Facilitating Communication Between Languages and Cultures: a Computerized Interface and Knowledge Base

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The Universal Networking Language (UNL) deals with communication, information, knowledge, language, epistemology, computer sciences, and related disciplines. This interdisciplinary endeavor calls for theoretical and applied research, which can result in a number of practical applications in most domains of human activities. Specially, it can help solving some of the most critical problems emerging from current globalization trends of markets and geopolitical interdependence among nations. This paper presents a project that aims to contribute with UNL KB (UNL Knowledge Base) theoretical and practical. The goal is to make possible people from various linguistic and cultural backgrounds to participate at UNL KB construction in a distributed environment.

1 Introduction

This paper presents a project that will be developed by the following partners: Information System Interfaces (ISI) Research Group at University of Geneva, the UNDL Foundation, and the United Nations Institute for Training and Research (UNITAR). This project is part of the Geneva International Academic Network Programme (GIAN). It involves creation of ontologies, for the Universal Networking Language (UNL) Knowledge Base (KB).

The project argues that the construction of these KB ontologies will contribute to the United Nations initiative of creating the multilingual infrastructure on UNL. Its infrastructure is meant to facilitate communication among natural languages on the Internet and includes development of a broad knowledge base from diverse linguistic sources and cultural backgrounds [10].

The UNL multilingual infrastructure is an interdisciplinary undertaking that involves both linguistic and engineering aspects. Its main components are (1) a formal, language-independent, non-ambiguous artificial language (UNL) and (2) a system that manages the interfaces between natural languages and the UNL over computer networks. The UNL itself comprises a vocabulary - a list of concepts, called “univer-

Universal Network Language: Advances in Theory and Applications.
Research on Computing Science 12, 2005, pp. 359–369.