Towards on-line knowledge sharing dictionaries for European law: the Legal Taxonomy Syllabus 3.0

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1 Introduction

Legal language is very different from the ordinary language. Ordinary language is characterized by ambiguity and variety, such as polysemy and synonymy, while legal language aims to be precise and determinate [1]. In fact, law is mainly made by words and lawyers tend to employ words in a technical way [2]. However, legal language is not always accurate because ordinary language is used in courts as well as in the legal literature where description of facts and legal reasoning are done through common words. Moreover, new issues as in the case of electronic commerce or biotechnologies require legal terms to cope with and the legal lexicon is often dependent by the reuse of common words with a rather technical meaning [3]. Translation has often been defined as the process toward reformulating a given texts in another language, so that the meaning of the source language is transferred into the target language [4]. Several difficulties arise from legal translation because the shift from technical to ordinary language and vice versa does not have the same extent and modalities in different jurisdictions [5].

European Union law is drafted in 23 official languages and then implemented in the national legal orders [6] where the legal languages are partially different from the EU official languages [7]. For this reason, the European Court of Justice (ECJ) is called upon to interpret provisions of EU law in particular when the meaning of concepts or terms used by the legislator gives rise to doubts, as it has been pointed out in famous judgement C-283/81⁴, which recognized that "even where

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⁴ Case 283/81, Srl CILFIT and Lanificio di Gavardo S.p.A v. Ministry of Health, [1982] ECR, 03415

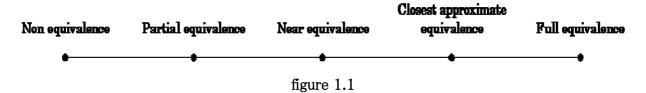
the different language versions are entirely in accord with one another, EU law uses terminology which is peculiar to it. Furthermore, it must be emphasized that legal concepts do not necessarily have the same meaning in Community law and in the law of the various member states" [8]. National legal concepts are bound by national legal and cultural traditions, which makes the interpretation of these concepts difficult outside their own legal system.

Terminological and ontological tools, as shown by projects like the Legal Taxonomy Syllabus (LTS), may address such a multilingual complexity in order to facilitate the communication and the harmonization of European law⁵ [9]. In this paper we describe the upcoming third version release of LTS by paying particular attention to the methodological issues for a better harmonisation of European law and an improved multilingual translation support [10].

2 State of art

..2.1 Questions about legal translation in European Law

Legal translation is a type of translation where concepts represented by legal terms are closely related to the legal systems to which they originally belong. They are the outcome of several historical and cultural influences and it is rare that a legal term has a perfect equivalent in another legal system [11]. This situation is depicted by the legal equivalence theory elaborated by Šarčević [12] and De Groot [13]:



In the translation process from the legal system A to the legal system B, it may happen that legal terms are easy to be translated at terminological level, but their context of application and the extent of the meaning they convey remain different.

This conceptual misalignment is augmented in the European law, where the translation process is twofold: vertically and horizontally directed. The first takes place at European Union level,

further references see http://www.eulawtaxonomy.org.

⁵ LTS version 1 was originally developed during the TMR research programme "Uniform Terminology for European Private Law" (2002–2006) funded by the European Commission. LTS version 1 was focused on the terminological tables and the ontological representation of European consumer law with reference to its implementation in five legal languages and six legal orders (EU, English, French, German, Spanish and Italian). For

where secondary law is translated into 23 official languages, while the second one takes place at Member States level, where European legal measures are implemented in the national legal languages [14].

The transposition of EU directives on private law- especially in the field of consumer law-is disrupting the unity of legal systems as modelled by civil and commercial codes as well as by judicial decisions. This is usually considered as a matter of coordination between different rules, such as the European consumer law remedies against national contract or tort remedies [15]. However, a crucial point of legal harmonisation in Europe is constituted by the way to represent the relations among the terms imported from the European level and the pre-existent national ones. Beyond the statutory texts and the judicial decisions, the interpretation of scholars and practitioners create a taxonomy of legal concepts that appeal to the coherence of the legal system⁶. The problem is that such a taxonomy of concepts is never documented in a complete way.

The challenge for multilingual legal translation is to map the several national taxonomies and to represent non only their internal relations, but also their external relations when concepts from the European law or from other national taxonomies (through the medium of EU law) are transposed into the national ones.

... 2.2 Methodology of LTS: From Terminology to Ontology

Taxonomical research may effectively contribute to face this challenge [16], even by the means of software instruments specifically designed by comparative lawyers, such as the LTS that is an online ontology based tool to annotate and to recover multi-lingual legal information about European law. LTS allows linking terms from articles of laws, from judicial decisions and from legal literature by using a XML format to convert each text entry or corpus acquisition. The XML standards widely adopted in the online documentation services may allow a future semi-automatic integration with external large repositories⁷. Many studies have been devoted to the

Taxonomy may be intended as the "conceptual framework" under the legal terminology used in each jurisdiction [6].

