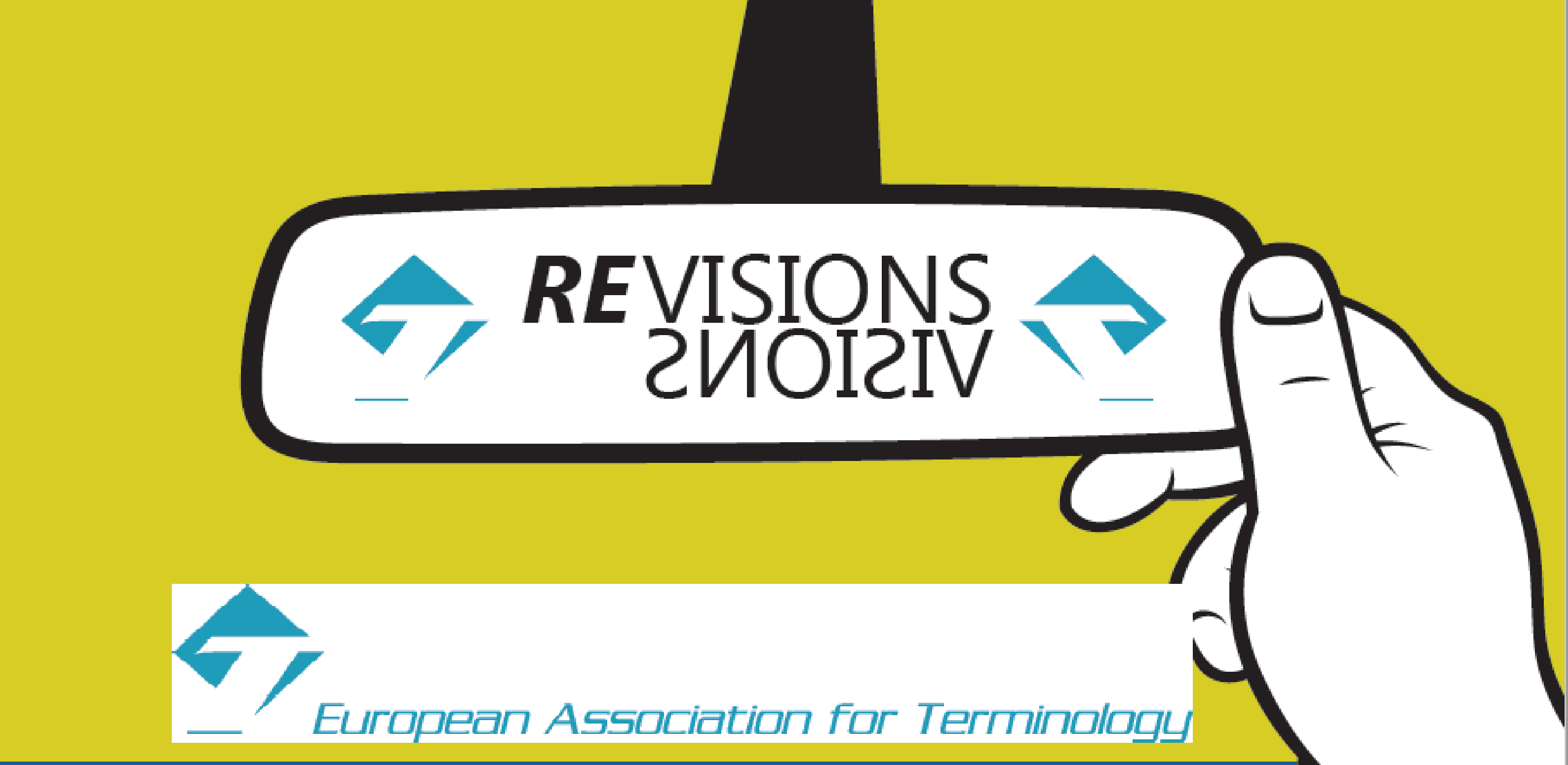

VIII EAFT Terminology Summit
VIII Sommet de Terminologie AET

Schuman Chamber, Luxembourg, 14-15 November 2016

proceedings

actes

Dedicated to the memory of

Annelise Grinsted

(1948–2016)

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FOREWORD

Henrik Nilsson

EAFT President

Annelise Grinsted, the first EAFT President in 1996, said in an interview in 2006: “It is always wise to stop and reflect.” So that was what we did.

In 2016, the EAFT celebrated its 20th anniversary – and self-reflection seemed to be in vogue. Therefore, the 8th EAFT Terminology Summit (organized in collaboration with TermCoord in Luxembourg on 14–15 November 2016) was a good opportunity to look back at the past and look to the future at the same time, to present both revisions of the themes of earlier Summits (and see what had happened since then) and visions of where terminology needed to go from there.

The overall topic for the Summit was: “Visions and revisions”. “Revisions” should not be thought of as an overly critical activity that would also include some changes or corrections, but rather as a way to revisit and reflect upon the previous thematics from a new perspective.

The 8th Terminology Summit was organized into 8 sections, each summarizing the main ideas or themes of an earlier Summit: Cooperation & Collaboration, Social Media, Quality Matters, Responsibility, Interaction and Diversity, the Terminologist’s Profile, State Of The Art/Domain Loss, Declaration. (I remember suggesting to the EAFT Board some years ago that a whole Summit be devoted to the theme of “domain loss”, but at the time it was not considered mature enough. Only later did this issue take on proportions worthy of a Summit and it is therefore included alongside State-of-the-art in one section.)

The idea was that each section was to contain at least a revision and a vision related to the thematic of the section. Some areas that might appear to be missing from the above (e.g. terminology training, terminology research, terminology standardization, terminology management, terminology tools) were in fact not missing, but rather they appeared in several sections.

There were also open sessions, where professionals who wanted to share their experiences relating to the Summit topics could do so during a set time limit. The open session was a new idea, since the Summit has traditionally been an event with invited speakers only, rather than a traditional conference with a call for papers. The open session was seen as a way of giving more people the opportunity to speak.

These proceedings present some articles, based on the presentations of the speakers at the 8th EAFT Terminology Summit. Most articles have a summary in French or English (depending on the language of the article). The French translations were funded by a grant from DGLFLF (Délégation générale à la langue française et aux langues de France) and carried out by Anca Velicu, University of Bucharest.

Although the Summit has always been one of the most important activities of the EAFT, it should also be remembered that the EAFT supports other events and also organizes separate workshops in between, or in connection with, the Summits. But the Summit does have a special place in our hearts, as an event where the big issues can be highlighted and discussed. In a time where terminology organizations and events are becoming more and more scarce and terminology training programmes are being closed, this seems more important than ever.

PRÉFACE

Henrik Nilsson

Président de l'AET

En 2006, Annelise Grinsted, la première présidente de l'AET en 1996, a déclaré dans une interview: « Il est toujours sage de s'arrêter et de réfléchir. » C'est ce que nous avons fait.

En 2016, l'AET a célébré son 20ème anniversaire – et l'autoréflexion semblait être en vogue. Par conséquent, le 8ième Sommet de terminologie de l'AET (organisé en collaboration avec TermCoord à Luxembourg les 14 et 15 novembre 2016) a été une bonne occasion de revenir en arrière et de présenter simultanément les deux révisions des thèmes des précédents Sommets (de voir ce qui s'est passé depuis) et des visions portant sur la terminologie devrait aller de là.

Le thème général du Sommet était: « Visions et révisions ». Ici, la « révision » ne devrait pas être considérée comme une activité trop critique qui inclurait également certains changements ou corrections, mais plutôt comme un moyen de revisiter et de réfléchir sur les thématiques précédentes à partir d'une nouvelle perspective.

Bien que l'idée d'organiser le Sommet de Terminologie d'AET autour d'un thème central n'ait pas été introduite depuis le début, le 8ième Sommet de Terminologie était composé de 8 sections qui tentaient de résumer les principales idées ou thèmes des précédents Sommets: Coopération & Collaboration, Médias Sociaux, Questions de qualité, Responsabilité, Interaction et diversité, Profil du terminologue, État de l'art/Perte de domaine, Déclaration. (Je me rappelle avoir suggéré au Bureau de l'AET de consacrer tout un sommet au thème de la « perte de domaine», mais à l'époque, ce n'était pas assez mûr comme sujet.) Plus tard, cette question a pris des proportions dignes d'un Sommet et conséquemment inclus à côté de l'État de l'art dans une section.)

L'idée était que chaque section devait contenir au moins une révision et une vision liée à la thématique de la section. Certains domaines qui semblent peut-être manquer à ce qui précède (par exemple : la formation en terminologie, la recherche en terminologie, la normalisation terminologique, la gestion terminologique, les outils terminologiques) ne manquaient pas, mais ils apparaissaient dans plusieurs sections.

Il y avait aussi des sessions ouvertes, où les professionnels qui voulaient partager leurs expériences sur les sujets du Sommet pouvaient le faire pendant une période déterminée. La séance ouverte était une nouvelle idée introduite puisque l'idée originale du Sommet était un événement avec des conférenciers invités seulement et non celui d'une conférence traditionnelle avec appel à communications, et c'était perçu comme un moyen de donner à plus de gens l'opportunité de parler.

Ces actes présentent quelques articles, basés sur les présentations des intervenants au 8ième Sommet de terminologie d'AET. La plupart des articles sont accompagnés d'un résumé en français ou en anglais (selon la langue de l'article). La traduction a été rendue possible grâce à une subvention de la DGLFLF (Délégation générale à la langue française et aux langues de France) et à travers le travail d'Anca Velicu, de l'Université de Bucarest.

Bien que le sommet ait toujours été l'une des activités les plus importantes de l'AET, il convient également de rappeler que l'AET soutient d'autres événements et organise également des ateliers séparés, entre les Sommets ou en relation avec ceux-ci. Mais le Sommet a une place spéciale dans nos cœurs, comme un événement où les grands problèmes peuvent être mis en évidence et discutés. À une époque où les organisations terminologiques et les événements deviennent de plus en plus rares et où les programmes de formation en terminologie sont en cours d'être fermées, cela semble plus important que jamais.

OPENING SPEECH

Valter Mavrič

Director-General of DG Translation/Directeur général de la DG Traduction

Honourable minister, dear EAFT President, dear colleagues and guests,

It is an immense pleasure to welcome you today to this historic venue – the very first hemicycle of the European Parliament (1973) – for this, the VIIIth Terminology Summit of the European Association for Terminology (EAFT). A historic venue for a historic moment, as a little over two decades ago, on 3rd October 1996 in Kolding, Denmark, the EAFT was founded. We are thus celebrating its 20th anniversary – a very happy birthday to you all!

As one of the key components of multilingualism, terminology goes right to the heart of our work here at the European Parliament's Directorate-General for Translation. Our dedicated terminology unit, TermCoord, together with all the terminologists from the various language units, all play a very active part in the overall architecture of EU terminology, and they do so for three main reasons:

1. Firstly, as co-legislator with the Council for the ordinary legislative procedure, it is Parliament that is responsible for the linguistic quality and consistency of translated legislative texts, which become original legal acts in every single official and working language of the EU;

2. Secondly, with deadlines often tight, the nature of parliamentary output and session documents is such as to require proactive work and meticulous terminology research;

3. And lastly, whenever a new official language is introduced – most recently Croatian – terminology is pivotal. Preliminary terminology work must be extensively undertaken in order to translate the acquis communautaire and lay the groundwork for the translation of all new EU acts. This demands concerted efforts to work together with national linguistic authorities, as the fabled European jargon – Eurospeak – has to be transposed or, in lieu of any clear equivalents, even created outright. Here, terminologists play an absolutely essential role.

Nous avons l'honneur d'accueillir un grand nombre d'éminents terminologues en provenance d'universités et d'organisations internationales. Leurs contributions à ce sommet portent sur des sujets importants et d'avenir. Je les remercie tous d'avoir fait le chemin jusqu'à Luxembourg et je suis certain qu'ils feront de ce sommet une réussite.

Permettez-moi de relever que la réussite d'un séminaire de cette envergure dépend non seulement des intervenants, mais aussi du public. Et je vois que nombre de terminologues de nos unités linguistiques sont présents ici aujourd'hui. Je saisis donc cette occasion pour saluer nos terminologues qui, par leurs efforts quotidiens, apportent une contribution cruciale aux travaux de notre direction générale et plus particulièrement de nos traducteurs. Je salue également les collègues de l'unité de Coordination de la terminologie qui ont organisé ce sommet avec brio.

Enfin, je ne peux que me féliciter que l'Association européenne de terminologie aie décidé de tenir ce VIIIe sommet en nos murs, honorant ainsi la direction générale de la traduction du Parlement et permettant aux collègues du Parlement et des autres institutions européennes de participer à ces débats.

Enfin et surtout, merci à vous, Mme la Ministre Erna Hennicot Schoepges, d'avoir accepté de participer à l'ouverture de ce sommet de la terminologie. Je sais, pour en avoir déjà eu l'occasion d'en parler avec vous, que le caractère multilingue du Luxembourg vous tient également à cœur et qu'en tant qu'ancienne députée au Parlement européen, vous avez pu goûter aux joies du multilinguisme au Parlement. C'est un grand honneur de vous compter parmi nous aujourd'hui. Villmools merci !

KEYNOTE SPEECH: Luxembourg, un don du multilinguisme

Erna Hennicot-Schoepges

Hon. Minister of Culture of Luxembourg

Une cordiale bienvenue à Luxembourg dans cet hémicycle si intimement lié à l'histoire des institutions européennes, puisque c'est ici que le premier Parlement Européen élu s'est rassemblé en 1979. Quand on a demandé à Umberto Eco quelle était selon lui la langue de l'Europe, il a répondu : C'est la traduction !

Vous, qui êtes confrontés à la multitude des langues, à laquelle on s'apprête maintenant à ajouter encore le Luxembourgeois, les services que vous rendez au fonctionnement des institutions sont inestimables. J'avoue que parfois durant ma vie parlementaire je préférais écouter le traducteur plutôt que l'orateur, et parfois je me suis demandée comment vous avez réussi à donner une structure au discours par la traduction.

Au titre de mon discours, il manque le point d'interrogation. Qui saurait en effet prédire si d'ici quelques décennies la multitude de langues pratiquées au Grand-Duché ne sera pas dépassée et quel sera alors l'avenir de notre langue le Luxembourgeois. L'initiative populaire de vouloir en faire une vraie langue d'administration suscitera certainement un débat, non seulement linguistique, mais surtout identitaire.

Identité

A l'occasion d'une conférence faite à Berlin à l'Institut pour la Diplomatie Culturelle j'ai demandé aux étudiants de définir leur identité. Les réponses étaient très diverses : les uns se disaient européens nés de parents de nationalités différentes, ayant grandi dans plusieurs pays, avec des attaches à plusieurs cultures. D'autres se sentaient proche de leur pays, ou définissaient leurs racines par leur famille, leur religion, leur culture, leur langue. Encore d'autres disaient se sentir apatrides, sans racines !

Cet épisode n'est évidemment pas représentatif pour un débat de fond sur l'identité, la nationalité et l'appartenance ethnique d'une personne. Toutefois les jeunes générations qui dès leur petite enfance ont voyagé et vécu dans différents pays en ont des perceptions différentes de celles qui à force de luttes et de guerres ont acquis une nationalité définie par des frontières géographiques. Est-ce que l'Etat Nation seul peut être synonyme d'identité ? Le Luxembourg avec ses brassages de nationalités et son multilinguisme séculaire peut être considéré comme un laboratoire pour l'étude de cette question.

Le Grand-Duché et son histoire

Quelques bribes d'histoire sont nécessaires pour comprendre la longévité du Grand-Duché de Luxembourg, comme état indépendant et souverain.

Carrefour dès le néolithique, terre de passage, cette région fut aussi lieu de séjour à l'époque romaine. Nous n'avons pas encore retracé cette histoire – au grand regret des archéologues. Le théâtre de Dalheim reste le plus grand site excavé. Les alentours, hébergent une cité de quelque 3000 habitants, construite au 2e siècle après JC. C'était la plus importante localité à cette époque, située sur les voies romaines qui reliaient Trêves à Reims. Vu l'importance du site, des excavations n'ont pas encore été entamées. Dans tout le pays de nombreuses villas romaines sont encore enfouies. Un événement phare fut la découverte en 1995, année de Luxembourg Capitale culturelle de l'Europe, d'une mosaïque romaine représentant Hector et les neuf muses. Elle a été restaurée et installée au musée d'histoire et d'art.

En 698 Saint Willibrord est autorisé par l'Abbesse Irmine de Oeren de construire sur les terres appartenant au cloître de Trèves, l'abbaye d'Echternach. Les Bénédictins en ont fait un centre de grande culture. Les plus importants vestiges sont certainement le Codex Aureus, manuscrit enluminé, acquis par le Musée National de Nuremberg. La procession dansante, qui a lieu chaque mardi de Pentecôte a été classée patrimoine mondial immatériel par l'Unesco.

Ce serait trop long de m'attarder à notre histoire du Moyen-âge, lisible à travers les noms de ses souverains, qui étaient empereur, comme Henri VII, roi de Bohême comme Jean l'Aveugle, qui est enterré à Luxembourg, Charles IV empereur, et Sigismond reposant en Roumanie.

Les guerres sévissant au Moyen âge sur le continent n'ont pas épargné cette région. Le Luxembourg a été convoité par les grandes puissances, occupé par les Habsbourg, les rois d'Espagne, les Prussiens. Le règne des Autrichiens sous l'impératrice Marie-Thérèse fut la période la plus paisible, riche par la culture architecturale léguée.

La forteresse construite par Vauban au XVI^{e} siècle a été célèbre, appelée le Gibraltar du Nord et jamais conquise.

Sous Napoléon nous sommes devenus le département des forêts, les biens de l'église furent confisqués, en contrepartie le régime Napoléonien a obligé l'autorité publique à se charger de la rémunération du clergé. Le Code Napoléon est adopté pour la juridiction.

Au congrès de Vienne 1815 l'ancien Duché de Luxembourg, est désigné Etat tampon entre la France et l'Allemagne, obligé à la neutralité, rapetissé de territoires affectés à la Belgique, la France et l'Allemagne. Devenu Grand-Duché, pour des questions de préséances, il fut rattaché au Roi des Pays-Bas.

De l'Etat à la Nation

La Construction d'un Etat indépendant ne s'est pas faite sans difficultés.

Les effets de la révolution de 1848, ont duré jusqu'en 1867, lorsque le traité de Londres a mis fin aux revendications de Napoléon III qui voulait acheter le Grand-Duché, et de Bismarck, qui voulait l'annexer. La condition du démantèlement de la forteresse y fut actée.

La guerre franco-allemande de 1870–1872 relance une nouvelle fois la question de l'appartenance du Luxembourg. Grâce à l'intervention du Tsar de Russie, alerté par l'épouse du prince Henri, la princesse Amélie, le statut d'indépendance et de neutralité a été retenu.

Le nouvel état était Membre de la Confédération germanique, lien essentiel pour le développement économique. L'orientation culturelle cependant a été plus forte vers les voisins francophones. Pour créer l'état, il fallait créer une administration, la question linguistique était donc épineuse. Le gouvernement a tranché avec la loi scolaire de 1843 qui est devenu unique en son genre. L'historien Gilbert Trausch commente comme suit dans son ouvrage « Le Luxembourg, émergence d'un état et d'une Nation » comme suit :

> A retenir une caractéristique essentielle des institutions scolaires du pays qui le distingue de ses trois pays voisines : une école unique pour tous les enfants et adolescents qui sera le creuset dans lequel se formeront la solidarité et l'esprit démocratique … Pour tout ce qui touche au droit civil et pénal le gouvernement se tourne vers la France et la Belgique, pays de code Napoléon. … Les lycées luxembourgeois sont plutôt organisés sur le modèle français et belge. … En revanche s'il s'agit de questions douanières et économiques on s'oriente vers l'Allemagne. … Comme le français est la langue de la réglementation, des problèmes de terminologie se posent parfois … ceci déjà en 1843.

