The KYOTO Project: Introducing a multilingual view towards global infrastructure in semantic computing and knowledge engineering

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"Knowledge-Yielding Ontologies for Transition-Based **O**rganization" (KYOTO) is funded by the European Commission as a 7th Framework project (Objective ICT-2007.4.2: Intelligent Content and Semantics). It aims to develop a content enabling system that provides deep semantic search. KYOTO will cover access to a broad range of multimedia data from a large number of sources in a variety of culturally diverse languages. The data will be accessible to both experts and the general public on a global scale. The consortium consists of research institutes, companies and environmental organizations: Vrije Universiteit Amsterdam (The Netherlands), Consiglio Nazionale delle Ricerche (Italy), Berlin-Brandenburg Academy of Sciences and Humantities (Germany), University of the Basque Country (Basque Country), Academia Sinica (Taiwan), National Institute of Information and Communications Technology (Japan), Irion Technologies (The Netherlands), Synthema (Italy), European Centre for Nature Conservation (The Netherlands), World Wide Fund for Nature (a.k.a. WWF), and Masaryk University (Czech).

The goal of KYOTO is to construct a language-independent information system for a specific domain (environment/ecology/biodiversity) anchored in a language-independent ontology that is linked to wordnets in seven languages. For each language, information extraction and identification of lexicalized concepts with ontological entries is carried out by text miners ("Kybots"). The mapping of language-specific lexemes to the ontology allows for cross-linguistic identification and translation of equivalent terms. The infrastructure developed within this project enables long-range knowledge sharing and transfer across many languages and cultures, addressing the need for global and uniform transition of knowledge beyond the specific domains addressed here.

Project Website: http://www.kyoto-project.org