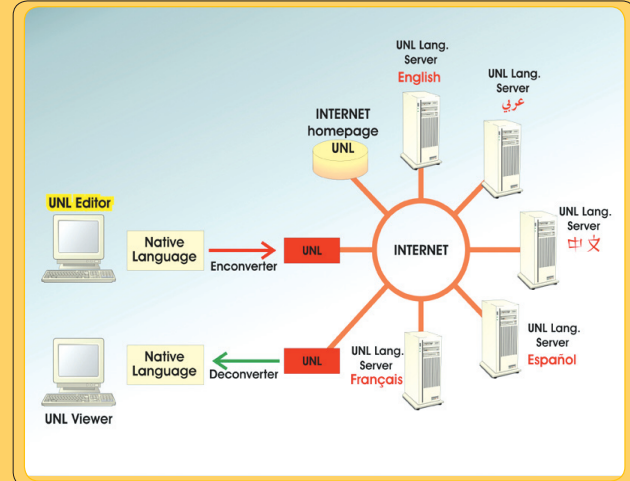
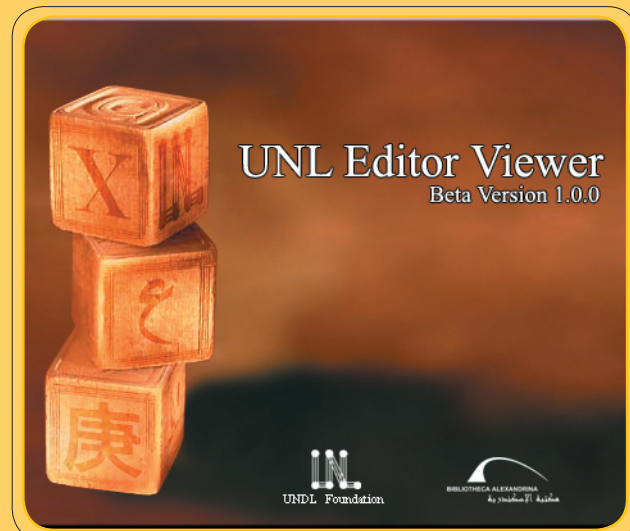


IBRAHIM SHIHATA

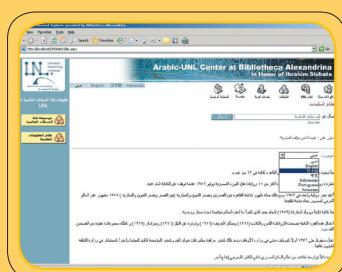
Arabic Universal Networking Language Center (ISAUC)

The mission of the Universal Networking Language Program (UNLP), initiated within the United Nations and devised by the Universal Networking Digital Language (UNDL) Foundation, is to enable all people to generate information and have access to cultural knowledge in their native languages. This global ambitious project focuses on automatic translation based on the Interlingua concept for supporting multiple languages. Universal Networking Language (UNL) is an artificial language that attempts to replicate the functions of natural human language in communication. Moreover, the UNL System will offer a powerful platform for inter-lingual communication in furtherance of the purpose of sustainable development, intercultural understanding and dialogue, and peaceful sharing of economic and social world resources. The Bibliotheca Alexandrina (BA) is taking the lead with regards to the Arabic components of the UNDL.



The UNLP consists of a network of people engaged in the common endeavor of universal access to information. The core of a UNL system is a pair of software to bridge natural languages through UNL: an Enconverter, converting expressions from native language to UNL, and a Deconverter, converting expressions from UNL into native languages. UNL applications include the creation of multilingual web pages, a UNL encyclopedia, and others. A UNL server, including an Enconverter and a Deconverter, will be developed for each of the contributing languages. UNL language centers worldwide will host their respective UNL servers and cooperate for the improvement of the UNL system at large. Currently, 15 languages have been involved and a number of institutions have started work on their respective native languages.

In July 2004, partnership with UNDL was established and an agreement was signed in favor of the BA to host the Ibrahim Shihata Arabic-UNL Center (ISAUC). ISAUC will play a major role in designing and implementing the Arabic component of this language and will act as an active language center for Arabic. A team of highly qualified software engineers has been formed from the International School of Information Science (ISIS), BA affiliated research center, in addition to some of the best linguists from Egyptian universities. The entire group was trained by the UNDL.



Areas of cooperation between the BA, the UNDL Foundation and the various Language Centers worldwide include:

- Development of the UNL language, in particular related to the Arabic language module;
- Development and maintenance of the Arabic language server;
- Development of specific applications of the UNL, in particular the UNL Encyclopedia and the UNL Library Information System;
- Development, improvement and use of the UNL System worldwide;
- Assistance of third parties in the use of the UNL System, in particular international and regional organizations, governments, academic institutions, and cultural entities.

By early 2006, progress has been made in several components. An Arabic Dictionary has been designed and produced with over 70,000 entries. Arabic Corpus refers to a large collection of texts annotated with Meta information describing usage of the language vocabulary. Moreover, three applications were designed and developed:

- The Language Server Software, which is responsible for receiving and processing users' requests for the Deconversion and the Enconversion, and sending back replies;
- The UNL Proxy Server software, which filters web requests for pages containing UNL expressions;
- The UNL Integrated Development Environment (UNL IDE), used to enable users and developers to view the UNL semantic network.



The partnership of the Ibrahim Shihata Arabic-UNL Center (ISAUC), hosted by the BA and the UNDL, has exploited the

research and development capacity of the Egyptians that was internationally recognized. In November 2005, during the World Summit on the Information Society (WSIS) in Tunis, ISIS demonstrated the design of the UNL Library Information System project. Currently the BA is taking part in training new UNL members on UNL concepts and orientation on using the UNL Integrated Development Environment.

MORE INFORMATION

about this project and other ISIS projects is available at
www.bibalex.org/isis.