Le débat de cette loi qui obligeait les communes à organiser l'enseignement des deux langues dans les écoles primaires fut rude. Une tentative d'introduire la possibilité d'une dispense, tenant compte de la situation géographique des communes, fut rejetée par le gouvernement avec l'argument que les ouvriers allaient chercher du travail dans les pays voisins et qu'ils avaient avantage à connaître leur langue.

Le premier document en Luxembourgeois date du XII^{e} siècle. Ce n'était évidemment pas la langue comme nous la connaissons aujourd'hui, elle fut d'ailleurs qualifiée de « Moselfränkisch ». Une riche littérature en Luxembourgeois a pris son essor après la création de l'Etat et l'établissement de l'école publique.

Le Multilinguisme source de connexion

La bourgeoisie, qui s'est installée au Grand-Duché, surtout avec le développement industriel au tournant du siècle pratiquait de préférence le français, alors que les journaux étaient en allemand. Ce bilinguisme a été à l'origine d'une coopération culturelle fructueuse. Après la première guerre mondiale, période marquée par des soulèvements populaires, la question du système d'Etat, Monarchie ou République, fut posée. Le gouvernement a soumis ces questions à un référendum en1919. Après un changement de la loi électorale, élargissant le droit de vote à toute la population, donc aussi aux femmes, les électeurs ont tranché pour la Grande Duchesse Charlotte et le rattachement économique à la France … qui n'a pas voulu de nous. En suit le rattachement économique à la Belgique en 1921 suivi par la création du Benelux en 1948.

Suite à l'initiative d'Aline Mayrisch de St. Hubert, l'épouse d'origine française du patron de l'industrie sidérurgique luxembourgeoise s'est créée une initiative culturelle appelée le Cercle de Colpach, nommé ainsi d'après la demeure des Mayrisch. Parmi les hôtes de Colpach il y avait André Gide, Annette Kolb, Koudenhove Kalergi, Président du Comité central de l'Union Paneuropéenne et Walther Rathenau, industriel et ministre allemand, assassiné à Berlin en 1922.

Emile Mayrisch, décédé lors d'un accident de voiture en 1928 n'a pu poursuivre sa vision d'empêcher la militarisation en cours et d'empêcher un nouvel affrontement entre la France et l'Allemagne.

L'institut Pierre Werner, institut culturel conjoint entre la France, l'Allemagne et le Luxembourg, créé en 2003 a repris cet « esprit de Colpach ». Son siège est à l'Abbaye Neumünster à Luxembourg.

Pendant la deuxième guerre Mondiale le Luxembourg était occupé par les Allemands, en dépit de son statut de neutralité, enrôlé de force à l'armée de l'occupant. Après la guerre les gouvernements ont pris une part active à la création de toutes les organisations internationales.

Membres fondateurs de la Haute autorité du Charbon et de l'Acier en 1951, nous sommes devenus, un peu par hasard et par chance ville siège des futures institutions européennes.

Le développement économique de l'après-guerre connait une période de forte immigration.

L'immigration et l'école

L'Allemand, et bien sûr le Luxembourgeois étant la langue parlée par les gens du peuple, les jeunes apprenaient dès les premières années de leur scolarisation l'allemand, par lequel ils sont alphabétisés, et ensuite le français, donc les langues des voisins. Même après la deuxième guerre Mondiale il n'y eut pas de tentative de bannir la langue de l'occupant Nazi de l'école publique, alors qu'il était interdit de parler le Luxembourgeois pendant l'occupation. La langue c'est avant tout aussi la culture. Notre fierté d'avoir pu lire Goethe en allemand et Victor Hugo en français a certainement contribué à l'évolution d'un multilinguisme bénéfique à notre survie comme État indépendant.

Face à l'immigration portugaise des années 70 l'alphabétisation des enfants était épineuse. Comment en effet alphabétiser les petits Portugais en allemand ? La demande de cours de langue maternelle offerts en marge des cours à l'école publique était pratiquée. Au Conseil de l'Europe cette pratique fut même inscrite dans des résolutions sur l'immigration.

Entretemps le multilinguisme précoce est promu, l'expérience de l'Ecole Européenne ayant apporté la preuve que ce n'est pas nécessairement une entrave à un bon développement scolaire.

Toutefois, nos mauvais résultats dans les études PISA s'expliquent par le volume des programmes scolaires, dus au multilinguisme.

L'alphabétisation en français a été thématisée seulement au tournant du XXI^{e} siècle. Avec la diversification économique, de nombreuses familles de nationalités différentes se sont installées, revendiquant des facilités scolaires pour leur progéniture.

La disparition du système de l'école unique pour tous nécessitera une réflexion profonde sur la cohésion de la population. La question de l'identité, liée à la nationalité qui peut être double, concernera aussi celle de la cohésion de la population. Terre d'accueil, avec une population résidente de 44% de non Luxembourgeois, les efforts pour l'avenir devront réinventer un multilinguisme élargi, dans le respect des différentes langues des immigrés.

Et le Luxembourgeois ?

Les défenseurs de notre langue se sont fédérés, en action concertée, promouvant les écrits en luxembourgeois dans la presse action qui a abouti à la législation de 1984. Pragmatisme encore : la constitution actuelle stipule que le régime des langues est fixé par la loi.

Le Luxembourgeois a été promu langue nationale, proclamant par la même loi sur le régime linguistique que le français restait la langue officielle et l'allemand langue usuelle, et accordant au citoyen le droit d'avoir une réponse de la part des administrations dans la langue de sa question.

Lors d'une émigration vers la Transsylvanie au 13^{e} siècle notre langue, assimilée au Sächsisch, a survécue quelques 5 000 personnes la parlent encore aujourd'hui. Un dictionnaire est en élaboration, ainsi on pourra comparer l'évolution de la langue en terre roumaine à celle au Grand-Duché.

L'université

Avec la création de l'Université du Luxembourg en 2003 commence une nouvelle ère. Allemand, français et anglais sont les langues imposées pour l'enseignement par la loi. Après 13 ans d'existence l'université est aujourd'hui classée parmi les 180 meilleures universités au niveau mondial.

L'institut de langue et culture luxembourgeoises créé en 2015 est encore un pas vers la sauvegarde de cette identité qui se proclame multilingue.

Le projet sur la terminologie à l'Université du Luxembourg, lancé en 2012 à l'Initiative de Rodolfo Maslias, prouve bien qu'il y a dans toutes les langues des termes qui ne peuvent être traduits dans une autre langue sans perdre une part de leur signification d'origine.

L'étroite coopération de l'Université avec les services européens sur place sera une perspective pour l'approfondissement des éléments culturels liés aux différents régimes linguistiques.

L'exiguïté territoriale y apporte son avantage : la perception de l'autre comme individu, et non pas comme entité anonyme, ajoute à la proximité le caractère humain. L'immigration a permis au Luxembourg de poursuivre son développement économique grâce à la main d'œuvre des immigrés et des frontaliers. Sans le multilinguisme ambiant ce serait chose impossible.

Pour conclure, je dirais : vive la traduction et les traducteurs. A la mobilité physique qui nous est garantie par les accords de Schengen s'ajoute une mobilité du cerveau bénéfique non seulement à la compréhension de l'étranger, mais aussi au respect de sa culture. Et cette diversité des cultures est toujours en attente de trouver sa place bien ancrée dans le monde d'aujourd'hui.

http://termcoord.eu/don-du-multilinguisme-mrs-erna-hennicot-schoepges/

TermCoord

Denis Dechandon, Paula Zorilla-Agut, Maria Pia Montoro, Rodolfo Maslias

European Parliament

At the opening session of the VIII EAFT Summit hosted by the European Parliament (DG TRAD) in Luxembourg a presentation was given on the main terminology platforms of the European Institutions by Denis Dechandon, Chairman of the IATE Management Group, Paula Zorilla-Agut, coordinator of the IATE development team, Maria Pia Montoro, coordinator of EurTerm, and Rodolfo Maslias, Head of the Terminology Coordination Unit of the European Parliament.

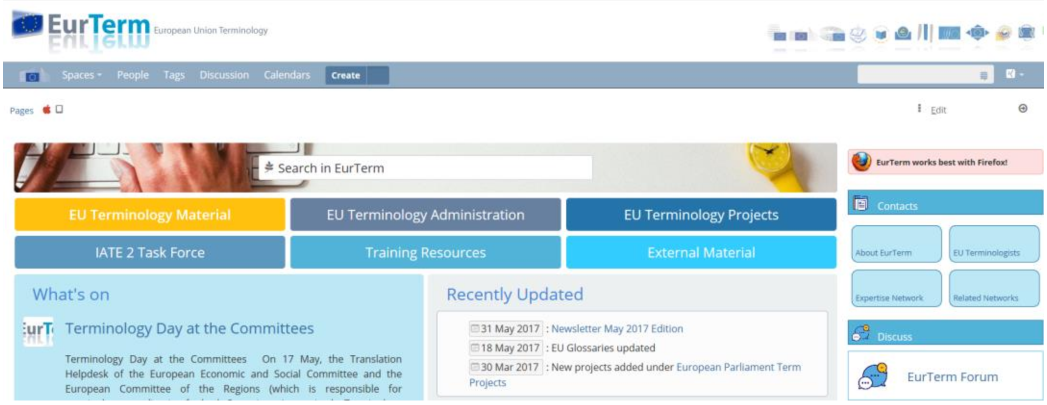
IATE 2

The EAFT summit organised by the European Parliament provided an opportunity to bring the terminology community up to date on the new developments taking place around IATE. Since this tool was designed and developed in the early 2000s, it has reached a point where implementing new features requested by users, adapting it to new usability, responsiveness and accessibility standards and making it more interoperable with other EU and external tools has become a technical challenge.

In order to increase user satisfaction, guarantee higher data quality, larger scalability and interoperability, contribute to increased efficiency in terminology tools and facilitate technical maintenance, the IATE partners have embarked on the redevelopment of IATE, with enlarged search capabilities, higher integration with CAT tools, advanced communication features, an optimised terminology project management module, and many more improved and new features.

The development has started with the data entry features (creation, modification and deletion of entries and advanced reference management) and will continue with expanded search, statistics and user management before moving forward to more advanced features like import, advanced export, integration with CAT tools, communication features and many more in 2017 and 2018.

EurTerm



Terminology work has never been a solitary activity: terminologists need subject matter experts, while subject matter experts often need the input from language specialists. Collaborative platforms can bring researchers and experts closer together in a common strategy.

Most translators and terminologists store terminology in spreadsheets or tables. Terms are gathered manually, maintained manually and looked up manually. These manual processes are extremely time-consuming and cumbersome, and as a result, terminology managed via spreadsheets is almost always out of date. The expectations of quantity and speed of terminology deliveries have changed over the last years, and so have technologies: emails have shortened the distance between the resource and the terminologist, but they are no longer sufficient. Collaborative platforms for terminology management provide a wide range of opportunities: contribution, feedback and voting mechanisms can produce valuable input for many terminology scenarios. That is why EurTerm has been created. EurTerm is an interinstitutional collaborative platform adapted to the terminological needs of EU terminologists and translators. Being a networked, multiuser platform, it contains functionalities enabling participants to share their knowledge quickly and efficiently. Terminologists can access their colleagues' input and use it to produce terminological entries to be stored later in IATE. The main asset of EurTerm is providing a vast amount of knowledge that would not otherwise be accessible to terminologists in their offices. EurTerm also reduces the use of emails for terminology work in order to avoid the "depths" of email inboxes: valuable terminology conversations stay trapped in emails, inaccessible to others who might benefit from them. EurTerm captures this internal knowledge and prevents it from being lost. Communication is thus made transparent by shifting it into the collaboration platform.

Benefits from using EurTerm for terminology work:

- single point of access for documentation on terminology projects;
- discussion groups;
- easy sharing of information through blog posts, wikis, discussion fora;
- sharing terminology resources;
- improving collaboration with subject matter experts for validation,
- integration of information and indexation of resources – EurTerm offers a combination of real-time data coming from the input of the users. The search functionality suggests search results as the user is typing – pages, blog posts, files and documents, thus making all the data immediately available.

EurTerm is accessible to all staff of the EU Institutions through an account secured by a password (EU login) and to some collaborating external experts to who may be granted read access.

EurTerm also gives access to 24 language-specific wikis which allow direct online cooperation of terminologists and translators from all EU Institutions.

termcoord.eu

The website of the Terminology Coordination Unit of the European Parliament, termcoord.eu, is the only public terminology website of the European Institutions. It gives direct access to all EU terminology resources open to the public and has an average of 40,000 visitors per month. It also provides a cooperative platform for several projects of terminology cooperation with a wide network of international organisations, universities and companies specialised in terminology and linguistics. The most interesting pages were presented to the audience:

- Interviews with well-known terminologists and linguists conducted by trainees of TermCoord, which are published in a downloadable e-book, also accessible from the EU Open Data Portal
- Cooperation with universities for terminology projects based on a framework agreement for importing in IATE
- IATE Term of the Week, a series of regular posts on selected IATE entries related to relevant news of the week
- Downloading IATE contents in TBX-format
- GlossaryLinks, a tool giving access to selected specialised glossaries filtered by language and domain
- EU Glossaries, a collection of multilingual glossaries provided by all EU Institutions
- DocHound, a one-stop-shop for accessing all official documents of all EU Institutions
- Terminology of all EU Agencies
- Material and presentations from terminology events organised or hosted by the European Parliament

SESSION 1: COOPERATION AND COLLABORATION

Challenges in Serbian terminology management, policy and planning

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1. Introduction

1.1. Serbian language

The Serbian language belongs to the group of South Slavic languages and has a long history. The information about the number of native speakers of the Serbian language varies depending on the source: some estimates are that it has around 8.7 million native speakers (6.2 million in Serbia and many abroad), and that the number is constantly decreasing. The Serbian language uses two alphabets, both Cyrillic and Latin, while only the Cyrillic alphabet has the official status.

To understand the current status of the Serbian language, we will go back into the recent history. Namely, in the times of former Yugoslavia, this language code was commonly known as Serbo-Croatian, the name reflecting the typological proximity and resemblance of the two languages. However, under the influence of socio-political circumstances during the 1990s (the disintegration of the former Yugoslavia, the civil war and political tensions, growing nationalism, etc.), the Serbo-Croatian language was broken up into separate idioms, often referred to as *political languages* by Serbian linguists (Piper 2010:31): Serbian, Croatian, even Bosnian and Montenegrin[1] (the last two are often denied their legitimacy). This linguistic secession (in words of Serbian linguist Predrag Piper 2010:31) was accompanied by often deliberate efforts aimed at changing the linguistic profile of the new languages, different choices of spelling rules, official alphabet (Latin for Croatian and Cyrillic for Serbian), some aspects of standardization, and purist tendencies versus tendencies towards internationalization of terminology. Political efforts aimed at changing of the Serbian linguistic profile were made for the most part by encouraging the use of the Cyrillic alphabet and by granting it the official status in the Republic of Serbia. These efforts, however, have not been successful enough, since the use of the Latin alphabet has increased in both private and public domain, as evidenced by a newspaper survey cited by Klajn (2003:126) in Bugarski (2009:4). The results of the survey proved that 39.8 % of respondents use only the Latin alphabet, and only 21.9 % the Cyrillic one, while the rest of the respondents alternate between the two. Whether Serbian and Croatian are one or two separate languages even now seems to be a question of intense debate among linguists.

Another important issue affecting the Serbian language in times of economic, political and linguistic globalization is the problem of its maintenance of its functionality. Many Serbian linguists are discussing the problem of *linguistic angloholism* (Prćić 2004: 560) or *Anglo-Serbian language* (Prćić, 2000: 872, 2004: 562, Vasić et al.2001), a pseudo-normative language whose use is for the most part status-related and which undermine the Serbian literary and linguistic norm (Piper 2010:49) by marginalizing its functionality in the public sphere.

[1] The official language spoken in the Republic of Bosnia and Herzegovina and the Republic of Montenegro in the times of former Yugoslavia was Serbo-Croatian.

1.2. Serbian language policy and planning

Serbian language policy and planning are based on the nationalistic cultural model, they are *top-down* oriented and under a strong influence of socio-political context and language ideology. The main authority regarding language policy and planning in the Republic of Serbia is the state government that works in close cooperation with national language institutions, such as the *Institute for the Serbian language* and the *Committee for Serbian Language Standardization* (within the Serbian Academy of Sciences and Arts), the *National Council for Serbian Language and Alphabet*, etc. The linguistic matter is prescribed and regulated by the *Act on Official Use of Language and Alphabet* (Official Gazette of RS, no. 45/91, 53/93, 67/93, 48/94, 101/05, 30/10) and the *Constitution of the Republic of Serbia* (Constitutions of 1974, 1990 and 2000, and the last version in 2006).

Having in mind the socio-cultural and political circumstances, the Serbian language and its policy and planning are nowadays focusing on two main issues. Namely, on the one hand, the current language policy in Serbia is "*directed almost exclusively to the issues and problems of relationship status, linguistic corpus and sociolinguistic connotations of Serbian in relation to Serbo-Croatian, Croatian, Bosnian, and Montenegrin*" (Filipović 2009:63), while the Serbian language is viewed as the basic carrier "*of national, cultural, political and standard language unity*" (Brborić 2000:52). On the other hand, Serbian linguists are pointing to the issues of maintenance of Serbian language purity in the face of rapid and inevitable penetration of anglicisms. Therefore, it is necessary to reconsider the nationalistic language policy and planning in Serbia and to find a compromise direction: between cultural modernization that comes with globalization processes on the one hand and language self-preservation (Filipović 2009:64) and traditional nationalism on the other. Bugarski (2005:95) introduces the term *integrative model* aiming to reconcile the two extreme positions: the one of linguistic ecology and the one of indiscriminate and uncritical use of English as the global *lingua franca*.

The number and the scope of projects of national importance regarding the implementation of Serbian language policy and planning, as well as their duration, point to the main problem that the Serbian language is facing today: lack of funding, which in turn reflects a lack of awareness of their importance by the state authorities and results in the neglect of the Serbian language. For example, the work on the publication of the *Dictionary of the Serbo-Croatian Language* has been in progress (with several interruptions) since the 1950's. Nineteen out of 30 volumes have been completed and published[2] (up to letter P) so far. Needless to say, there is a question whether some of the volumes have become obsolete and incomplete in the meantime, as well as the question whether the name of the dictionary itself should be changed and refer to Serbian instead of Serbo-Croatian language.

2 Serbian terminology

2.1 Terminology research

Serbian language for specific purposes, scientific and technical terminology as its essential part, have only recently become important research topics of language policy and corpus planning. Owing to the fact that Serbia is a country that is economically, technologically and politically dependent on developed countries, two parallel processes have affected the development of its scientific and technical terminology: globalization and internationalization of professional terminology for easier and more efficient communication on the one hand, and localization or translation, construction or adaptation of the terminology in the Serbian language with the purpose of preserving its cultural identity, on the other hand. We believe that terminology of "small languages" such as Serbian represents a strategic resource and its conscious and systematic development is a means of preventing domain loss and enabling language maintenance. It is also noticeable that most scientific and technical domains are experiencing negligent and random adoption of unadapted foreign (English) terms for either a new or an existing concept (thus resulting in terminological synonymy).

[2] http://www.dml.rs/index.php/lat/tekstovi-lat/leksikografija-lat/79-recnici-savremenog-srpskog-jezika-lat

According to the relevant literature, the issues regarding scientific and technical terminology in the Serbian language have generally been dealt with language and terminology policy and planning and terminology standardization (Bugarski 1996, 2005, Filipović and Filipović 1997, 1998, Filipović 2002, Prćić 1996, Jakić 2012, 2013, Đordan et al. 2016, Silaški 2009a). Fewer scientific and research papers approach this topic from the perspective of natural language processing and computational linguistics, and represent the very few examples of electronic corpora for term extraction and other terminological resources and tools specifically designed for the Serbian language (Stanković et al. 2012, Stanković et al. 2014). To a somewhat lesser extent, terminology is approached from the perspective of cognitive linguistics, mainly when it comes to translating foreign metaphorical terms into the Serbian language (e.g. Silaški 2012:103–121 for the domain of economics). The most common domains covered in terminology research are economics (Silaški 2000, 2009a, 2009b, 2012), marketing (Silaški 2009a, Đordan 2016) and management (Jakić 2012, 2013, Anđelković 2014, Anđelković et al. 2014). Other terminology domains are present in research papers to somewhat lesser extent, e.g. traffic engineering (Dimković-Telebaković 2013, 2014), sport (Milić et. al 1998, Milić 2003, 2006), library and information sciences (Kovačević 2000), medicine (Mićić 2011) and electrical engineering (Tasić 2010).

