity for Nature, and is a treasure shared by the entire human race";

- UNESCO Recommendation concerning the Promotion and Use of Multilingualism and Universal Access to Cyberspace;

- Key documents of the World Summit on the Information Society (Geneva, 2003, and Tunis, 2005) and the Vision for WSIS Beyond 2015 (WSIS+10, Geneva, 2014) which emphasize the importance of the preservation of cultural and linguistic diversity and suggest a set of measures necessary to achieve this goal;

The Conference agrees on the following recommendations:

General framework

Local, regional and central governments should play a wider and significant role in preserving, developing and sustaining local indigenous languages and their cultures by providing, in particular, resources for the development of digital tools, and the promotion of education and literacy for these languages to be present in cyberspace.

Governmental bodies at all levels should build professional communities and further develop necessary resources and tools (training courses, higher education courses, educational curricula, preparation of teachers, training for trainers, seminars, research, etc.) to strengthen linguistic and cultural diversity in cyberspace as digital language vitality is only sustainable where the language is spoken and taught. "Digital natives" should not be left alone in the digital arena. They belong to the always-on global communication community. They create their own forms of language to exchange text messages, instant and multimedia messages as an additional legacy for future generations.

This can be done with the help of academia and thinktanks providing the expertise and identifying the best practices on language policies that not only promote all languages and put them on equal footing but also foster dialogue between co-existing languages in specific territories.

The development of natural language processing technologies (Text understanding, Question answering, Information querying, Speech Recognition, Speech Synthesis, (Spoken) Machine Translation and others) is a crucial step for ensuring equal digital opportunities for all languages. Mobile phone, Internet chat and social media interaction should be included in any definition of digital vitality and use of minority languages.

All institutions, organizations, associations and even individuals involved in language development, language planning or language promotion should set up collaborative projects to support lesser spoken languages, with a special attention to

- development of culture-based terminologies;

- production and dissemination of written materials and digital documents in these languages.

Local digital communities (not just read-only material) are also needed for digital ascent. Micro-grants to small communities (literary, theatrical, whatever brings people together) should be provided to document in their native language what they are doing.

Further examination should be made of the:

- identification of all the factors necessary to sustain linguistic diversity;
- link between digital vitality and spoken language vitality;
- impact of digital stillness on a spoken language.

The setting-up of language policies should include the state language, the national/regional language, and also migrant languages, as this is the only way to ensure that all citizens, regardless of their legal status in a territory, can be recognized equally by recognizing the plurality of their languages.

Diversity management of the communities enables a real representation of language minorities to promote stable and sustainable development.

Corpora, the lifeblood of modern computational linguistics, must be unencumbered by Copyright. A research exemption must be enshrined in the legal framework. In addition national projects need to make their corpora not just searchable but also downloadable by ROAMing (randomize, omit, anonymize, mix). Open access to materials collected, as a precondition of funding, must be assured.

The significant part in linguistic diversity is linguistic diversity in scientific production. "Grey" literature naturally incorporates a greater linguistic diversity in scientific production particularly in developing and less developed countries. Promoting "grey" scientific literature can ensure linguistic diversity in knowledge production. Efforts should be deployed to raise the interest of the Academy in "grey" literature and acknowledge the alternative knowledge production it represents.

The open access movement makes scientific publications openly accessible and proposes that they give a greater priority to linguistic diversity so that the production of knowledge in multiple languages is promoted and facilitated, especially life-crucial knowledge.

All publicly funded translations of works should be available under free license for everyone to use and re-use without additional restrictions or exemption from copyright. This should apply both to works that are in the public domain as well as works still being under copyright, so they can be used as soon as copyright to the original work expires. International and national Copyright law systems should be amended in a way to allow all educational, scientific and non-commercial use of global cultural heritage.

In order to promote a widespread positive adoption of the notion of linguistic diversity and a favourable cultural climate that is the precondition for its flourishing, educational and informative tools need to be developed, aiming at correctly informing society at large and at educating the new generations about the value of multilingualism.

Efforts should be made to:

- support, enable and assist the documentation, protection and promotion of regional, minority and endangered languages;
- bring together specialists in specific areas of the world with members of endangered language communities in these areas.

It is very important to ensure long-term preservation of audio and video recordings reflecting linguistic and cultural diversity, specifically of orally transmitted cultures, key elements to ensure demo-anthropological studies. Over the past 60 years, rich collections of such audio-visual recordings have been produced, forming the basis of our present knowledge. Nowadays they can only be preserved by digitization and proper digital preservation of data. Presently, however, the availability of replay equipment for magnetic

audio and videotapes is dramatically shrinking which may bring digitization programmes to a halt. Adequate measures must be taken to respond to this threat in order to prevent such unprecedented loss of irreplaceable documents of the linguistic and cultural diversity of humankind.

