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Tesi di dottorato

Information Technology per IATE, la banca dati terminologica multilingue dell'Unione Europea

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Abstract

Information Technology is the matrix and engine of innovation and change. Thanks to it, various disciplines and sciences evolve and permeate each other. Terminology is one such example.

InterActive Terminology for Europe (IATE) is the multilingual, interinstitutional terminological database of the European Union and its objective is to provide a centralised infrastructure for all the EU terminological resources, improving their usability and standardization.

The objective of this research is to investigate how to improve IATE's linguistic and terminological resources.

The present thesis outlines the most recent Information Technology (IT) developments oriented at IATE's terminology management. It focuses on the projects realized at the Directorate General for Translation of the European Parliament, aimed at the improvement of EU terminology through the use of termbases, as well as on the cooperation agreement between the *Dipartimento di Scienze Politiche, Sociali e della Comunicazione* of the University of Salerno and the Terminology Coordination Unit of the European Parliament, whose objective is to make the database terminology a tool for semantic interoperability, i.e. the ability of an informatics system to elaborate and exchange data while keeping their precise meaning, regardless of the means and mode used to represent it.

The first chapter presents some of the main theoretical approaches of the scientific literature on the topic, showing their origin, different perspectives, metholodogies and objectives. Moreover, it shows the relation between terminology, translation and informatics, with a special focus on the use and development of termbases, which are databases consisting primarily of information about domain-specific concepts and the terms that designate them.

The second chapter deals with the activities of the Terminology Coordination Unit (TermCoord) of the European Parliament within the framework of the Directorate General for Translation (DGTRAD). It describes the tools used by the translators and terminologists of the European Parliament for terminology management.

The third chapter analyses IATE, the multilingual terminological database of EU institutions and bodies. After a brief historical overview, it shows the general principles, the structure, the recommendations and the best practices for the creation and management of terminological entries. The chapter concludes with the future developments aimed at improving this huge database, which contains 8.5 million terms in the 24 official EU languages in its publicly accessible version and 8.6 million terms in 125 languages in its internal version (including terms in 101 non-official EU languages).

The fourth chapter presents the initiatives and programs promoted by the European Union in the field of semantic interoperability and describes projects from industry and university research centres aimed at IATE's semantic interoperability.

The fifth chapter demonstrates how IT tools and terminology can contribute to IATE's semantic interoperability. It analyses the most recent developments in the framework of European institutions concerning the use of IATE's terminology in translation tools, with a special focus on

the European Parliament. It describes the developments of a project entitled "Terminology in Studio", which is aimed at improving terminology consistency and the quality of documents through the use of termbases in SDL Trados Studio, a computer-assisted translation (CAT) tool.

The thesis also presents the activities of a project arising from the cooperation agreement between the *Dipartimento di Scienze Politiche, Sociali e della Comunicazione* of the University of Salerno and the Terminology Coordination Unit of the European Parliament, aimed at creating terminological entries that will support IATE's semantic interoperability.

Finally, the appendix shows the relation between terminology management and translation, and proposes analytical cards about the most recent terminology extraction technologies.