The most important terminology issue is certainly the growing internalization and the anglicization of Serbian scientific and technical terminology (Silaški 2009a, 2009b, 2012, Tasić 2010). It is not surprising that domains covered by sociolinguistic research of terminology in the Serbian language are the ones experiencing the most rapid growth and development, followed by constant emergence of new concepts and corresponding (English) terms, such as marketing, management, information technologies, etc.

Newly adopted terminological anglicisms are studied in terms of their adaptation to the Serbian language system. Prćić (1996:203–205), for example, highlights the importance of their consistent adaptation, both formal (phonological and graphological) and content-adaptation (by means of calquing or translation), while Silaški (2012:26–42) and Jakić (2012:39) also emphasize the importance of linguistic adaptation of terminological anglicisms on all levels. Terminological synonymy also represents a frequent topic of terminology research. It is seen as one of the most prominent problems of Serbian terminology, often caused by uncontrollable borrowing of anglicisms for concepts already named in Serbian. Another interconnected topic of terminology research is the necessity of urgent and consistent standardization of Serbian technical terminology.

Research papers dealing with terminology from the perspective of computational linguistics are for the most part dedicated to the presentation of software tools and resources used for terminology management, extraction and processing, developed for the Serbian language in particular, having that this is a highly flective language (Stanković et al. 2012, Stanković et al. 2014).

2.2 Criteria for terminology evaluation

One of the most important issues related to adequate standardization of terminology is the criteria implemented in deciding which terminology alternative to choose and standardize, especially in case of terminology variation, synonymy and polysemy. The criteria for term evaluation followed in the majority of research papers dealing with Serbian terminology standardization are the ones proposed by Bugarski (1996:25–28, 2007:109). Bugarski's experimental matrix consists of the following criteria for term evaluation (hierarchically organized from the most important to the least important):

1. systemicity,
2. productivity,
3. uniformity,
4. internationalization,
5. motivation,
6. diffusion,
7. stability,

8. connotation,
9. brevity,
10. easy pronunciation.

Bugarski proposes that each terminological alternative in a pair of alternatives should be assigned a value of *plus* + (has the property) or a *minus* − (does not have the property) or 0 (neutral term) for each of the criteria. The aim of such quantification of properties for each terminological alternative is to objectively determine the advantage of one of them over another, and to relatively precisely assess which alternative should be given the priority in terminology standardization. Scientific and theoretical importance of the matrix of the terminology evaluation criteria devised by Bugarski was applied in the various scientific and technical domains, e.g. quality control, information technology, linguistics and engineering (Filipović and Filipović 1997: 285–291), sport (Milić 2013), management (Đordan 2016: 146–162). Even though some authors have questioned the hierarchy of Bugarski's criteria (e.g. Filipović and Filipović 1997), this matrix still remains very relevant for the Serbian terminology standardization needs.

2.3 Terminology policy and planning: institutional framework

Unlike language policy and planning, terminology policy and planning of the Serbian language are not explicitly regulated by legal acts and the constitution. In addition, the institutional framework for terminology is rather weak, i.e. there is not a single institution exclusively in charge of Serbian terminology policy and planning; these tasks are rather distributed among several language institutions. Jakić (2012:223–225) notes that terminology policy and planning is the issue of national importance that should be dealt with cooperatively by language institutions, the government and its ministries (e.g. the Ministry of Education and Science), universities, associated colleges, language societies and the Institute for Standardization of the Republic of Serbia, while at the same time signalling to the danger of transferring the responsibility from one institution to another.

If we look at the activities performed by language institutions in more detail, however, it becomes obvious that work regarding terminology policy and planning is scarce, and is performed mainly within larger projects, not separately.

The Institute for the Serbian language (Serb. *Institut za srpski jezik*[3]), as a part of the Serbian Academy of Sciences and Arts – SASA (Serb. *Srpska akademija nauka i umetnosti*[4]), for example, is currently in charge of two complex projects, the first one oriented towards linguistic research of contemporary Serbian language and the publication of a comprehensive Serbo-Croatian language dictionary (mentioned above), and the second aiming at the description and standardization of the Serbian language. Official documents and scientific papers regarding these projects (available on the Institute's website) do not confirm whether and to what extent terminology work is covered. Among the 24 monographs published by the Institute and available online, only one is dedicated to terminology (*Fruit growing terminology* by Neđo G. Jošić), and in all the journals issued by the Institute (five in total – *Južnoslovenski filolog*, *Naš jezik*, *Lingvističke aktuelnosti*, *Srpski dijalektološki zbornik*, *Zbornik Instututa za srpski jezik SANU*), we have found only one book review regarding terminology (Journal *Lingvističke aktuelnosti*, no. 28, a monograph review by Svetlana Spajić).

The Institute was, however, the co-organizer and the host of two important terminology conferences: the *Yugoslav conference on terminology standardization* (in 1996) and, twenty years later, the *International Conference on Slovene terminology today* (in 2016). The long time-span between the two conferences confirms that Serbian terminology research was neglected for a long time, but (hopefully) the awareness of its importance is rising.

[3] http://www.isj-sanu.rs/
[4] https://www.sanu.ac.rs/

Regarding the international terminology cooperation, the Institute of the Serbian Language is a member of the Terminology Board within the International Slavic Committee, and there is an initiative for its membership in EAFT – the European Association for Terminology.

The *Board for Standardisation of the Serbian Language* (Serb. *Odbor za standardizaciju srpskog jezika*[5]) was founded in 1997 within the Institute for Serbian Language and the Serbian Academy of Sciences and Arts (SASA) with the aim of bringing together Serbian language experts and scientific institutions with the purpose of professional and organized language planning and achieving adequate language policy and practice in newly created socio-political circumstances after the breakup of former Yugoslavia. The complex and demanding work on Serbian language standardization was allocated to nine board committees (for phonology, morphology and word formation, syntax, corpus, lexicology and lexicography, etc.). In addition to the systematic standardization of the Serbian language as its most important objective, the Board points out the importance of Serbian language involvement in terminology (i.e. communication, information technology) projects and standards[6]. Act 5 of the Board's program represents its orientation regarding terminology standardization, by seeking to reconcile the growing penetration of English with the need to protect the Serbian language by activating its word formation power: this can be understood as the acceptance of the aforementioned interactive language standardization model (Bugarski 2005:96).

Within the Board of Serbian Language standardization there is a *Committee for Public Relations and Addressing Urgent Issues* (Serb. *Komisija za odnose sa javnošću i rešavanje neodložnih pitanja*), which provides terminological services; however, we have found only one inquiry regarding terminological ambiguity directed at this Committee.

The *National Council for the Serbian Language and Script* (Serb. *Nacionalno veće za srpski jezik i pismo*[7]) is a non-governmental, non-profit and independent organization established in 2002. The Council does not deal with language and language policy and planning in the broadest sense, but rather monitors the language development and standardization in different areas, having in mind the socio-cultural, social and civilization aspects, as well as the terminology aspect of technology and global civilization. One of the most important tasks of the Council regarding terminology work is to monitor projects dealing with localization of software packages and software tools, as well as assisting in the development of specialized linguistic tools for the Serbian language. As its most important project the Council's website mentions the publication of the White Paper of Serbian localization, as well as the control process established in order to assure the standardness, acceptability and legality of localization.

2.4 Terminology management: resources, activities and institutions

Terminology management activities in Serbia are mostly performed through individual initiatives and projects. This is especially so when it comes to scientific and technical terminology for individual subject-field domains. One of the possible reasons behind this is the absence of an institutional authority (i.e. a terminology centre) that would act as the supervisor and coordinator of these projects, and, obviously and certainly, insufficient or non-existent funding.

2.4.1 Terminology resources: an overview

Upon investigating the number and the quality of terminological resources (dictionaries, databases, glossaries, lexicons) dealing with domain-specific terminology in Serbian published in the past 10 years or available online, we have discovered quite a poor choice, especially when it comes to digital resources. In the absence of available resources, scientific and technical translators in Serbia mostly rely on self-made glossaries of terms, or on Croatian terminological resources, which, though in some matters unreliable to Serbian speakers (due to language differences), are still more varied than the ones in Serbian.

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[5] http://www.isj-sanu.rs/rubrike/odbor/75/2015/03/10/odbor-za-standardizaciju-srpskog-jezika.html
[6] https://www.rastko.rs/filologija/odbor/program_c.html
[7] http://www.jezik.org/

One of the few Serbian terminological dictionaries worth mentioning is the bilingual (English–Serbian, Serbian–English) *Medical Dictionary*, published in 2011 by Sofija Mićić. The dictionary contains 879 pages and over 40 000 entries in both languages. As stated in its preface, this is the first dictionary in Serbian of this kind, containing both outdated and modern medical terms, collected with the attempt at standardization of medical terminology. In the preface, the author Mićić also emphasizes the undeveloped state of the Serbian language, the indiscriminate adoption of unadapted anglicisms, as well as the lack of contemporary Serbian language dictionaries, standards and grammar as the main obstacle experienced during the compilation of the dictionary.

The *Dictionary of Library and Information Science* was compiled by Ljiljana Kovacević, Dobrila Begenišić and Vesna Injac-Malbaša[8] in 2014. The dictionary is available both in paper and online, in the form of a database, and contains approximately 40 000 entries in three languages (14 000 in Serbian, 12 400 in English and 14 000 in German), with 900 definitions or annotation terms. The dictionary's website[9] states that the purpose of this dictionary (i.e. the electronic terminology database) is to "*help and improve the flow of information in the library environment*" ..., and "*the development of library terminology in Serbian language*". The choice of terms to be included in the dictionary was based on the study of a corpus consisting of domain-specific research papers available either in print or in electronic form, as well as on the study of terminology already present in the existing dictionaries, encyclopedias, terminology and bibliographic standards.

Electronic glossary of geology *GeolISSTerm*[10], developed within the project titled *Development of Geological Terminology and Nomenclature for Serbia Geological Database* at the Faculty of Mining and Geology, University of Belgrade, represents one of the basic resources of the Geological Information System of Serbia (GeolISS). The dictionary is partly based on the analysis of a comprehensive lexicographic publication *Geological terminology and nomenclature* (Petković 1975), and was made with the purpose of eliminating the examples of synonymy, homonymy, idioms, archaisms, imprecise terminology definitions, etc. from the original publication (Stanković et al. 2010:57). Being an online resource, GeolISSTerm is constantly being updated: in 2011 it contains about 3800 of terms organized alphabetically, positioned on the semantic scale between taxonomy and a thesaurus, and with an ambition of growing into an ontology a terminology knowledge base (Stanković et al. 2010:53–57). The online GeolISSTerm dictionary was published in 2011 (Stanković et al. 2011:54).

An institution worth mentioning with regard to computational terminology management in the Serbian language is the *Society for Language Resources and Technology* (Serb. *Društvo za jezičke resurse i tehnologije – JeRTeh*), based at the Faculty of Philology, University of Belgrade. Even though the primary tasks of this society are "*the promotion, popularization and improvement of all the branches of linguistic technology on the scientific, professional and practical level*", and "*the contribution to the creation of lexical resources in the digital form*" and (perhaps most importantly) "*the preservation of Serbian language in the digital age*", several of its projects are directed at developing and maintaining terminological resources and tools for the Serbian language. Namely, a group of JeRTeh researchers, led by professor Ranka Stanković, have developed a language and terminology tool Biblisha (Serb. Bibliša), designed for analysis of aligned (English–Serbian) texts and research articles from several collections: WordNet, INTERA and BAEKTEL TEMPUS projects, as well as from the *Infoteka* journal (for the domain of library and information technologies), *Stomatološki glasnik Srbije* (for the domain of dentistry), *Arhitektura i urbanizam* (for the domain of architecture), and *Podzemni radovi* (for the domain of mining), *Menadžment* (for the domain of management). Biblisha is an indispensable tool for Serbian terminology extraction, creation of termbases, technical translation, corpus-based language and

[8] This dictinary was based on the Library terminology dictionary (English–Serbian, Serbian–English), compiled by the same authors and issued by the National Library of Serbia, in paper in 2004, online in 2002, and on a CD in 2002. The paper version had approximately 23 000 term entries in both directions.

[9] http://rbi.nb.rs/srlat/dict.html

[10] http://geoliss.mre.gov.rs/recnik/recpj.aspx

terminology research, as well for comparative and contrastive terminology and LSP research. The aforementioned *Dictionary of Library and Information Science* is partly based on term extraction from aligned research papers from Infoteka journal available through Bibliša.

2.4.2 Terminology education and training

Serbian universities are lacking undergraduate and graduate programs that are specifically designed for terminology compilation, processing and management. In addition, to our knowledge, there are no courses, seminars and training sessions aimed at translators and technical writers that would enable them more efficient handling and consistent use of terminology.

However, several years ago, the Faculty of Philology, University of Belgrade, initiated an accredited M.A. program in Translation and Interpreting, carried out within a TEMPUS project Reforming Foreign Language Studies in Serbia (REFLESS) contacting sources in terminology management. The same faculty is currently preparing an application for Erasmus Mundus Joint European Master's Degree in Interpreting, MAGIS (Master in Glocal Interpreting Services), coordinated by the Universidad Autonoma de Barcelona, whose focus would be on public service and community interpreting, but it would also open up space for the creation of a regional center for translation and interpreting[11]. The purpose of both programs is human capacity building for the translation workload, accompanying the pre-accession and the accession of Serbia to the European Union, that necessarily involves activities on terminology consolidation, harmonization, and management.

2.5 Terminology management in the context of EU integration

The most topical issue with regard to terminology management is certainly related to the ongoing process of Serbian preparation for the accession to the European Union and the considerable workload of translation of legislative documents that accompany the process. The institution in charge of this task is the Sector for Translation Coordination within the Office for European Integration of the Republic of Serbia[12]. The Sector itself employs several terminologists and translators, while the majority of translations is outsourced by contracted translation agencies.

In order to assure the quality of translation and the consistent use of terminology among the contracted agencies, the Sector for Translation Coordination has developed several digitally available resources. Multilingual terminology database *Evronim*[13] is a publicly available terminographic resource aimed at providing support to scientific and technical translators in achieving terminological consistency. Terminological entries in Evronim are terms, phrases, and common expressions in Serbian and their English equivalents (some entries also contain equivalents in one or several out of 15 available European languages, including Latin). The terminology database is regularly updated, and currently contains more than 18 000 entries. Each terminological entry includes a definition, a context, an example of use, hypernyms and hyponyms, grammatical information, and metadata relating to the domains and subdomains that the term in question belongs to, references, the source of the term, source of its definition, the source of its usage context, etc. In addition, each entry in Evronim is graded on a scale from 1 to 4 in terms of its translation reliability: based on whether the use of the term is suggested, confirmed, recommended or verified (1 = recommended term, yet to be confirmed, 2 = a used term, but has not been confirmed in editing, 3 = a term confirmed and recommended by experts and/or by legal editors, 4 = verified term).

In addition to Evronim termbase, the Sector for Translation Coordination also uses *Evroteka*, a bilingual, English–Serbian collection of legal texts or excerpts created throughout the translation with the use of the CAT tool *Trados*. Evroteka is regularly updated and currently contains over 102 500 words, or almost 5 000 translation units, out of which approximately 3 500 were exported into the Evronim

[11] Source: communication with Jelena Filipović, PhD, vice-Dean for Science of the Faculty of Philology, University of Belgrade.
[12] http://www.seio.gov.rs/src/kancelarija/sektori/sektor-za-koordinaciju-prevodjenja/
[13] http://prevodjenje.seio.gov.rs/evronim/index.php?jezik=engl

termbase. Upon entering a word or a phrase in the search bar, Evroteka provides a text segment corresponding to the query. Since Evroteka is primarily aimed at translators, the texts have not been fully aligned and pre-processed (in terms of lemmatization, tagging, parsing, etc.), which makes it less suitable for thorough terminology and linguistic research.

The website of the Office for European Integration – Sector for Translation Coordination[14] also provides several manuals and guidelines for the translation of the European *acquis communautaire*, and especially instructions that refer to terminology translation[15]. Terminology guidelines suggest that in translating terminology into Serbian, one should follow a set of predefined terminology principles:

1. A term should be clear and unambiguous, regardless whether it is domestic or borrowed,
2. Domestic terms have a priority over foreign terms,
3. Terms of Latin and Greek origin have priority over other foreign terms,
4. Well established and widely used terms have priority over other terms,
5. Terms that follow standard language norm (phonological, morphological, syntactic and word formation rules) are given preference,
6. Shorter terms have a priority over longer terms, and
7. In terms of word formation, more productive terms have a priority over less productive ones.

The quality and consistency of translations is constantly monitored and controlled; however, according to terminologists employed in the Sector, it is an extremely demanding task, having in mind that the guidelines and instructions for achieving high-quality and consistent translation are not always consistently followed.

The Sector for Translation Coordination works in close cooperation with the Faculty of Philology, University of Belgrade, and provides valuable support in both the implementation of Master studies in Translating and Interpreting, as well as in the initiative towards a Center for Terminology, Translation and Transdisciplinary Studies that is currently in the process of establishment.

3 Case study: Serbian management terminology

In this chapter, we would like to illustrate the state of Serbian terminology, terminology management and planning by focusing on a particular subject domain. The domain of management has not been chosen in an *ad hoc* manner; rather, we have chosen it because it represents a rapidly developing scientific and practical discipline with a growing number of newly emerging concepts that need to be named. Serbian terminology issues discussed earlier in this paper, e.g. terminology gaps, variation, synonymy and polysemy, indiscriminate adoption of terminology anglicisms, etc., are very prominent in this domain. There is an evident lack of terminographic resources, which are either outdated or not comprehensive enough.

Linguistic research papers dealing with management terminology (e.g. Živojinović and Gajić 1996:70, Jakić 2012, Silaški 2009, Anđelković 2014, Anđelković et. al 2014) focus on the fact that the Serbian terminology in the domain of management is in the state of disorder, characterized by terminology gaps, synonymy and variation, and in need of urgent harmonization and standardization. Živojinović and Gajić (1996:69, 72) see this as a result of (a) the complexity of management and its close connection with other disciplines (i.e. multidisciplinary nature of management domain), and (b) theoretical heterogeneity inherent to organizational thought and the existence of a variety of theoretical approaches and schools of management.

As discussed above, the most commonly observed solution to management terminology problems is seen in its standardization. Živojinović and Gajić (1996:69–71) claim that the prerequisite for management terminology standardization is precise definition of its basic concepts, while Silaški

[14] http://www.seio.gov.rs/srl/kancelarija/sektori/sektor-za-koordinaciju-prevodjenja/#
[15] http://www.seio.gov.rs/upload/documents/prevodjenje/terminoloska_uputstva.pdf

(2012:133–134) suggests steps that need to be taken in standardization process. Jakić (2012:115–126), in addition, follows Bugarski's matrix of criteria for management terminology evaluation, and proposes an institutional and normative model of terminology standardization of in the domain of management.

3.1 Management terminology questionnaire

The information about the contemporary state of Serbian terminology, policy and planning presented in previous chapters was for the most part provided by (socio-) linguists and language planners.

In the summer of 2016 we conducted a survey among the subject-domain experts in order to find out their opinions and attitudes about the state of terminology in the domain of management, as well as to identify the responsible parties and offer possible solutions for the problematic terminological questions.

The questionnaire was conducted at the Department for Management and Specialized Management Disciplines, Faculty of Organizational Sciences, University of Belgrade. Out of 50 respondents who completed the questionnaire, 4 respondents were Full Professors, 6 Associate Professors, 6 Assistant Professors, 27 teaching assistants/PhD students, and 7 students of Master studies at this department.

When asked to rank the current state of Serbian terminology in the field of management, 52 % of the respondents marked the answer "unsatisfactory", while only 2 % the respondents believed that it is "excellent".