Extensible Markup Language (XML) is a simple, very flexible text format derived from SGML (ISO 8879). Originally designed to meet the challenges of large-scale electronic publishing, XML is also playing an increasingly important role in the exchange of a wide variety of data on the Web and elsewhere. It is defined in the XML 1.0 Specification produced by the W3C, available at http://www.w3.org/TR/REC-xml.

standards XML for legal applications in order to improve the interoperability among different institutional and private databases of laws and judicial decisions, such as MetaLEX/CEN, LeXML (EU); LegalXML (USA); LAMS e JSMS (GB); AKOMA NTOSO (North Africa) [17]. LTS includes two kinds of tools combined under a specific methodology: terminological datasets with annotated legislation and case law together with ontological maps. Terminologies and ontologies are normally used for the same purposes despite their differences. According to ISO 1087-1, terms are defined as "verbal designation of general concepts in a specific subject field". Terms remain linguistic entities and they are not constrained by any formal logics or description such as ontologies [18], which may lead to problems like cyclicity and redundancy within a terminology. In a multilingual setting, multiple concepts from different levels, such as European and national ones, can belong to the same subject field and may be expressed by same terms in a target language, even if they exhibit a diverse taxonomical organization, as in the above mentioned example of consumer law. The effect of this combination is rarely considered since the principal challenge for terminology is to construct the system of terms in a single jurisdiction and for a particular legal domain. When coping with translation, such a system of terms is compared with others from different jurisdictions. Conversely, LTS aims at integrating several systems of terms in order to allow many taxonomical organizations and the super-ordinated ones at both. In that respect, terminology and ontology are two complementary resources in the LTS architecture. An ontology may be built not only through the axiomatization by formal logics or description, but also through a set of lexical semantic relationships involving the terms. For example, terms in a domain are often related to each other through a range of semantic relations such as hyponymy and meronomy. In LTS architecture, domain experts are required to annotate semantic relationships in the acquired terminological datasets of LTS. These terminology trees contribute to the localization of ontologies, whether these outcomes are processed through the application of ontological relations mainly obtained by existing conceptual schemes, such as top level formal ontologies, lightweight ontologies from jurisprudence and homologation schemes developed by comparative lawyers [19]. These relations may reorder several taxonomies in alternative super-ordinated organizations, allowing scholars, practitioners and translators to obtain relevant information about the effectiveness of the diverse choices. However, the LTS main limitation is constituted by the large amount of highly skilled human resources required for the terminological and ontological annotations, because two kinds of developers are needed. The

first kind of developers ("lawyer") is allowed to collect the legal terms, identifying the semantic relations to connect the various terms within a European or a national taxonomy. The second kind of developers ("ontologist") is allowed to rearrange the terms inserted into the system by the means of ontological relations in order to hierarchize the terms according to different existing conceptual schemes [20].

3 Passwords of 3.0 LTS: sharing and free access

...3.1 The LTS as a wiki system

To overcome the above mentioned limitation of LTS, a specific development tool has been implemented and integrated in the third release of LTS. Such a tool is based on a wiki system to allow specific "communities of practice" to develop terminological and ontological annotations in each domain of interest [21]. A broad community participating in the annotations increases probability of their completeness. The web-based architecture of wiki-software is an ideal facilitator for exposing legal domains to a vast audience increasing the number of potential contributors. While the degree of LTS completeness is strictly dependent on the number of involved people, the quality of annotations may be obtained through the use of an advanced wiki system with version management and control functions. Internet social networking is providing a new way for information sharing and knowledge dissemination. An essential feature is user generated content enabling sharing, co-creating, co-editing, and co-construction of knowledge reflecting the competences of the users. The wiki system allows several kinds of users with different privileges, according to their status: experienced researchers, early stage researchers, practitioners, citizens. This multi-user functionality is also crucial for the translation process, especially in Europe where the legal terminologies are in a state of transition. Central to any translation process is the issue of quality. The accuracy of translations can vary widely, especially in multilevel institutional settings where the negotiation of meaning is the norm. Systems based on iterative methods, where multiple people verify accuracy and quality, and where knowledge is captured in context documentation and terminologies, yield the best results over time. Finally, the LTS 3.0 enabling communities of practice with diverse levels of competences allows to track reputation and to reinforce better solutions that may be useful for optimal matching with translators' needs.

...3.2 LTS 3.0: The impact on scientific communities and society

LTS 3.0 is envisaged to be able to share knowledge among different kinds of communities that may adopt public or private access policies about their knowledge bases developed on the LTS architecture.

The first is connected with the scholars and practitioners interested in the Europeanization of law with a clear emphasis on educational purposes. The co-creating, co-editing, and co-construction of multilingual legal knowledge may play a role for continuing legal education and a life-long learning process. Despite the effects of EU law on several areas of law, different countries develop legal education differently with particular attention to their own national legal traditions. Projects such as the LTS 3.0 may complement the efforts to harmonising European law from a bottom up approach by creating communities of practice across national borders. Moreover, these communities may be populated of lawyers as well as laymen in line with the critical aspects of every reform that is the consulting of stakeholders and the improving of the citizens participation.

Another kind of users is constituted by the research groups working on European law. They may have an advantage of using LTS 3.0. over other distance communication tools. LTS 3.0. may address the needs of such groups whose members are localised in different parts of Europe in order to refine their knowledge and to draft proposals with a consistent terminological apparatus⁸.

Knowledge is recognized as an important and central asset for the competitiveness of modern public and private entities [28]. One of the most important aspects of Knowledge Management is the way to share knowledge without loss or distortion of information. Prospectively LTS 3.0 may serve as the basis for in-house services of legal compliance support for companies and public administrations. Particularly to solve European multi-level compliance issues affecting their organizations, LTS 3.0. can support the rewriting of content from specialized sources, such as European and national legal texts, to organizational language, such as internal policies.

Joint Research Center, European Public Law Center.

⁸ Many research project and scholarly communities are active in Europe, such as Commission on European Contract Law (Lando Commission), Commission on European Family Law (CEFL), European Center of Tort and Insurance Law (ECTIL), European Group on Tort Law (Tilburg Group), SECOLA (Society of European Contract Law), Study Group on an European Civil Code (Von Bar Group), The Common Core of European Private Law Project (Trento Group), Joint Network on European Private Law (CoPECL), European Public Law Organisation,

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