At the political level

1. All stakeholders should seek to facilitate the emergence of knowledge societies respecting human rights and values and based on four principles: Promoting freedom of expression in traditional and new forms of media, including the Internet; Access to quality education for all; Respect of cultural and linguistic diversity; and Universal access to information and knowledge, especially in the public domain;

2. UNESCO, especially through its Information for All Programme (IFAP), should pursue in cooperation with relevant UN agencies, IGOs and NGOs the efforts for further development and promotion of ethical, legal and societal principles and norms for preserving linguistic and cultural diversity worldwide, in particular in cyberspace;

3. All stakeholders should encourage governments to enact and implement more effective national policies in support of preservation of linguistic and cultural diversity;

4. All the stakeholders should continue to promote and support the creation and free dissemination of language resources (alphabets, diacritic marks, phonetic language resources, Wikipedia, Wiktionaries, and related technical means (e.g. spell checkers, and generally speaking natural language processors), with specific reference to the use of virtual keyboards), necessary for the use of indigenous and minoritized languages in cyberspace ensuring equal digital opportunities for all languages;

5. UNESCO and its Member States should continue to develop with the relevant IGOs and NGOs policies to enhance the presence (localization and content) of all languages in cyberspace, based on media and information literacy, access to resources and promotion of participation, developing programmes of inclusion of knowledge from languages unrepresented on the Internet, creating a comprehensive and sustainable set of indicators, and promoting a comprehensive view of the digital divide which encompasses the content and linguistic divide;

6. Governments should strengthen existing discussion platforms involving all concerned stakeholders in a continuous interdisciplinary debate on preservation of linguistic diversity in the context of current socio-cultural transformations in globalizing information society/knowledge societies;

7. All stakeholders, especially in academia should develop interdisciplinary research and comprehensive study on the various political, social and cultural challenges especially in education with regard to the preservation of linguistic diversity;

8. All stakeholders, especially governments, scholars and experts in academia, should develop and strengthen educational and awareness-raising programmes, especially among the youth, to form stronger respect of linguistic and cultural diversity and deeper understanding of the necessity to preserve all languages particularly minority/minoritized ones.

The Conference also especially recommends UNESCO, and other relevant international, regional and national stakeholders, to

a. develop and propose an international act on global linguistic and cultural diversity in cyberspace as well as in other communication spaces;

b. stimulate the creation of a worldwide network of competence centres for the study and promotion of multilingualism in cyberspace and for sharing expertise on the subject;

c. set up a working group representing each continent to identify language policies, initiatives, and digital opportunities that best respect the linguistic reality of the territory;

d. invite the National IFAP committees to support the development of culture-based terminologies and promote online publication of indigenous and minority history, events, raw data (Newspapers, Books, Radio-TV Broadcast, Videos, etc.), as well as the production and distribution of annotated corpora, lexica, dictionaries, grapheme-phoneme convertors, parallel corpora, etc. allowing for the development of language technologies;

e. invite the National IFAP committees to create and support a specific action aimed at activating crowdsourcing in order to address autochthonous and minoritized language content digitization (Adopt an endangered language/culture!) and constitute related communities;

f. emphasize the role of the broader literacy context for digital language ascent (work the chain of literacy);

g. conduct comparative study on national policies to sustain languages, including linguistic preservation and development in cyberspace;

h. conduct a survey of the state-of-the-art regarding language resources and technologies for all languages;

i. set up a clearing-house on language technologies to be used for identifying and assessing digital language development;

j. start focusing (including through IFAP) on the possibility of using cyberspace as a laboratory for creating writing traditions for endangered and minority languages;

k. further work on the development of language technologies for minority languages, which can be easily adapted for application from one language to another (easier localization techniques), especially within language families;

l. ensure the availability of language technologies for the largest number of languages through the cooperation of all stakeholders (Member States and regions, public and private research laboratories, industries) under the general coordination of UNESCO;

m. design an Index of Digital Language Diversity, as an instrument for measuring the digital language diversity of a given region and for assessing the type of intervention needed to ensure all languages equal digital opportunity;

n. invite universities in all countries to submit project proposals to international institutions (such as UNESCO Chairs and UNITWIN) to promote multilingualism and cultural diversity in cyberspace;

o. support the documentation of endangered languages in their area and provide an inventory of existing material;

p. start working on the modernisation of the existing Atlas of World Languages by using advantages of modern ICTs;

q. set up fund-raising events and look for possible sponsors of the work in the area.

A Virtual Observatory for Multilingualism and Digital Language Diversity (possibly as a part of the IFAP Information Society Observatory) should be set up in order to:

1. accumulate reliable and up-to-date data about the presence of the world's languages on the Internet, the availability of digital technologies supporting languages, and of infrastructural conditions enabling presence of languages in the digital world;

2. accumulate publications on academic and civil society projects concerning multilingualism in digital world;

3. closely monitor existing language policies that best respect the linguistic reality of the territories, and the efforts and initiatives taking place worldwide to support multilingualism both offline and online;

4. help identify best practices being developed in each continent;

5. highlight what works best in each geographical location and to monitor the extent to which language diversity is digitally reflected;

6. map the researchers working on the subject and the fields of knowledge.

The Conference finally urges UNESCO and other relevant international, regional and national stakeholders to initiate a preparatory process for a World Summit on Multilingualism as it is highly desirable for the preservation and development of the world's languages and cultures in the epoch of galloping globalization.

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This document was produced through a collaborative process involving participants from the following countries - Albania, Argentina, Austria, Azerbaijan, Belarus, Botswana, Brazil, Bulgaria, Central African Republic, China, Colombia, Czech Republic, Dominican Republic, Ecuador, Estonia, Finland, France, Hungary, India, Israel, Italy, Japan, Kazakhstan, Kyrgyzstan, Latvia, Macedonia, Moldova, Netherlands, Nigeria, Oman, Peru, Poland, Republic of Korea, Republic of Maldives, Russian Federation, Rwanda, Slovakia, Spain, Sri Lanka, Sudan, Sweden, Syria, Thailand, Togo, Turkey, UK, USA.