The respondents were also asked to mark one or several problems that Serbian terminology in the domain of management is currently facing, and the results were as follows:

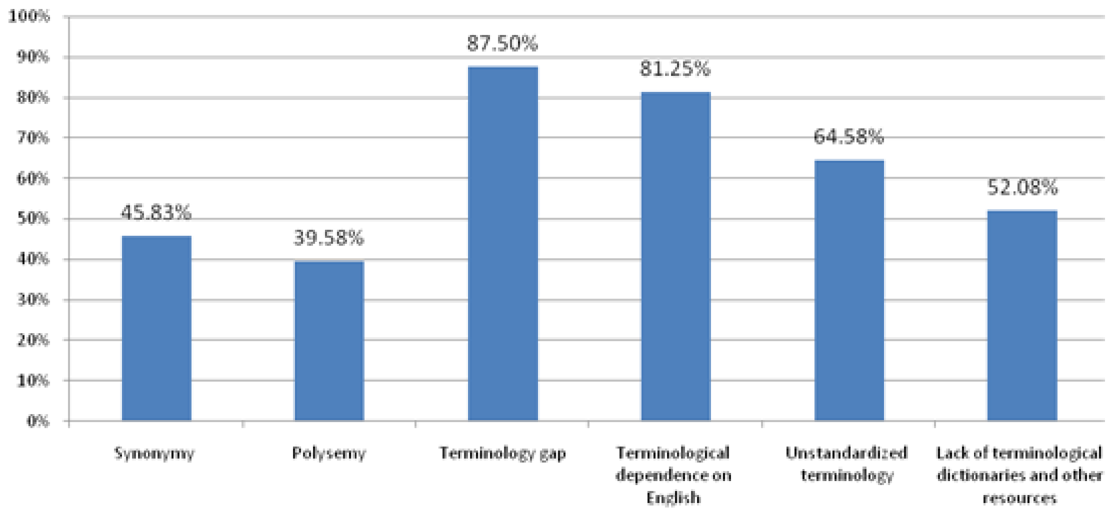

Figure 1: Language related problems at the domain of management

As we can observe from the graph above, two interconnected terminology issues, the existence of terminology gaps and terminological dependence on the English language are given almost the same importance (87.50 % and 81.25 % of the respondents marked these issues as the most pressing ones. More than half of the respondents also believe that unstandardized terminology (64.58 %) and lack of terminographical resources (52.08 %) are the issues of importance.

When asked about the institution that should be responsible for terminology in the domain of management and its policy and planning, the majority of respondents (34.09 %) claimed that the institution in charge should be the University, i.e. faculties teaching the subject matter, while 22,73 %

believed that it would be useful to found a terminology management centre exclusively in charge of Serbian management terminology and its harmonization. More than 15 % of the respondents believe in cooperation between all the institutions listed in the questionnaire.

The respondents’ opinions about what the priorities of terminology work in the domain of management should be were also quite varied. The same percentage of respondents (48.9 %) thought that both terminology standardization and the establishment of an institution in charge of terminology management in this domain should be given the priority. An interesting fact is that term formation work was marked lowest, which contradicts the replies to the second question (above) which identifies terminology gaps as the most important problem that management terminology is facing nowadays.

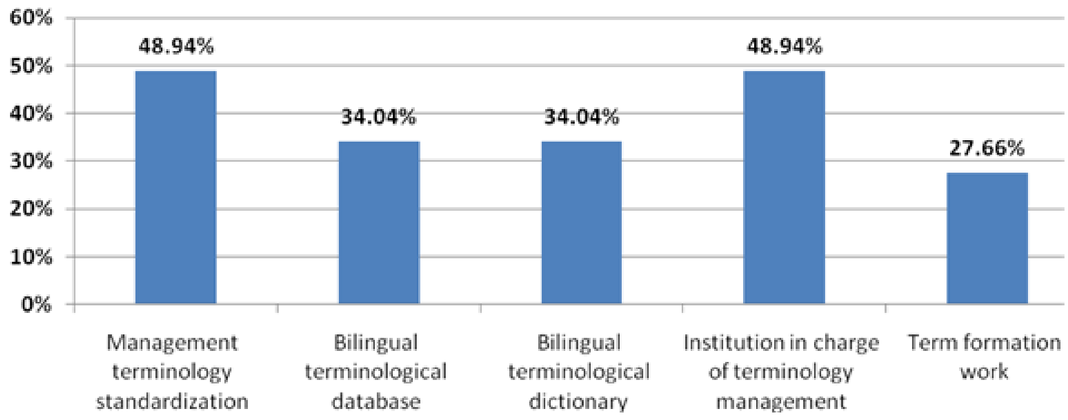

Figure 2: Priorities of terminology work in the domain of management

3.2 Challenges

One of the possible challenges of the future prospects of Serbian terminology is founding a Terminology Centre for the Serbian language. Due to rising awareness that Serbian terminology policy, planning and standardization activities are not performed systematically within the afore-mentioned language institutions, there have been several initiatives regarding the establishment of an independent terminology centre that would be exclusively in charge of terminology work, management and planning. The most recent initiative was taken by the Faculty of Philology and the Faculty of Organizational sciences, University of Belgrade, with strong support of the Sector for Translation Cooperation within the Office for European Integration of the Republic of Serbia. The future *Centre for Terminology, Translation and Transdisciplinary Studies* (CTTTS) would aspire to be a national and regional center for:

1. Scientific research in the area of translation studies, terminology management and planning,
2. Education of students at advanced levels of university education (M.A. and Ph.D. studies) who strive to gain valuable theoretical knowledge and practical experience and know-how in managing and improving translation and terminological resources, and
3. Consultancy to interested parties from industry, public and private sector, institutions of the state, NGOs and the like, in the area of high-quality terminology management, translation and interpreting services.

CTTIS intends to create multimodal, IT-based terminology repositories, translation memories, databases of internal and external resources, to design teaching and training modules for terminology-oriented professional translation, and to offer training for terminology-based computer assisted translation for different professions.

4. Conclusions

The data presented above can lead to several conclusions. Firstly, Serbian management domain experts are aware of the existing terminology problems and their urgency, since they are dealing with terminological gaps, terminological dependence on the English language and other issues in their everyday academic and professional career. The fact that the majority of respondents marked University, i.e. faculties teaching the management subject matter, as the institution(s) in charge of management terminology shows that management experts are aware of their role in the formation, harmonization and standardization of the domain terminology. Yet, the role of language experts is not underestimated, too, as well as the role of inter-institutional cooperation. Even though the data is not quite clear on what the priorities of terminology work are, the establishment of a strong institutional framework that would represent as umbrella for the activities of terminology standardization and terminography work seems to be the bottom point.

Based on the general information regarding the state of Serbian terminology, its management, policy and planning, as well as on the more specific information about the terminology in the domain of management, we can identify several issues in need of further inquiry.

The first one is the issue of *responsibility*. We have identified several language institutions responsible for language and terminology policy and planning implementation. The results of the questionnaire also point to the fact that subject-domain experts are aware of their own responsibility, (i.e. the responsibility of professional and academic associations and institutions) for the terminology of the domain in question, as well as the mutual responsibility of all the above-mentioned stakeholders. In such a situation, the responsibility is being transferred from one party to the other.

The second issue is the one of *awareness*: the awareness that the negligence of terminology issues and indiscriminate adoption of unadapted foreign words leads the loss of functionality of the Serbian LSP in problematic domains (i.e. domain loss). The number of research articles dealing with this issue and the results of the questionnaire may be taken as a proof that awareness does exist, but they also point to the lack of action.

The third issue is the one of *cooperation and collaboration* between stakeholders in Serbian terminology management: subject-domain specialists, translators, terminologists, linguists, information technology specialists, and other interested parties. As shown above, individual terminology projects neither seem to be coordinated and unified nor they are transparent enough. Terminological dictionaries are mostly compiled by lexicographers, while language planners and policy makers are for the most part linguists. Subject-domain specialists, according to the questionnaire results, seem aware of the importance of their involvement in the solving of the terminology issues. All this may indicate the need for an institution exclusively in charge of enabling cooperation, cooperation and (we would add) supervision of terminology work.

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Défis en gestion des terminologies, en politique et en planification terminologiques pour la langue serbe

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Résumé en français

Cet article vise à pourvoir une vue d'ensemble sur l'état de la terminologie et des activités de gestion terminologique pour la langue serbe, ainsi qu'à identifier de potentiels défis et vulnérabilités en la matière.

Dans la première partie de l'article, seront présentées des activités de gestion terminologique tant descriptive que normative, pour la langue serbe, actuellement en cours à l'échelon international, à l'échelon national ou bien à l'échelon local.

En ce qui concerne l'échelon international, nous étudierons la position et l'implication de la Serbie dans diverses institutions de gestion terminologique internationales ou régionales, ainsi que dans divers projets et activités au niveau international ou régional, tout en comparant la charge de travail des terminologues (recherche terminologique comprise) en Serbie, aux activités similaires dans d'autres pays européens (Bratanić, M., Ostroški Anić, A. 2013 : 83–94, Ciobanu, G. 2012 : 46–78).

En ce qui concerne l'échelon national, nous envisagerons la gestion des terminologies en serbe comme composante de la planification et de la politique terminologique, voire comme composante de la planification et de la politique linguistique en général (Filipović, J. 2012 : 285–320). Nous étudierons la contribution de la langue nationale et des institutions de normalisation, dans le processus de mise en place d'un modèle de planification terminologique. Ce modèle devrait être taillé sur mesure, afin de répondre à la fois aux besoins réels du marché serbe et aux contraintes socio-culturelles et socio-politiques de notre langue.

En ce qui concerne l'échelon local, nous étudierons plusieurs projets initiés par des enseignants-chercheurs et/ ou par des experts du domaine de référence, projets pour la plupart orientés vers des terminologies maisons et recouvrant chacun un seul domaine terminologique (Kovačević, Lj. 2000 : 49–65, Blagojević, B. 2011 : 53–56).

Qui plus est, la plupart des activités de gestion terminologique en Serbie faisant l'objet de cette contribution semblent être plutôt de nature descriptive, et se limiter à des initiatives personnelles. Nous remarquerons un manque évident de coordination entre divers projets de gestion terminologique, ainsi que l'absence d'une stratégie nationale en gestion des terminologies, qui vise explicitement à mettre en place un modèle de planification terminologique du type évoqué plus haut.

Les vulnérabilités identifiées, qui devront faire l'objet de recherches plus poussées, concernent surtout : (a) la responsabilité des institutions publiques, professionnelles ou académiques, en fait de gestion des terminologies en langue serbe ; (b) la prise de conscience insuffisante quant à l'importance de la gestion terminologique, en particulier pour ce qui est de la préservation du serbe sur objectifs spécifiques et de son caractère fonctionnel, ainsi que pour ce qui est des potentielles pertes de domaines subséquentes ; (c) les résultats de la coopération et de la collaboration entre projets de gestion terminologique et initiatives individuelles.

[Traduit de l'anglais par Anca-Marina Velicu, Université de Bucarest, relecture-révision stylistique par Virgile Prod'homme, Service de Coopération de l'Ambassade de France en Roumanie]

SESSION 2:
SOCIAL MEDIA AND TERMINOLOGY WORK

Terminology work in the digital era: New challenges of the democratization of knowledge

Maria Cortés and Sandra Cuadrado

TERMCAT

The body responsible for standardisation in the Catalan language is TERMCAT, a centre for terminology established in 1985 by the Government of Catalonia and the Institute of Catalan Studies, the principal authority on Catalan language.

0. Main activities

Its work has mainly involved three lines of action:

- Terminology standardisation
- Advisory services
- Creation of terminological products

The output from these three core activities (terminological production, neologisms and user queries) provides terminological resources and feeds Cercaterm, our free online consultation service, which contains almost a million term denominations and is updated on a monthly basis with new material.

To perform these tasks over its thirty years of life, TERMCAT has called upon collaboration from 3700 specialists from all kinds of fields of expertise.

Here we have some examples related to different fields of knowledge: the first one related to health science: Dictionary of neuroscience; the Terminology of Music Styles and the Terminology of Digital Marketing.

An example for this social and collaborative work can be seen in *Terminologia de màrqueting digital*, a project in which the corpus and in many cases the term denominations were decided upon using the proposals and comments of users on social networks. The result was launched in 2014: a new Catalan language online dictionary of digital marketing. When planning this dictionary our idea was to start a new terminology project on digital marketing, using social media to contact experts, to exchange opinions with users about new terms, and to get suggestions to create the terminological corpus.

Currently, the second edition is about to be published and the experts committee once again met both virtually and physically to discuss which new terms to include. This is an example of digital and traditional communication working hand in hand to get the best results. (Check the visual storytelling linked to the dictionary https://spark.adobe.com/page/gH5R6Fbe0cavY/).

Tomorrow we're meeting to talk about #màrquetingdigital https://t.co/g5y1qukUws @oscarvillalibre @lourdesfeans @Thinkcopy https://twitter.com/termcat/status/750262436121501696

1. Communication

Digital communications and the tools with which they are used are an important reality, one that cannot be ignored; to do so would be to risk missing opportunities for obvious improvement (Twitter, Facebook, blogs, Instagram, LinkedIn, etc.). TERMCAT has sought to take an active approach to this situation, and in recent years has incorporated use of these applications not only as a means for dissemination but also as a key axis in the processes of its terminology work.

1.1 Social networks, a new focus for terminology work

In digital communication and social media there is everything to learn and a whole new world to explore. Everything is -moving fast; it is not a question of take it or leave it; if you do not take up the challenge, the user will leave you. Social media are here to stay. It is time to observe, participate and, where possible, learn about the social rules in force.

Digital communications team

From this perspective, here at TERMCAT we decided to create a new work unit focusing on digital communication, mindful of the need to communicate our content in places where our users connect and discuss different topics with our colleagues. If our users can already be found in one place, why would we stay in another parallel channel? This must be organized as close as possible to our users, something we are working towards with the creation of a digital communication committee, in charge of planning all digital content and disseminating it in the best suited social media platforms.

Social media plan

For a company or institution, opening an account in social media networks is easy but it could be a waste of time if it is not accompanied by a social media strategy plan that defines the objectives and the actions to be implemented to achieve their goals.

The TERMCAT case

- Objectives: What are we going to communicate? Terminology products, new tools or services, corporate brand contents and cooperation with experts.
- Goals: branding, engagement, cocreation, coworking.
- Our audience: public and private institutions, universities, research centres, professional associations and societies, mass media, business, companies, bodies, specialists and language professionals, all of whom may need tools and resources for producing terminological products, drafting or translating specialist texts and technical rules, or localizing data-processing products.

Contents calendar and planning

There is no need to publish lots of programmed contents, the post must be well defined and distributed. It is time to listen to the audience to hear what they are interested in, what they are talking about. Establishing an effective plan is crucial to understand our targets better and reach their attention.

Where (channels: twitter/Facebook/blog): Twitter is the place where most of our expert communities are connected. The communication should be coherent in all channels even though we use different registers.

Frequency: the post frequency as well as the timetable must be defined in advance, for instance this is our case:

- 3 weekly post in the blog
- 4 posts a day on Twitter
- 1/2 posts a day on Facebook

The rhythm of every post

Today the communication rhythm is led by technology and the melody imposed by social media. The competition is so high, as users generally access social media platforms an average of 30 times a day, we consume lots of posts from lots of different sources. But where, why and when do we stop to look more deeply? Every post should be well defined, well thought and well written. This is why every single post has to have our rhythm and it must work as a whole unit. This is why the copy, the link and the image are so important to attract the attention of our audience.

Termcat dashboard

We meet every Monday morning and we plan all the posts for the following two weeks. First, we brainstorm possible thematic ideas and issues, after that we distribute the chosen ones into specific posts which will be located on the appropriate day depending on the latest news, planned publications or linked with corporate events.

The typology of contents depends on your audience. In our case we need to cover all fields of knowledge because our user and expert community is highly targeted. On the other hand, each platform is more suitable for certain posts than others. So we need to choose the best post for every social channel. Style, language, formats and discourse should follow the same communication line to keep a unique voice.

Metrics: Contents should be measurable, specific, attainable and relevant. They should be SMART: Specific+Measurable+Attainable (realistic)+Relevant+Temporal

Terminologists involved in the social media strategy

Everybody in the organization is promptly informed about the contents planning. So, they can cooperate with new post suggestions regarding their own terminological project and even contribute to each content with comments.

Blog

We publish a blog (http://blocs.gencat.cat/blocs/AppPHP/termcat/), which provides us with a much more direct means of interaction, linked to current affairs and users' immediate needs. It contains sections such as "Queries and answers" (which publishes real queries answered by the Cercaterm personal attention service) and the term of the week, featuring a topical term under the hashtag *#termedelasetmana*.

Examples:

- Terminology posts linked with latest news #termedelasetmana 'refugee'

  Refugiat/refugiada

  https://termcat.blog.gencat.cat/?s=refugiat

- Terminology posts linked with neology or latest queries. Consulta amb resposta: Com podem dir 'storytelling' en català?

  https://termcat.blog.gencat.cat/?s=storytelling

Twitter

Opened in 2011, TERMCAT's Twitter account now has over 14 000 followers and publishes 1500 tweets a year. Twitter has become a means for global connections with other institutions and with current and potential users. It also allows us to reach other communities of users who otherwise would not have been identified as part of our target audience. The communication of terms increases exponentially, and it is the users themselves who take the leading role in spreading term proposals inside their communities. Users become opinion leaders, influential in advocating term proposals that they themselves disseminate and, on some occasions, debate with other users. The terminological discourse is enriched by user participation, while the term implementation process is made more democratic by virtue of reaching a very broad community. All users can communicate in real time with the organisation, something that helps with decision-making, for example when it comes to approving the best alternative for a loanword. The community works as a barometer for measuring which trend may be most successful.

Examples:

- Cocreating with experts. Terminology and naming. How to create a brand name? #Espais2016

  https://twitter.com/termcat/status/789426760693772288

- Terminology tweets cover all fields of knowledge #Physics can work on social media. It depends on the content's rhythm.

  Ones gravitatòries o ones gravitacionals? Us ho expliquem a la nova Consulta amb resposta:

  https://twitter.com/termcat/status/699573002334310400

- Branding posts. Tweets used to announce a forthcoming publication on the correspondent international day. In this case, the international day for Ictus was the motivation to announce our new dictionary on this disease.

  https://twitter.com/termcat/status/791910551597174784

Twitter as advisory service

Apart from the planned contents, Twitter works as an advisory service. So, interaction with the community often comes from the users. The dialogue comes from the users and the terminology debate often continues among them. Meanwhile their questions become our source to detect new terms or the trending terminological issues.

Facebook

In terms of digital communications, TERMCAT's expansion of its channels continued in 2013 with the opening of a Facebook page (https://www.facebook.com/Termcat). Currently there are over 2600 Facebook users that like our page. It is regularly updated with new content (more than 400 posts a year), and this has succeeded in generating significant growth in interest from users.

Examples:

- Posts related to terminology curiosities which can attract a wide range of targets.

  Sommelier, sumiller o sommelier? Nova Consulta amb resposta:

  https://www.facebook.com/Termcat/?fref=ts

- Posts linked to social realities: Llindar de pobresa ('poverty line').

  Amb motiu del Dia Internacional per a l'Eradicació de la Pobresa, el nostre #termedelasetmana és 'llindar de pobresa'

  https://www.facebook.com/Termcat/?fref=ts

1.2 New formats

As communication channels change, the way in which content is presented also needs to adapt to the new terminological discourse. Accordingly, as part of our digital communication unit, we have recently started up a new line focusing on creation of the most suitable formats for terminology dissemination, making it more visual and more in touch with users' new forms of digital consumption. Its first works on climate change and alternative means of financing have been very well received by followers online. Strong motivation to continue with this line of work has been provided by positive results from impact indexes.

The explosion of visual and interactive content Infoxication and attention span

Never before has our brain been exposed to such an avalanche of information as nowadays. It is what has been labelled "infoxication".

Information overload resulting from the empowerment provided by smart devices, the digital platforms and the rapid acceptance of smartphones and tablets has several consequences:

- Our attention span has been reduced
- Anyone wishing to communicate a message in these conditions will have to plot a way to not go unnoticed. This is where visual content comes into play.

The power of imagery in communication

People generally only remember 10% of what they hear and 20% of what they read, but up to 80% of what they see and do, therefore it is obvious that visual content is destined to succeed in the era of “Infoxication”. Visual contents manage to attract and withhold attention.

The human being is an eminently visual species. Sometimes we forget that human beings are prepared to process visual signals much better than those based on text. Processing print isn’t something the human brain was built for. The printed word is a human artefact. It’s very convenient and it’s worked very well for us for 5000 years, but it is an invention of human beings.

Emotional content

What makes information transcend is not information itself, but the way you explain it. That is why emotional message becomes more and more important.

Strong storytelling and high-quality visuals can change the way people perceive even the most impenetrable content (E.g. NASA, CIA etc.)

Infographics are attractive, didactic and easily go viral

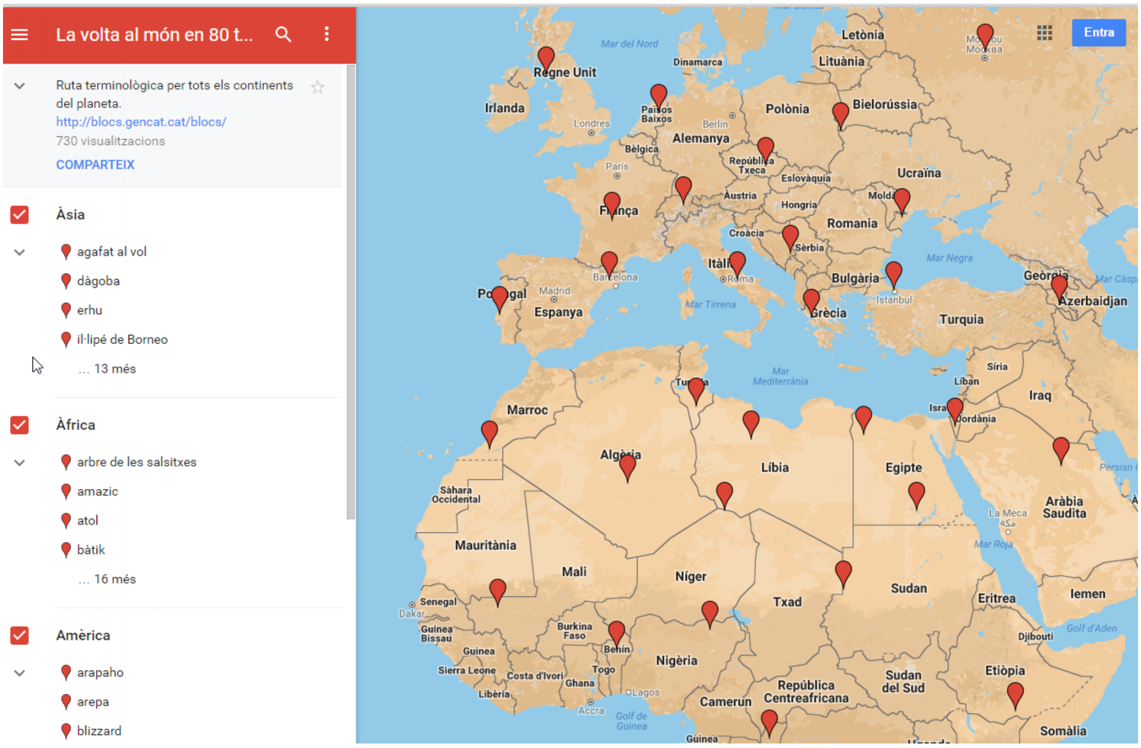
If a picture is worth a thousand words, a good data visualization is worth a thousand pictures.

A sign of their popularity can be seen in this chart depicting the evolution of searches for the term “infographics” in Google Trends over the last 5 years:

How is TERMCAT experimenting with new formats and narratives?

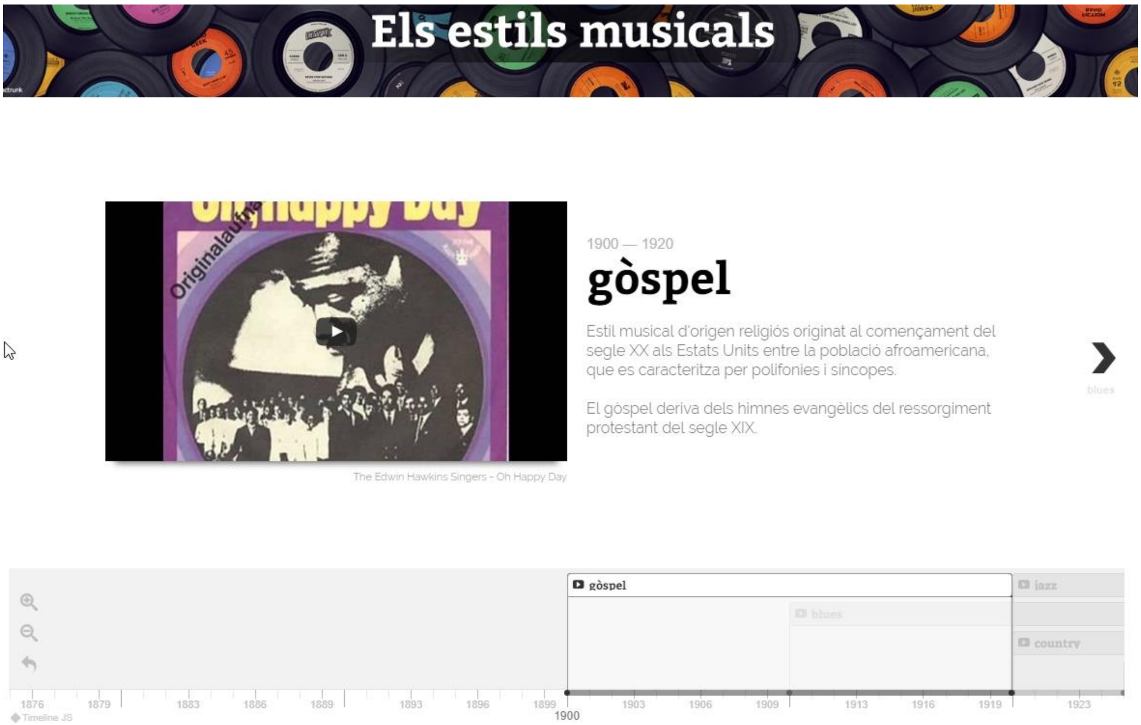
- Maps: Volta al món en 80 termes http://bit.ly/2f5aI5t

In the summer of 2015, we geolocalized the most popular terms all around the 5 continents: 80 terms, simulating Jules Verne’s *Around the World in Eighty Days*.



- Timelines: Estils musicals http://www.termcat.cat/docs/estils-musicals/

On the occasion of the publishing of the Terminology of music genres, we turned the plain dictionary into an interactive timeline that got a Youtube video of every style sample embedded.

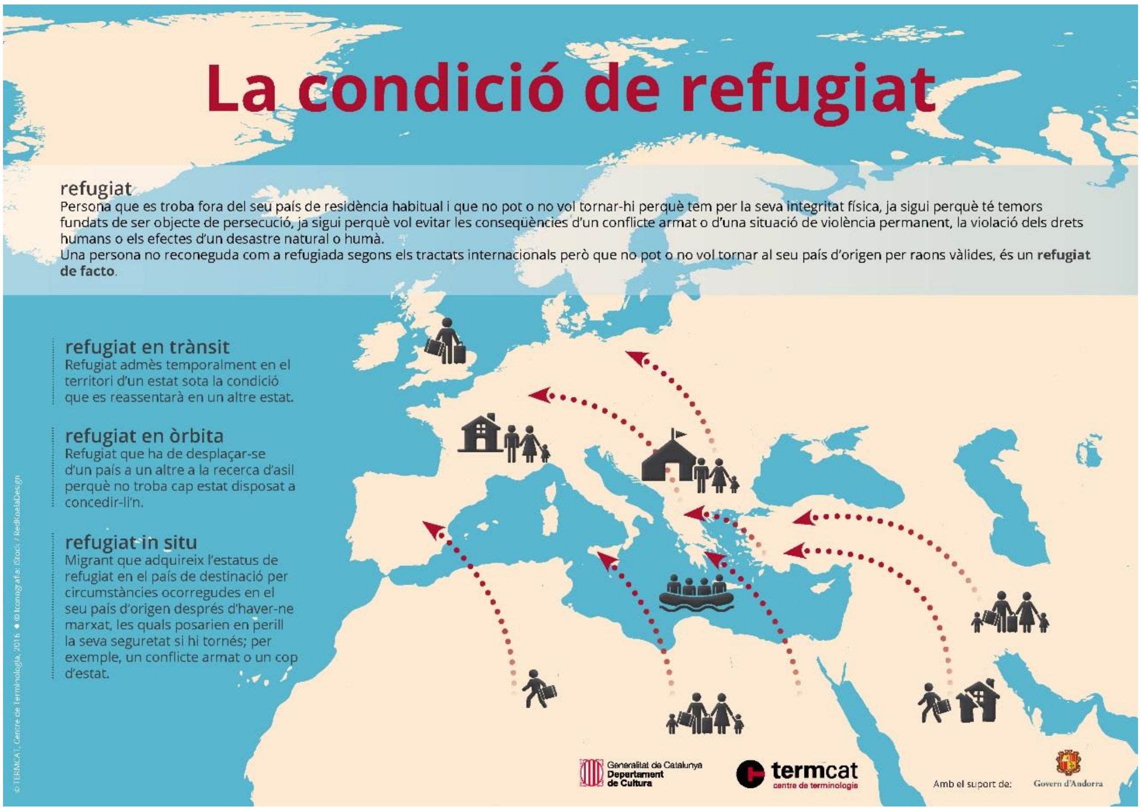


- Infographics: Cicle de l'aigua http://www.termcat.cat/docs/Cicle_Aigua/, Finançament col·lectiu http://www.termcat.cat/docs/Financament_Collectiu/index.html, Migracions http://www.termcat.cat/docs/Mapa_Refugiats/

The water cycle (Environmental Management Dictionary)

Crowdfunding (Terminology of Alternative financing)

The condition of refugees (Terminology of Migrations)

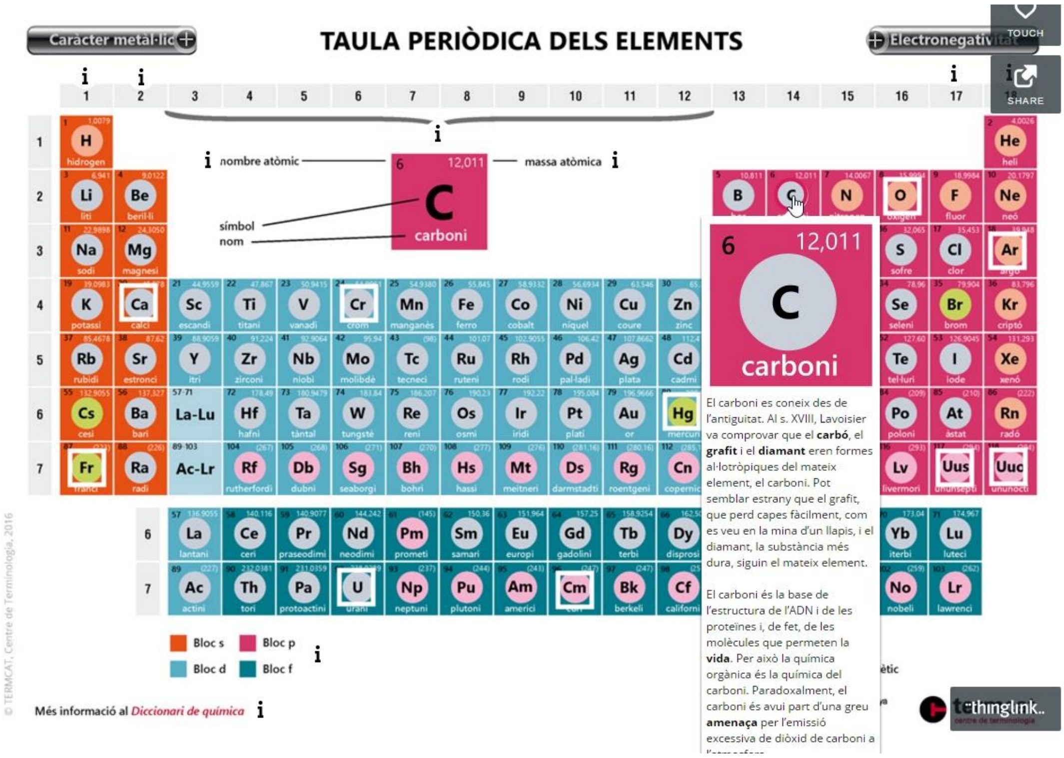


- Interactive images: Pluja d’estels https://www.thinglink.com/scene/751407346630000640, Corredors http://www.termcat.cat/docs/Jo_corro/, Taula periòdica https://www.thinglink.com/scene/841966764202917889

Meteor shower on the occasion of the meteorological phenomena that took place in February this year (alpha Centaurids)

Running equipment on the occasion of one of the most popular races in BCN, la Cursa de la Mercè.

Periodic table on the occasion of publishing the Chemistry Dictionary.



- Immersive storytelling: Canvi climàtic https://spark.adobe.com/page/JcBdI/, Videojocs https://spark.adobe.com/page/Tl4eqjPi1fEdV/

Climate change terminology on the occasion of the last UN conference in Paris.

Videogames terminology on the occasion of the BCN Games World meeting, last October.

- Microvideos: Finançament col·lectiu https://www.youtube.com/watch?v=EaGIP6nt1qE , Formació de termes https://www.youtube.com/watch?v=yZwcG7-MJN8

Short videoscribes showing the difference between accelerator and incubator and neologisms creation.

- Quizzes: Diccionari de l'erotisme https://www.timeout.cat/barcelona/ca/sexe-i-cites/quant-en-saps-de-sexe

Tests where users need to link a given definition to the best option in a multiple choice quiz (gamification).

- Gifs: Manga, Arts, Football, Augmented Reality, Gastronomy…
  https://twitter.com/termcat/status/791924081205444608 (manga)
  https://twitter.com/termcat/status/791924081205444608 (arts)
  https://twitter.com/termcat/status/715872354719678465 (football)

https://twitter.com/termcat/status/728189288458891264 (augmented reality)

https://twitter.com/termcat/status/753515987253727232 (topping)

1.3. To conclude. A new way of understanding and creating terminology

For TERMCAT, new social channels have not only changed the ways we publish our output; social networks have also affected its methods for the terminology work itself. The traditional stages in dictionary productions are still the same, but the communication channels, the relationships with experts and the potential for detecting neologisms in real time on social networks have all been cause for significant changes in the methodology.

Specialists

Twitter is a very useful source for detecting new groups of specialists and for deciding whether it is worth contacting them. The relationships with experts in any given project take the form of a dialogue, with direct interactions and almost immediate responses. New term proposals can be discussed, with the possibility for other experts – ones who were not called upon directly – to also contribute.

For example: our 'e-learning' project. We looked to Twitter to find the best Catalan proposal for this concept. We received 300 responses and had leaders from the education sector engage in a very successful online debate about our proposal.

1. New project on e-learning https://t.co/qHeIw9z1uk How do you call it in Catalan? Vote for your #propostaelearning

Original Tweet: https://twitter.com/termcat/status/738275167638593536

2. Want to see the results of the survey #propostaelearning? Thanks to all for taking part! http://bit.ly/1UyVku1

Queries service/Current topics

Fast detection of terms currently in use that are of interest to our community of users. In addition, new terms can be discovered in real time.

Neology

Twitter is one of the main sources when it comes to detecting neologisms. The reduced time interval between detection and dissemination of a term proposal favours implementation. At the same time, the success of a term implementation goes hand in hand with the users' social dialogue in the platforms.

Terminologists

Terminologists' rhetoric is humanised. It is worth noting that terminologists use their own Twitter profiles to disseminate their projects and collaborations, and can interact directly with experts in the fields they are working on.

Terminology is thus no longer simply disseminated as a product, as a set of terms that are more or less interrelated; it has now become a project shared between TERMCAT and its community of users. The dictionary is a result of the experience shared between the team of terminologists and the opinions gathered by our specialists and followers on social networks.

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Le travail terminologique à l'ère du numérique : nouveaux défis de la démocratisation des savoirs

Maria Cortés et Sandra Cuadrado

TERMCAT

Résumé en français

La communication numérique et ses outils représentent une réalité impossible à ignorer de nos jours. Quiconque les ignore court désormais le risque de rater l'occasion d'évidentes améliorations de son activité.

Le Centre de terminologie catalane TERMCAT a pensé adopter une attitude proactive à cet égard, et, ces dernières années, il a intégré le recours au numérique non seulement comme moyen privilégié de dissémination, mais également comme composante centrale du travail terminologique.

Aussi avons-nous pris la décision de créer une nouvelle unité, dont le principal objet d'activité sera la communication numérique, dans le souci de disséminer nos contenus précisément sur les sites où les utilisateurs de nos services entrent en relation les uns avec les autres et discutent avec leurs collègues. En effet, si nos utilisateurs sont déjà à retrouver sur une certaine plate-forme, pourquoi devrions-nous rester ailleurs, sur un canal de communication parallèle ?

L'idéal serait au contraire de mettre en place nos dispositifs à proximité des utilisateurs, autant que faire se peut. Nous ferons de notre mieux pour y parvenir, en créant un comité de la communication numérique, chargé de projeter tout contenu numérique et d'en assurer la diffusion sur les réseaux sociaux les plus appropriés. Comment allons-nous répondre à ces défis ?

D'une part, à force de nous adapter aux nouveaux flux de communication et d'assistance usager, avec des échanges multidirectionnels et des actions visant à stimuler le trafic de notre site. D'autre part, grâce à une présentation de l'information, enrichie, visuelle et interactive, adaptée aux exigences de la consommation numérique. Au fur et à mesure que les canaux de communication changent, la façon de présenter les contenus terminologiques doit changer à son tour.

En même temps, suite à ces évolutions, tant TERMCAT que les utilisateurs de ses produits et services, ont besoin d'un nouveau vocabulaire pour désigner toutes ces réalités. Dans l'esprit de la mission dévolue à notre institution, nous avons ouvert au grand public plusieurs produits (en terminologie du marketing numérique et/ou en terminologie des réseaux sociaux), qui permettent une meilleure délimitation à la fois des concepts désignés et de leurs dénominations.

[Traduit de l'anglais par Anca-Marina Velicu, Université de Bucarest, relecture-révision stylistique par Virgile Prod'homme, Service de Coopération de l'Ambassade de France en Roumanie]

Blogging our way into the future of terminology

Patricia Brenes

Owner of the blog 'In My Own Terms'

Long gone are the days when terminology was recorded by hand on index cards. Nowadays, technology evolves so fast that we have a hard time keeping up with it. It was April 8, 2014 when I wrote my first blog post. Back in 2014, I was contemplating the possibility of a career path change and wanted to follow the Terminology route. I came up with the idea of the blog while taking the ECQA Terminology Management certification, and it turned into reality thanks to Gabriele Sauberer and Blanca Nájera from TermNet who accepted it as my final project.

However, starting a blog does not mean immediate success. It takes a lot of research, patience, and time. Being a newbie to the field, I was lucky to make an initial contact with Maria Pia Montoro who is author of the Terminology blog Wordlo. This was first a LinkedIn connection that continued on Twitter. Once I got the hang of hashtags and all things Twitter, I connected with Rodolfo Maslias and Licia Corbolante who, along with Maria Pia, started retweeting my tweets. After that, it was all a snowball effect. That is the power of blogging, Terminology, and social media working in unison.

Therefore, it was not a coincidence that I was at TermCoord in 2015 talking about blogging and Terminology, and again in 2016 at the European Parliament talking about Terminology, blogging, and social media. The need for freely available information on Terminology was latent, although many of us had not realized that, if done properly, blogging and networking could be the way to raise awareness and get the attention that Terminology deserves.

It has been almost 50 years since Eugen Wüster published his Machine Tool, and we have accomplished many things since then. But imagine what could be accomplished not in 50 years, but 20, 10 or even 5 years, thanks to technology and to the joint efforts and support from the Terminology community.

Through social media, technology has opened new spaces for us to interact, share knowledge and most importantly learn from each other. It is in social media where blogging and Terminology meet. We are witnessing the start of the golden age of Terminology, and blogging and social media should take center stage.

Take 'Padlet' for example: It is a virtual collaborative bulletin board created in December 2012 and used by teachers and students for assignments and projects. I shared some of my blog posts and other Terminology-related information on Padlet, and when they found out about it, they asked for an interview to publish on their blog. Thanks to Padlet we were able to reach out to a public that otherwise would not know anything about Terminology.

Other recent examples of using the latest social media platforms are IULATerm and teleTermino that took us to 'Telegram', an instant messaging system created in 2013. IULATerm keeps us updated on the work they do and teleTermino offers students access to free training through very comprehensive exercises and useful feedback to students. I was also happy to see that companies such as SDL Trados and Interverbum Technology had been making tremendous efforts to disseminate Terminology by offering free webinars on terminology management with the participation of renowned terminologists such as Gabriele Sauberer, Barbara Inge Karsch, and Kara Warburton, among others, and then uploading the videos to YouTube to make sure that the information is available to everyone.

So, in view of the above, how do we blog into the future of Terminology? First, let us do an inventory of active blogs. We have 'TermCoord's blog'; 'Terminologia etc' by Licia Corbolante; 'Wordlo' by Maria Pia Montoro, 'Terminosophy' by Besharat Fathi, and 'In My Own Terms', all of which complement each other very well. More and more, translation blogs such as Olga Jeczmyk's '20.000 Lenguas', are also taking an active role in raising awareness. And all of these blogs have ranked in the last few years at the top 10 in the different categories of bab.la's annual contest of top professional language blogs. This is a strong indication that blogging is key to raising awareness about Terminology.

We need to keep working on three fronts: First, to offer original content in order to maintain relevance; second, to keep that content easy to understand and accessible to the public; and third, to keep up to date with new technologies.

In order to keep a blog alive, we have to write original content. In Terminology, that is an easy task: We have a lot of information in the form of books, articles, and presentations that can be transformed into concise and comprehensible blog posts. We need to be creative and innovative to make sure that our readership stays hooked.

However, we cannot captivate their interest if the information we give is too complex or technical. Do not get me wrong, books and articles are necessary, but if we want to reach out to potential Terminology lovers, as we call ourselves in social media, then we need to make sure that we explain our content in simple terms. This first approach would allow us to get the readers' attention.

Keeping up with technology is a big challenge for everyone, but well worth the effort, as it was demonstrated with platforms such as Padlet or Delicious. The new technologies that will come into light in the future will be another great opportunity to share the Terminology love and grow our community exponentially.

Thanks to that technology people are starting to really notice, and language professionals and other stakeholders are not only becoming aware of Terminology but asking where they can find more information on training. Here is a sample of messages that are very inspiring and that I have collected from readers.

- Claire: "I am a beginner in this field, but it interests me very much even if I don't know exactly where to begin and how to practice terminology management."
- Amelia: "The last few days I have started thinking about where I want to see myself and my career in the near future and the more I think about it, the more I feel it could be in the field of Terminology."
- Sara: "I have reoriented my professional life, but I'm deeply interested in the subject and I do wish to pursue further education in the field."

Just like Claire, Amelia, and Sara, there are many others who will find in Terminology a new passion through to blogging and social media. It is a fact that those outside the Terminology world don't know where to start, information is scattered or in a few cases outdated, books are expensive and complex for the newbies, but, again, more and more they are looking at Terminology as a career path and, therefore, more affordable or free training opportunities must be a priority.

People everywhere are searching for information. Statistics from In My Own Terms show readers come from all over the world: Saudi Arabia, Colombia, The Netherlands, Austria, Guatemala, Japan, and so on and so forth. Asma from Saudi Arabia says: "*You have no idea how much your posts motivated me. I'm genuinely interested in Terminology because of your blog*". This type of message is a clear indication that people are thirsty for knowledge. A quick look at the blog's top searches is also proof of the topics that people are looking for: training, terminologist, job description, and job opportunities.

Here is one way to explain how I felt when I took my first steps into this fascinating field. When we visit our homeland after a long time away from our country, what is the first thing we hear? We hear our people speaking the same language (our language), using the exact same words and speaking with a unique accent. Well, that is exactly how I felt in 2015 when I visited TermCoord for the first time. All of a sudden, I stepped into the "real world" of Terminology. I heard people talking about Terminology every day as part of their daily life, and I immediately felt that I was a member of their community.

This connection is extremely important for Terminology, because our goal must be to give people that same feeling of "being home", even if they can't come to international events such as the EAFT meeting, let them feel that, instead of being outsiders, they are part of a strong and thriving community of Terminology lovers.

So let's keep blogging, meeting in social media, and sharing the Terminology love!

Entrons dans l'avenir de la terminologie en bloguant

Patricia Brenes

Propriétaire du blog In My Own Terms (Dans mes propres termes)

Résumé en français

Les vingt dernières années ont vu d'importants progrès technologiques ayant contribué à la dissémination des terminologies. Tout cela aura abouti à un vrai âge d'or de la terminologie, à la fois comme science et comme pratique professionnelle, à force d'ouvrir de nouveaux espaces où l'homme, les savoirs et la technologie puissent se rencontrer, espaces d'interaction, d'apprentissage et de partage.

Les blogs et les réseaux sociaux sont des véhicules idéaux de dissémination, d'apprentissage et de partage d'informations sur la terminologie. Mais le progrès incessant de la technologie lui-même n'a de pertinence que dans la mesure où nous continuerons à partager, grâce aux nouvelles technologies, notre amour de la terminologie.

[Traduit de l'anglais par Anca-Marina Velicu, Université de Bucarest, relecture-révision stylistique par Virgile Prod'homme, Service de Coopération de l'Ambassade de France en Roumanie]

Terminologie et néologie dans les réseaux sociaux

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1. La création de nouvelles terminologies : évolutions des pratiques et dynamiques sociales

Pendant les dernières décennies, la discipline terminologique a connu une évolution rapide et profonde, qui s'est concrétisée dans la révision de plusieurs postulats théoriques qui avaient caractérisé la première phase de la théorie d'empreinte wustérienne (Théorie Générale de la Terminologie, désormais TGT). L'avènement de la terminologie textuelle d'abord (Bourigault et Slodzian, 1999), l'application de plus en plus fréquente de l'analyse de vastes corpus textuels, plus récemment encore l'essor de la socioterminologie (Gaudin, 2002), puis de la terminologie sociocognitive (Temmerman, 2000) contribuent à modifier profondément l'approche méthodologique en terminologie. Cette « irruption du discours » (Cabré, 2015 cité par Maldussi, 2016) dans l'étude des terminologies marque le tournant de la terminologie normative à la terminologie descriptive, de l'idée de la terminologie comme nomenclature à l'étude des variations à l'œuvre dans les discours spécialisés.

Parmi les postulats théoriques mis en discussion par l'évolution des pratiques discursives (tels le principe de l'uninotionnalité, la biunivocité de la relation entre terme et concept, l'absence de variation ou de synonymie dans les terminologies), l'un des plus intéressants est à notre avis lié à la phase de création de nouveaux termes, en d'autres mots au processus de *néonymie* (Rondeau, 1984). Force est en effet de constater que l'avènement de l'Internet et des nouveaux médias de communication de masse a profondément modifié les dynamiques à la base de la création de nouvelles dénominations. La création néonymique a été pendant longtemps confiée à des instances d'autorité (Humbley, 2012), qu'il s'agisse de techniciens d'un domaine ou secteur, de professionnels (dans le cas par exemple des « terminologies d'entreprise »), ou bien encore d'organismes responsables de politiques linguistiques. Dans tous ces cas, la proposition, puis la *validation* (Gaudin, 2002) des termes, revient aux spécialistes, comme il ressort des citations suivantes :

> On peut distinguer les étapes suivantes dans la constitution d'un domaine spécialisé. **Les termes sont attribués à des concepts par les spécialistes d'un domaine**, d'un métier, d'une science, d'une discipline, d'une activité de loisir, d'une théorie, d'une activité de production, etc., quand une innovation voit le jour et qu'ils ressentent le besoin de créer et de nommer le concept correspondant. Ceci se produit généralement quand l'idée ou la représentation mentale de l'innovation est suffisamment claire dans l'esprit de la personne pour qu'elle puisse la définir. Au début, les termes sont affectés provisoirement seulement et ils n'existent que dans l'idiolecte de celui qui les a inventés. Ils font partie de sa langue personnelle. Si l'inventeur veut communiquer sa découverte ou des idées à d'autres, il doit cependant trouver une désignation susceptible d'être acceptée par les spécialistes du domaine, voire par le grand public. **Le processus de dénomination du concept est comparable au baptême** (Sager, 2000 : 55 – c'est nous qui soulignons)

> **C'est dans les discours spécialisés que sont institués les termes** : signalés, en règle générale, par une prise en charge explicite de l'acte dénominateur de la part de son auteur, qui l'accompagne souvent de commentaires sur la motivation du terme, mettant en relation sa forme et son sens (Mortureux, 1995 : 8 – c'est nous qui soulignons)

Or, le développement massif de l'Internet à partir des années 90, et plus spécialement des réseaux sociaux à partir des années 2000, a contribué à bouleverser la donne. La connaissance se fait de plus en plus *liquide*, partagée, et la néologie, même dans les langues spécialisées, n'est plus uniquement confiée aux experts, mais elle devient (dans certains secteurs notamment) le produit d'un travail collectif, au sein de communautés discursives hybrides dans lesquelles l'ethos expert s'avère de plus en plus flou et la validation des termes est l'apanage du consensus collectif indifférencié. Gaudin et Nicolae (2016) rappellent à ce propos les concepts de *déférence épistémique* et de *confiance épistémique* que l'on doit à Gloria Origgi (2008) et qui s'avèrent de grande actualité pour repenser les enjeux de la création et de la validation en terminologie à l'heure actuelle :

> Notre savoir procède d'une construction sociale dans laquelle les rôles sont répartis et, de nos jours, **l'expertise est souvent confiée à Internet**. Or sur ce support, les règles sociales de l'expertise sont méconnues et **le savoir se diffuse en jouant sur la déférence sans que personne ne soit vraiment responsable**. (Gaudin et Nicolae, en ligne, 2016 – c'est nous qui soulignons)

Comment cette évolution des pratiques communicatives influence-t-elle la création et la validation des nouvelles dénominations ? Peut-on encore parler de termes techniques et de locuteurs experts ?

2. Le domaine de l'œno-gastronomie e la création de nouvelles dénominations

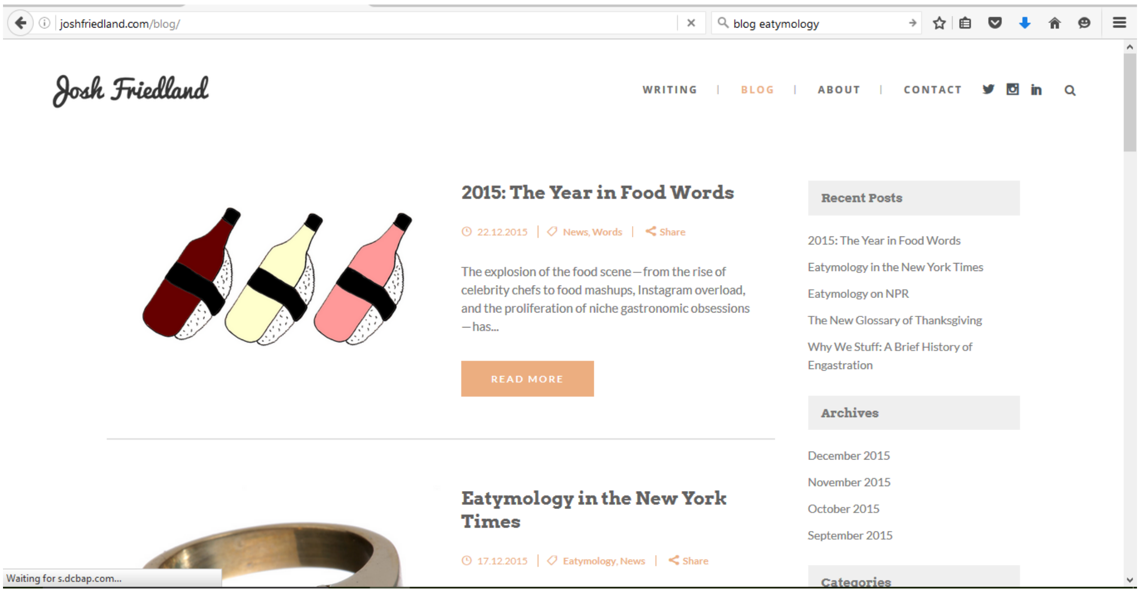
Afin de répondre – du moins partiellement – à ces questions, nous avons sélectionné comme domaine d'étude le domaine de l'œno-gastronomie, qui nous a paru intéressant sous plusieurs points de vue : il s'agit en effet d'un domaine spécialisé sensible aux évolutions et aux dynamiques de changement internes au lexique, riche en innovations technologiques et langagières, mais également d'un domaine à la spécialisation fort ambiguë, lié aux modes et aux phénomènes sociaux passagers, foisonnant en néologismes expressifs outre qu'en néonymes (Bouverot, 2000). En plus, il s'agit de l'un des domaines professionnels les plus popularisés et les plus médiatisés des dernières décennies : les innombrables émissions télévisées, le nombre illimité de blogs et de sites Internet sur ce sujet témoignent de l'engouement du grand public pour les activités gastronomiques. Tous ces facteurs rendent ce domaine un terrain de recherche propice pour notre brève réflexion sur les pratiques de création néonymique dans les réseaux sociaux.

Les néologismes dans le domaine gastronomique sont désormais légion dans les dictionnaires contemporains, et les parutions des éditions du *Petit Robert* ou du *Petit Larousse* à chaque rentrée offrent au public de nouvelles dénominations d'objets, ustensiles, mets et recettes, mais également de nouvelles pratiques sociales liées à la nourriture. Juste pour ne citer que quelques exemples, le *Petit Larousse* et le *Petit Robert* en 2016 enregistraient l'entrée dans la nomenclature d'une série de nouveaux mots liés à la gastronomie, à savoir *crudivore, bistronomie, cuisine moléculaire, vegan, cœur-de-bœuf, entomophagie, yuzu*. En 2017, le Petit Robert ajoutait à cette liste les néologismes suivants : *antispécistes*, *viandards*, *pad thaï*, *piquillo*, *graines germées*, *alfalfa*, *pommes paillasson*, *mara*, *ristrette*, *bûchette* (*de sucre*). Le Petit Larousse, quant à lui, intégrait en 2017 *burrata*, *ciabatta*, *mannele*, *noisettine*, *phô*, *socca*, *wrap*. Parmi ces termes, les néologismes liés aux pratiques gastronomiques (comme *locavore, crudivore, viandard*) constituent des cas emblématiques de création au sein des communautés de discussion en ligne ou dans les médias. La néologie est bien alors une opération collective, dont le parcours diverge de celui de la néologie d'autorité et dans laquelle la responsabilité de la création lexicale est partagée dans la communauté des locuteurs, qui ne sont pas forcément des spécialistes.

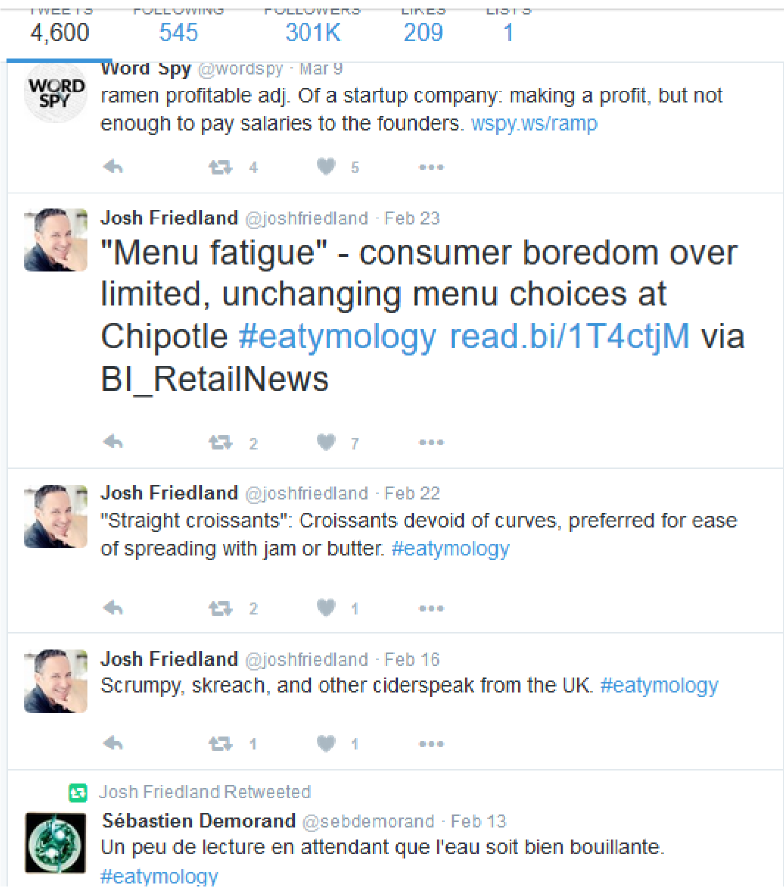
Pourtant, même dans ce cas de figure, le parcours de création des nouveaux termes est censé passer par une phase de validation des nouvelles dénominations, et cette nécessité est à l'origine de longues discussions en ligne, dans les blogs et dans les réseaux sociaux (Twitter avant tout), qui permettent de tracer et d'analyser les différentes phases de la création néologique. Cette particularité fait des corpus de discussion en ligne un observatoire privilégié.

3. Josh Friedland et son *Eatymology* : un exemple de création néonymique *via* les réseaux sociaux

Un cas d'étude intéressant afin d'observer l'impact des nouvelles pratiques discursives dans la création de nouveaux termes nous est offert par le journaliste et bloggeur américain Josh Friedland. Auteur d'articles et rubriques gastronomiques pour le *New York Times*, le *Washington Post*, *Olive magazine* (BBC), and *Time Out New York*, écrivain parodique, Josh Friedland est l'animateur d'une plateforme de communication qui exploite plusieurs outils et réseaux sociaux, tels que Twitter, LinkedIn, Instagram (http://joshfriedland.com/) :

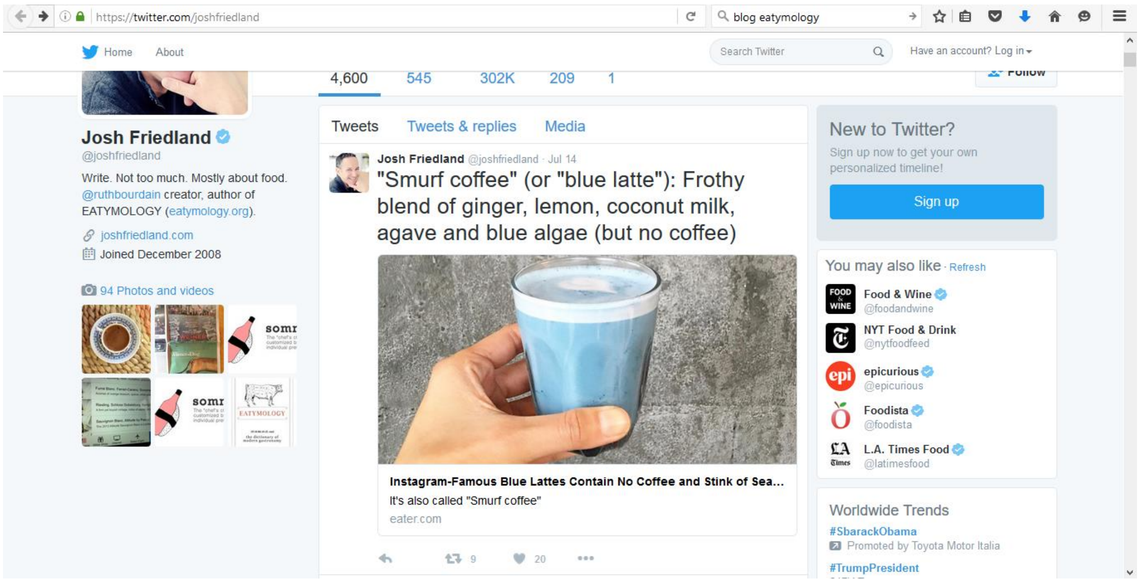


A l'intérieur de son site, Friedland partage ses considérations et ses critiques par rapport aux nouvelles modes gastronomiques, aux nouvelles pratiques sociales dans le domaine de la nutrition, et finalement discute des nouvelles dénominations pour ces nouveaux concepts :



Le blog, l'account Twitter et le site en général permettent alors à la communauté des internautes de se confronter sur les nouvelles tendances, mais également de discuter des nouvelles dénominations, de cautionner l'usage de nouveaux termes ou de refuser des terminologies perçues comme peu efficaces.

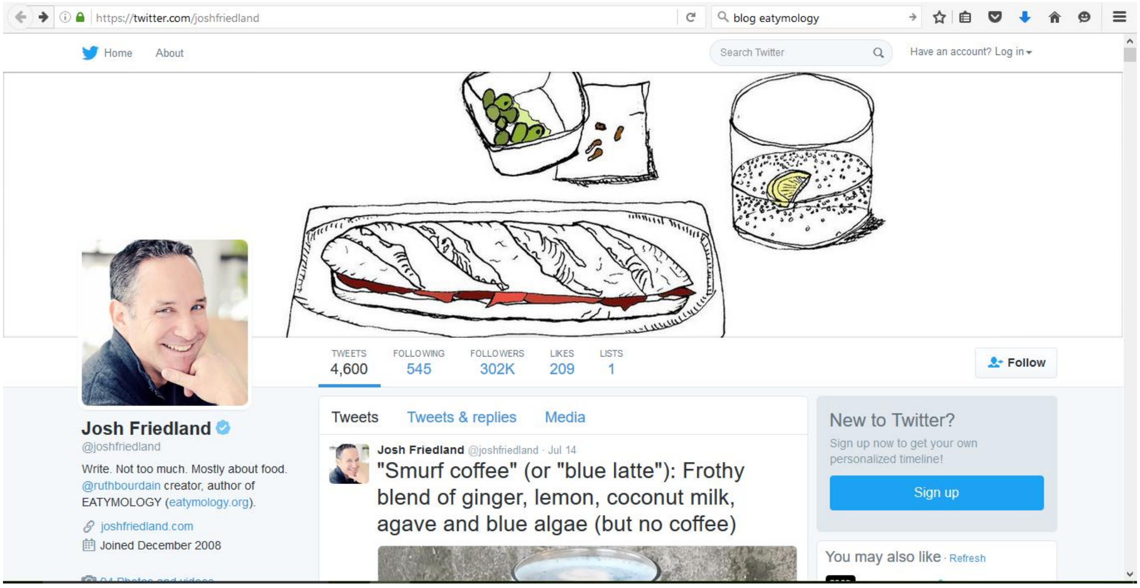
Dans l'exemple suivant, c'est l'emploi de Twitter qui permet à Friedland de relayer le néologisme *blue latte (smurf coffee)* pour la boisson à base de citron, gingembre, lait de coco et algues bleues :



Sommes-nous dans cet exemple face à un cas de néonymie ? Il ne faut pas sous-estimer le fait que – mis à part l'aspect ludique de la dénomination et notamment du renvoi interdiscursif aux Schtroumpfs – la nouvelle dénomination fonctionne dans le discours à tous les effets comme un néonyme, la boisson bleue étant une nouvelle réalité dans un discours spécialiste (le domaine de la gastronomie et des boissons) qui nécessite d'une dénomination précise. Le fait que cette dénomination soit proposée dans un réseau social tel que Twitter en appelle à deux considérations corollaires.

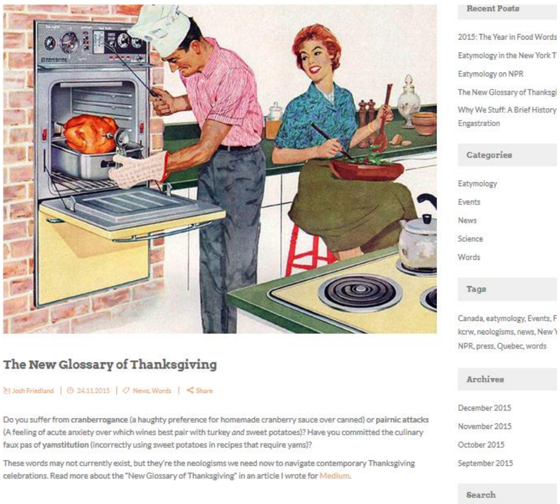
La première : la proposition de néonymie dans les réseaux sociaux marque une démocratisation quelque peu ambiguë du processus de validation du nouveau terme, car les « internautes » constituent une communauté de discours aux contours flous, dans laquelle le statut d'expert peut être attribué sur la base de dynamiques purement internes au réseau, et qui n'ont pas forcément un lien avec les profils professionnels et les compétences réelles des intervenants[16]. On pourrait donc contester la reconnaissance du statut de *néonyme* à cette nouvelle dénomination.

La deuxième considération, qui s'oppose à la première, met en revanche l'accent sur le fait que, désormais, la validation des termes est de plus en plus l'apanage des usagers que de l'élite restreinte des « professionnels », et que – notamment dans certains secteurs comme la gastronomie – la grande masse des internautes peut jouer un rôle fondamental. Il suffit de prendre en compte le nombre des *followers* (302 000) dans la page de Josh Friedland pour comprendre le poids de cette collectivité dans l'implantation des nouveaux termes proposés (ou mieux, le plus souvent, relayés, captés dans les médias tels qu'Instagram[17] ou dans la presse en ligne) par le blogueur :



L'intention de l'auteur est toujours par ailleurs ouvertement orientée vers la définition de nouvelles *terminologies*, qu'il s'agisse d'articles dans le blog, ou de messages dans son profil Twitter :

[16] Comme en témoignent les nombreux mécanismes d'évaluation des compétences présents dans les forums ou dans les plateformes collectives – nous avons ailleurs analysé ce phénomène dans l'évaluation des compétences des traducteurs dans Rossi, 2013.
[17] C'est le cas par exemple pour *blue latte*, voir https://www.theguardian.com/lifeandstyle/shortcuts/2016/jul/13/blue-latte-the-vegan-coffee-that-smells-of-seaweed-and-contains-no-caffeine.



Même si dans bien des cas les termes proposés dans les articles de Friedland sont des inventions cocasses, tels que les termes contenus dans son *Glossary of Thanksgiving*[18] – où l'on passe de l'opposition entre *partisans* et *intactivistes* pour la recette de la dinde, à la stigmatisation de la *yamstitution*, à savoir l'usage de la patate douce à la place des ignames… – on remarque au fil des discussions la présence de termes qui représentent en effet des dénominations précises et couramment utilisées. On sort alors du domaine de la parodie et on rentre dans le domaine de la création collective de néologismes, car les termes comme *blue latte* sont ensuite globalement utilisés comme désignation d'une boisson concrète et réelle.

C'est à partir de cet ensemble de termes désormais attestés dans l'usage, qu'en 2015 Friedland a finalement publié un recueil « officiel », regroupant sous le titre d'*Eatymology*[19] les néologismes gastronomiques recensés dans son site. La nomenclature est formée par des entrées concernant aussi bien de nouvelles pratiques sociales dans le domaine de la gastronomie, que de nouvelles techniques de préparation ou de nouvelles recettes de cuisine. On passe de l'hôtel pour la levure-mère (*sourdough hotel*) à la nourriture paresseuse (*lazy food*), du *cronut* (croissant+donut) au *smushi* (*smørrebrød* danois + sushi), des *brocavores* à la *drunkorexia*…

Dans ce cas aussi, l'intention communicative de Friedland est claire : fournir, même sous forme de dictionnaire détourné à des fins satiriques, un aperçu des nouvelles dénominations et des nouveaux concepts de mode dans le domaine de la gastronomie et de la nourriture. Bien qu'il soit conçu comme un ouvrage parodique, le dictionnaire de Friedland présente toutes les caractéristiques saillantes que Léturgie (2009) attribue aux dictionnaires détournés, ce qui le rend un document intéressant pour analyser la charge culturelle partagée qui se cache derrière les néologismes enregistrés. On n'oubliera pas en outre que, indépendamment de leur origine plus ou moins parodique, les termes répertoriés par Friedland sont des termes attestés et utilisés dans la presse et dans l'Internet, et que les dynamiques linguistiques et sociales présidant à leur formation, puis à leur validation, sont tout à fait les mêmes que l'on retrouve dans les processus courants de néonymie technique.

Ce parallélisme est encore plus évident si l'on analyse en profondeur la structure de l'ouvrage. Le texte enregistre 100 termes et, pour chaque terme, il fournit un traitement en forme d'article lexicographique, avec mention de la prononciation du terme, la catégorie grammaticale, une définition et une note étymologique, comme dans les exemples suivants :

[18] https://medium.com/@joshfriedland/cranberrogance-rewining-and-stuffobia-the-new-glossary-of-thanksgiving-8893441ef0a0 (cons. 07/06/2017)
[19] Josh Friedland, *Eatymology. The Dictionary of Modern Gastronomy*, Sourcebooks, 2015.

LA·ZY FOODS (*noun*): Precut vegetables and other semiprepared foods sold as culinary shortcuts for harried home cooks.

ORIGINS

A 2010 article in the *BBC News Magazine* reported on rising UK supermarket sales of "'lazy food' and cooking 'cheat' ingredients such as peeled potatoes, diced onions, and other partially prepared vegetables that eliminate a step or two in the cooking process."

As reported by the *Telegraph*, a 2010 study of British consumers by the website MySupermarket.co.uk, found that spending on "ready-grated, sliced, and chopped" products was up 14 percent over the previous two years and that women spent 10 percent more on such products than men. Jonny Steel, a MySupermarket spokesman, told the *Telegraph*: "Our great-grandparents would be amazed at the kinds of convenience ingredients sweeping the supermarket shelves—prechopped onions, ready-grated cheese, and even ready-boiled eggs. Foods that were once considered an absurd convenience are now a normal part of our daily routines."

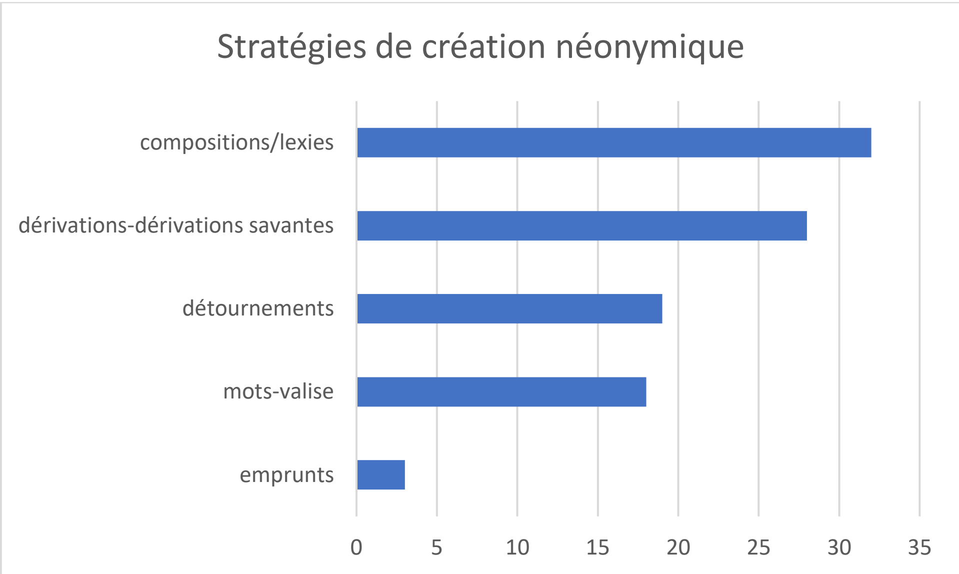
ven·dri·fi·ca·tion

ven·dri·fi·ca·tion (*noun*): The process by which an influx of fancy food trucks selling gourmet treats threatens to displace established, traditional street vendors.

Katie Robbins coined the term in a September 25, 2009 article in *BlackBook* reporting on rising tensions in New York neighborhoods between existing kebab and hot dog vendors and their new competition: social-media savvy entrepreneurs serving up cupcakes, schnitzel sandwiches, and Tahitian vanilla *panna cotta* (among other treats) from their high-end food trucks:

> "In a city accustomed to gentrification, perhaps this new phenomenon could be described as "**vendrification**," with more expensive, higher-tech carts and trucks sweeping in and shaking up the culinary terrain of the streets. Predictably, this shift has led to some tensions between the "traditional" vendors and the newer-style sellers, who often use heavily decorated trucks, rotating seasonal offerings, and regular Twitter tweets advertising their current whereabouts to draw in customers. For the kebab and hot dog vendors, who often stay in the same city-assigned location day after day, it becomes a question of market infringement."

Une analyse approfondie des entrées (Giaufret, Rossi, à paraître) révèle que les mécanismes à l'œuvre dans la création des néonymes sont globalement les mêmes mécanismes utilisés dans la création néonymique dans d'autres domaines spécialisés ; on remarque notamment la primauté de la composition sous forme de lexies (*coffee nap, nut rage, pot wine, ugly fruit*) et de la dérivation savante (*bestovore, carnism, bratophobia, brocavore, cookivore, demitarian, drunkorexia*…) :



Un cas particulier est enfin représenté par les néologismes créés par détournement (Sablyarolles, 2012), renvoyant à des réalités interdiscursives ancrées dans la mémoire collective (c'est le cas per exemple de *goodfellas thin* ou *cowpooling*) ; cette stratégie, éminemment ludique, qui n'est pas apparemment propre aux langues de spécialité, rentre en réalité dans les mécanismes les plus fréquemment exploités à des fins néonymiques. C'est en effet la culture partagée dans la communauté des spécialistes qui entre bien souvent en jeu dans la création de nouvelles dénominations, comme dans le cas des BD dans le domaine de l'informatique (Pavel, 1991) ou encore de la science-fiction dans la terminologie des nanotechnologies (Fries, 2016). Dans ce cas, la culture de référence est la culture globalisée de la masse des internautes, connaissant le film *Goodfellas* and *Stardust Memories*… une preuve ultérieure du fait que la néonymie, dans ce domaine, est désormais de plus en plus soumise à la communauté élargie du Réseau.

Peut-on finalement parler de néonymie, ou bien faudra-t-il renvoyer à une simple néologie expressive à des fins ludiques ? Si les termes décrits dans *Eatymology* naissent sans doute comme des détournements parodiques, des jeux de langage, on ne saurait oublier que ces termes deviennent ensuite bien souvent des dénominations partagées et acceptées, ce qui les rend à notre avis très proches d'une terminologie à tous les effets. On n'oubliera pas non plus que beaucoup de termes scientifiques célèbres (*big bang*, pour rester dans les sciences physiques, où la précision est la règle et la validation officielle des dénominations est censée être la norme) ont connu un parcours de création comparable : inventés par la presse, popularisés par les médias, et finalement validés par les spécialistes.

Il nous semble alors que les mécanismes à l'œuvre dans le petit observatoire constitué par le site de Josh Friedland ne sont qu'un des nombreux symptômes d'une évolution plus générale, qui déplace progressivement sur la Toile, dans la communauté vaste et indéfinissable des internautes, les dynamiques de création néonymique autrefois confiées aux communautés expertes. S'agit-il d'une juste démocratisation des savoirs, ou bien d'une perte dangereuse de pouvoir épistémique des experts au profit des grandes collectivités indéfinies des internautes ? Peut-on confier la responsabilité de la création terminologique à ces instances ? Comment les instances officielles peuvent/doivent-elles se positionner par rapport à ce changement inévitable ?

Pour ne pas conclure : qui peut créer de nouveaux termes ?

La communication spécialisée est en train de subir une évolution rapide, notamment dans des domaines où nous sommes tous impliqués, comme celui de la gastronomie (mais pas seulement…). L'expertise, autrefois confiée aux élites des spécialistes, aux décideurs officiels, aux autorités politiques et linguistiques, est devenue un concept de plus en plus flou, dilué, diffusé dans une communauté d'usage de plus en plus globale. La création terminologique est désormais une question de plus en plus collective, et c'est la collectivité qui décide du succès ou de l'échec d'un néologisme. Dans ce contexte liquide, complexe, sans contours précis, le rôle des réseaux sociaux est fondamental pour la définition des nouvelles pratiques discursives. Il s'agit d'une dynamique de démocratisation irréversible, qui nous questionne en tant que linguistes et qu'il ne faut pas sous-estimer : les procédés de validation des concepts et des termes sont en train de changer, et l'acte de dénomination deviendra de plus en plus un acte collectivement partagé, du moins dans certains domaines socio-professionnels.

Il est donc indispensable d'établir des stratégies de veille néonymique qui permettent aux linguistes et aux terminologues de suivre les évolutions des discours et des concepts même à l'intérieur de communautés de discussion en ligne qui, normalement, ne seraient pas considérées comme des communautés expertes, mais qui peuvent avoir un impact important sur les usages. Comme le précisent Gaudin et Nicolae (2016) « *Le sens en usage relève […] de la communauté linguistique alors que le rapport à la vérité référentielle est de la responsabilité des experts* » : il nous semble que la responsabilité épistémique des spécialistes (y compris les linguistes) s'avère encore fondamentale aux fins de guider, d'orienter, de surveiller le parcours des nouveaux termes qui naissent et se développent dans les nouveaux médias de communication de masse.

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Terminology workflows at an Austrian university aimed at collaboration, terminology awareness and joint responsibility for university terminology – a study on the University of Vienna's terminological database UniVieTerm

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Background

The University of Vienna is a diverse university and this diversity is also reflected by its terminology. Its terminology ranges from administration and studying to teaching and research. This means that, on the one hand, there is terminology arising from the university administration that covers the entire university. On the other hand, there is terminology used in a certain academic discipline. However, both areas include several domain-specific terminologies (Heinisch-Obermoser 2014).

The University of Vienna has different workflows for translation-oriented terminology work. The workflows determine the options for collaboration between domain experts, terminologists, translators, university employees and approvers. The terminology management system serves as a collaborative workflow system or a life cycle management system for terminology that facilitates the processing and recording of term requests and decisions (Fleischmann et al. 2013).

This paper shows the University of Vienna's terminology workflow and addresses the challenges of collaboration, terminology awareness and responsibility.

Terminology-related challenges

The Bologna process aimed at the harmonisation of the European Higher Education system led to changes in the Austrian university system and its terminology. These changes provided the basis not only for a discussion of the German terms used (to be able to differentiate between the previous and the new higher education system in Austria), but also of the English designations (Heinisch-Obermoser 2014).

However, there was no centralised terminology management at the University of Vienna. So, every organisational unit and every person could coin their own terms. The result was inconsistent university terminology, predominantly in English. This led to misunderstandings and required centralised and prescriptive terminology work. To reveal and remove the inconsistencies in English university terminology used in communications materials of the University of Vienna, a workflow for terminology work in the areas of studies, administration and teaching was established at the University. A so-called terminology network (a particular group of approvers) was appointed to decide on a preferred English term by discussing the terms that are already in use at the University of Vienna as well as the term candidates researched by the terminologists.

Prescriptive terminology work

UniVieTerm follows a prescriptive approach. The major challenge of prescriptive terminology work at the University is to find an English concept for the German one because there is hardly any 1:1 equivalence due to different higher education systems. However, the most appropriate English term is selected according to certain criteria.

Although the University of Vienna uses British spelling in its external communications, it does not focus on British university terminology only. It tries to find an internationally understandable preferred English term regardless of whether the term is part of a specific university system.

However, some terms are unique to Austria or the University of Vienna and it is difficult to find an appropriate English designation. Therefore, some German designations are also used in English to highlight the term's uniqueness, i.e. some German expressions are not translated into English (Heinisch-Obermoser 2014).

UniVieTerm – the University of Vienna's terminological database

The tangible result of this process is UniVieTerm (Fig. 1 and 2), the University of Vienna's bilingual terminological database covering the main fields of activity of the University. It contains university terms such as designations of organisational units, functions, certificates, degree programmes, services, professorships, buildings and study- and work-related terminology. The university employees and translators can access the terminological database via the University's Intranet.

Figure 1: UniVieTerm logo

Figure 2: Start page of UniVieTerm

Users can search for terms, request the entry of new terms, comment on existing terms and use a number of social features within the terminology management system.

Searching in UniVieTerm

In UniVieTerm users can search for terms in German and English. They have two options to search for a term:

- They can enter a search query in the search box (and select from different search modes, such as normal search, fuzzy search or full-text search) or
- they can use filters to browse the content of the terminological database. Here, the system displays all terms of a certain domain or category. Instead of searching, it allows users to navigate through the entries that belong to a certain category (based on subject fields or disciplines).

When their search for a term was successful, the system displays either basic or detailed information on an entry:

- The short version (Fig. 3) displays only the subject area, the term and its recommended usage, i.e. if it is a preferred or deprecated term. The preferred and deprecated terms can also be distinguished by their colour as the term's colour depends on the term's usage recommendation. In addition, the information whether a term is recommended or not is also highlighted in the "usage" field.

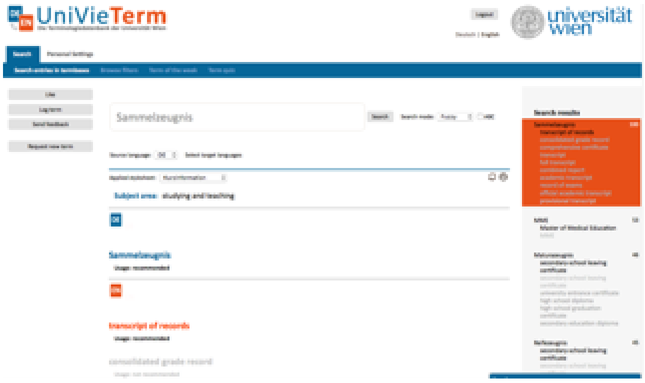

Figure 3: Short terminological entry in UniVieTerm

- The long version (Fig. 4) contains additional information such as definition, context, note or geographical usage of a term, register, grammatical information, administrative status, etc.

Figure 4: Long terminological entry in UniVieTerm

Requesting the entry of new terms

When their search for a term was not successful, users can notify the terminologists of a missing term. If users wish the entry of a certain term currently missing in the terminological database, they have two options:

- If users want to send a quick message that a term is missing in UniVieTerm, they can log a term. Log term is the easiest way of informing the terminologists that users have not found a certain expression in the terminological database. Users just enter the term they have not found and do not have to provide any further information. An immediate workflow is not initiated. Users only inform the terminologists that they have searched for a term, but have not found it.
- Users can also file a term request that enables them to provide more detailed information on a term, e.g. an explanation, a definition or a note. They can also send a message to the terminologists or attach word lists or files and define the priority of their term request. Users have to enter their contact details in case the terminologists have any queries. A term request initiates a workflow for including a new entry in the terminological database. The approvers will discuss the term in one of their meetings and the approved entry will be available in UniVieTerm afterwards.
- The third option is looking up terms in non-university terminological databases, dictionaries, encyclopedias and translation memories. If UniVieTerm does not contain the search term, users can refer to other electronic resources such as Wikipedia, IATE, Pons, Linguee or Leo. The

electronic resources available through UniVieTerm can be found at the bottom of the search results column. The name of the resource is displayed in square brackets.

Providing feedback on existing entries and contributing to UniVieTerm

If users wish to provide feedback on already existing entries, they can send their comments or request that an entry is modified, e.g. if they think that the English preferred term is not the best option or if they would like to change the definition. Furthermore, they can chat with the terminologists via the system. However, users have never used this option before.

Users can contribute to UniVieTerm not only by informing the terminologists about a missing term or by commenting on an existing entry, but they are also invited to provide their terminological resources. Their glossary, word list, etc. can be integrated into UniVieTerm.

Social features (to strengthen motivation)

Currently, the main users of UniVieTerm are university employees, i.e. people who are neither translators nor terminologists. Therefore, certain measures are aimed at motivating them to use the terminological database and thus at involving heterogeneous user groups in terminology work. These measures include social features and social elements in UniVieTerm:

- **Liked entries**: Users can like entries in order to have quick access to their most frequently used terms on the UniVieTerm start page. The number of users who like an entry defines the ranking of a term. The figures to the right of the term indicate the number of users who liked this entry.
- **Recommended entries**: However, terminologists can promote and recommend certain terms as well. Entries that are frequently searched for, new terms added to UniVieTerm or commonly misused terms are listed underneath the Recommended entries heading on the start page.
- **Term of the week**: When looking at the term of the week (Fig. 5) that presents a term contained in UniVieTerm, users can learn about the key university terminology used in German and English. The term of the week is also advertised on the start page of the university intranet.
- **Term quiz**: Users can test their knowledge of university terminology with the term quiz (Fig. 6). They can solve the quiz by choosing the so-called correct translation of a term or by finding the appropriate term for a definition. After the users have answered all questions, the numbers of their correct and incorrect answers are displayed.

Figure 5: Term of the week in UniVieTerm

Figure 6: Term quiz in UniVieTerm

Terminology workflows

Terminology workflows define the sequence of a terminological process, i.e. the sequence of operations through which a term passes from request to publication and (iterative) modification. These workflows also determine the options of collaboration between domain experts, terminologists, translators, university employees and approvers.

Workflow models as well as the types and sequence of collaboration between user groups can be specified (Chiocchetti & Ralli 2013; Karsch 2006; Kudashev 2013). The terminology management system, or rather the terminology workflow system, facilitates the processing and recording of the users' requests and feedback as well as the decisions of the terminology team.

Basically, the University of Vienna has two workflows. There is a short and a long workflow for (translation-oriented) terminology work. Depending on the priority (i.e. urgency and/or importance) of the user request and the degree of specialisation of the term, the terminologists decide whether to use the short or the long workflow. The short workflow means that the terminologists do terminology work and make the final decision. The long workflow includes the consultation with the domain experts and the final approval of the preferred term by the terminology network (or another group of approvers).

In the following section, this paper focuses on the end-users' perspective, especially the university employees' perspective. The terminology workflow is illustrated with the following example:

- A university employee searches for a term in UniVieTerm, but she cannot find it. So she can either log a term (i.e. just clicking a button and informing the terminologists about a missing term) or filing a term request (i.e. providing additional information such as subject field, definition or own "translations" of a term and specify the priority of the request).
- The terminologists receive a notification (via e-mail) that a user logged or requested a term. They also receive an e-mail if a user provided a feedback on an entry. In addition, unsuccessful searches are logged automatically if a certain number of people look for the same term but have not found it. All requests and comments are accessible via the system.
- Then, the terminologists check the users' feedback, logged terms and term requests.
- Depending on the priority determined by the user, the terminologists either just collect the requests for later processing or they take the next workflow step.
- Domain-specific questions are forwarded to the experts or the terminologists ask the users for clarification if anything is unclear.
- Depending on the difficulty, significance and frequency of a term and the available information on a term, the terminologists decide whether it is necessary to discuss the term with the terminology network (or another group of approvers) in order to obtain approval for a preferred term.
- First, the terminologists take the following steps:
    - They look for relevant internal and external terminological resources,
    - create a corpus,
    - extract term candidates,
    - collect additional information such as definitions, context or explanations, geographical usage, etc. and
    - analyse and check the terms according to the main criteria, i.e. transparency, precision and frequency of a term.
- The final step in the short terminology workflow consists of the terminologists' decision on a preferred term, whereas in the long terminology workflow the terminology network (or approvers) have the final say regarding the preferred term. After a quality check, the updated information is published in UniVieTerm.
- After a requested term has been discussed and decided on, the users receive an e-mail that their entry is now available in UniVieTerm.

- The cycle starts again if the users or the terminologists are requesting changes according to new developments.

Challenges

Although there is an elaborated workflow that is facilitated and documented by the terminology workflow system, there are still some challenges. The main challenges regarding terminology workflows include collaboration, joint responsibility for terminology and terminology awareness.

Collaboration

The workflows determine the type of collaboration between different user groups including domain experts, terminologists, translators, university employees and approvers.

Collaboration often entails divergent opinions and perspectives. Especially domain experts have different views on a concept, even if they are experts in the same domain. An expert's or approver's preference for a certain term thus heavily depends on the disciplinary background (and school of thought), the linguistic background (e.g. preferred use of American or British English) and habits (long-established use of a certain term, individual usage preferences, etc.).

The workflow should be flexible enough to allow for urgent terminology work. The long workflow makes it hard to meet certain deadlines that are usually dictated by translation assignment deadlines. In addition, there are different approvers depending on the domain of a concept. Moreover, the domain experts and approvers are not always available. Therefore, it is difficult to find a date for a meeting or to gain approval via the system in a relatively short period of time.

Furthermore, the use of new technologies, especially a specialised system such as UniVieTerm, decreases the willingness to work with the terminology workflow system. For the domain experts and approvers the use of the terminology workflow systems means using another system, in addition to all the other (university) technologies they already have to use as researchers or as employees.

In addition to the divergent perspectives, the (sometimes) strict deadlines and the technological hurdle, the workflow involving the approvers also caused terminological inconsistencies within a discipline or subject field. These inconsistencies arose because the responsibility of people making terminological decisions depends on their position within an organisational unit and ends with their term of office. This also means that approvers are appointed on the basis of their hierarchy or status in an organisational unit and not according to their interest in terminology. Therefore, there are different approvers within one organisational unit for degree programmes, professorships, key research areas, the designation of organisational units, etc. In some cases, the approvers have the final say ignoring the recommendations from the terminologists and thus leading to inconsistent terminology within a certain domain.

Motivation and terminology awareness

Generally, the motivation of the users to use UniVieTerm either as a look-up tool or as a tool to participate in terminology work is low. The number of people providing terminological resources, making comments on or contributions to entries is low compared to the total number of employees. Reasons for this might be a lack of terminology awareness among university employees and the unwillingness to change their term usage habits. Users seem to reject the change of preferred terms because these might be terms they have used for years. If people are used to a certain term, they do not realise (any more) how uncommon this term might be in an international context. The reasons why university employees do not consult the UniVieTerm terminological database might also be that they are unaware of the terminological database's existence and access to it. As the terminological database can only be accessed via the University's intranet, this might be another barrier to the consultation of UniVieTerm as well as the usability of the terminological database.

Joint responsibility for terminology

Related to terminology awareness is also the aspect of joint responsibility for terminology. As mentioned before, the terminology work done at the University follows a prescriptive approach. However, different user groups have a different sense of responsibility for terminology. For example, translators are required to use the preferred terms as specified in UniVieTerm. They also give feedback on the entries in UniVieTerm as the usage of (correct) terminology in their texts influences the overall quality of their translations. On the other hand, for university employees there is no obligation to use the preferred terms. Therefore, they might not have a strong feeling of joint responsibility or perception of ownership in the area of terminology work.

In the wake of prescriptive terminology work, there might be another aspect that does not help develop the employees' feeling of joint responsibility for terminology. Prescriptive terminology work might evoke the perception among users that terminology work is a top-down initiative. Therefore, they might think that they do not have a say in terminology work or that their contributions and suggestions do not matter.

Recommendations

The recommendations for the further development of UniVieTerm are aimed at increasing terminology awareness, collaboration and joint responsibility for university terminology. The recommended activities are intertwined, but they are listed according to their primary purpose.

Measures to raise terminology awareness include:

- Targeted communication and cooperation measures should increase the use of and contributions to UniVieTerm. First steps that have already been made encompass the term of the week and the term quiz. However, information events and workshops addressing UniVieTerm and terminology work in general would help showing the relevance of terminology for everyday university activities. As a result, the expansion of the terminological database and more feedback on entries are expected.
- Generally, improving the communication about UniVieTerm via various channels would help promote the terminological database and terminology work. The University's social media and internal communications could provide more information on the terminological database and the workflows. This can stress the importance of the university employees' expertise in their domain and the significance of their contributions to UniVieTerm.

For a more active and close collaboration with and between users, the recommendations are the following:

- The communication measures mentioned above might also help form a larger group of approvers who understand the importance of terminology work. So, the terminologists can attract people who are really interested and competent in terminology work.
- The terminology workflows could be adapted to the needs of ad hoc terminology work (required for translation). So, deadlines imposed by translation assignments could be met more easily. Moreover, the terminology workflow system could be used more comprehensively so that meetings aimed at the approval of terms do not have to be convened at short notice. The terminology workflow system would allow for more effective online collaboration.
- The publication of UniVieTerm on the Internet enables the terminologists to reach a wider community. It would also make the terminological database more accessible because it is currently only accessible via the university intranet. The publication on the Internet would also mean that a wide range of people gain access to the university terminology and can contribute to the further development of the terminological database. However, this requires preparation by the terminologists. A broad user base also means a lot of communication and support to be provided.

- Some activities to share responsibility for terminology work are:
- In addition to the information events and workshops mentioned above, networking events for the people responsible for terminological decisions in an organisational unit would help them getting to know each other and exchange experience.
- The usage of UniVieTerm and the number of contributions to it might not only be low due to the usability of the system and accessibility of the information but also to the users' dissatisfaction with some preferred terms. Therefore, more transparency of the workflows for the users and dissemination of information on the types of user contribution are necessary.
- A concept system or ontology that depicts the relationship between the concepts in the terminological database would also make the use of UniVieTerm more attractive for users.
- The university management could issue a guideline stating that UniVieTerm is the sole source of terminology and that preferred terms have to be used for all university communications. This would also help to acquire some status within the University.
- Achieving a status within the organisation would also mean that the use of preferred terms and following the workflows becomes mandatory or, at least, habitual for users.
- In addition, the design of an intuitive web interface for non-terminologists according to usability guidelines might also lead to a high usage of UniVieTerm. Therefore, it would be necessary to conduct a usability test to evaluate the design and content of the terminological database's user interface. Non-terminologists should easily and quickly find the information they are looking for. Complicated systems that are cumbersome to use do not win user acceptance. Therefore, the terminological database should provide a reduced amount of information, many ways to find the required information or a certain functionality and easily understandable content, including the designation of the data categories (Cauna 2012; Heinisch-Obermoser 2016).

Conclusion

UniVieTerm is a bilingual terminological database fostering corporate terminology within the University of Vienna. It has to cover a wide range of disciplines and subject fields. Conflicting opinions on terminology among stakeholders and users sometimes require trade-offs that contradict the principles of professional terminology work. In addition, prescriptive terminology work and finding equivalent concepts in a system of different higher education systems also pose challenges to terminology work at the University.

There are two workflows, a short and a long workflow for (translation-oriented) terminology work. The terminologists decide whether to use the short or the long workflow based on the priority of the user request and the degree of specialisation of the term. The difference between the short and the long workflow is the involvement of the approvers. The short workflow means that the terminologists select a preferred term, whereas a group of approvers discusses the terms and their definitions in the long workflow. Domain experts are usually asked for their advice in both workflows. Therefore, the workflows also determine the options of collaboration between domain experts, terminologists, translators, university employees and approvers.

The main challenges are not only terminology work but also aspects related to the terminology workflows and the use of the terminology workflow system itself. Basically, these challenges include collaboration, lack of terminology awareness and joint responsibility for university terminology. Although UniVieTerm offers various options to provide contributions to and feedback on the content of the terminological database, the motivation of the users to consult UniVieTerm is rather low. Users hardly submit term requests, comment on entries or use social features, such as the term quiz, the live chat or term of the week. In addition, urgent terminology work, inconsistent terminology arising from divergent opinions as well as (individual) habitual term use and preferences pose challenges to the terminology workflows. Moreover, the use of the terminology workflow system itself as wells as restricted access to and the usability of the terminological database might be barriers for users. Furthermore, a certain indifference towards terminology work and its relevance, different opinions of and within user groups as well as the availability of approvers are also challenges that the terminology workflows need to respond to.

Activities to increase the use of the terminological database, foster collaboration between and among user groups, raise terminology awareness and share responsibility comprise targeted communication across different channels and cooperation initiatives. They include the organisation of information and networking events as well as workshops addressing both UniVieTerm and its workflows and terminology work in general. These measures are primarily aimed at emphasising the importance of terminology in university communications. Other activities are the adaptation of the workflows to the needs of urgent terminology work and the publication of UniVieTerm on the Internet to reach a wider community. The issuance of guidelines on terminology work by the university management, the aim of achieving a certain status within the University and the improvement of the usability of the system could not only increase the number of people involved in terminology work but also improve the quality of the terminological database's content and terminology workflows.

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Flux terminologiques dans une université autrichienne ciblant explicitement le travail collaboratif, l'éveil de la conscience terminologique et la responsabilité commune et partagée pour la terminologie académique – une étude de la BDT UniVieTerm de l'Université de Vienne

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Résumé en français

L'usage d'une terminologie académique adéquate joue un rôle très important dans le « processus de Bologne » pour toute université européenne. Cependant, on en sait très peu sur la gestion des flux terminologiques dans le domaine des études, de l'enseignement et/ou de l'administration même de ces universités. Une analyse aura dévoilé quels sont au juste, les flux de travail pour les termes spécifiquement académiques tant allemands qu'anglais, à l'Université de Vienne.

Les résultats de cette étude auront montré que l'Université de Vienne dispose de plusieurs flux distincts pour le travail terminologique axé sur la traduction, et que des mesures spécifiques y sont prises afin d'impliquer dans le travail terminologique plusieurs groupes différents d'usagers. Ce sont en effet les flux qui déterminent les options de travail collaboratif entre experts du domaine de référence, terminologues, traducteurs et fonctionnaires (employés de l'université). Le système de gestion des terminologies facilite le traitement et l'enregistrement des recherches de termes par les usagers, ainsi que les décisions au cas par cas de l'équipe de terminologues.

Parmi les principaux défis en fait de flux terminologiques, mention doit être faite de : de la collaboration avec les experts du domaine, quand il y va notamment de décider du terme préféré en anglais ; de l'appétence ou motivation des fonctionnaires de l'université à consulter la BDT UniVieTerm, d'envoyer leurs commentaires et suggestions, voire d'opérer des ajouts d'informations dans la base elle-même ; de la conception d'une interface web intuitive, pour des usagers non terminologues, interface qui respecte les règles d'accessibilité en vigueur.

Cet article formule une série de recommandations concernant d'autres mesures de communication ciblée et de coopération, susceptibles d'intensifier l'usage de UniVieTerm et d'augmenter le nombre de contributions à cette BDT, tout en éveillant la conscience terminologique des fonctionnaires de l'université et la responsabilité commune et partagée pour le travail terminologique. En outre, nous nous attacherons à discuter de l'architecture et du contenu des interfaces utilisateur de cette BDT, ainsi que des évolutions futures des flux terminologiques.

[Traduit de l'anglais par Anca-Marina Velicu, Université de Bucarest, relecture-révision stylistique par Virgile Prod'homme, Service de Coopération de l'Ambassade de France en Roumanie]

Inspired by the past, based on the present, looking at the future

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1. TERMit and IUSLIT: the origins of TERMitLEX

More than two decades ago, in 1996 to be precise, a team of researchers[21] of the University of Trieste developed TERMit (Magris, 2002), a database built for the storage of multilingual terminological data. The idea for this database stemmed from the desire to bring together students of the former Advanced School of Modern Languages for Interpreters and Translators of the same University and have them work on a collective project. By deciding to participate in the project, translation and interpreting students agreed to contribute to it by creating and populating TERMit with their own bi- or multilingual terminological collections. These collections were actually produced as final research projects by both BA students in Applied Interlinguistic Communication and MA students in Translation and Interpreting, who could thus acquire useful professional skills and experience in data mining, corpus compilation and analysis, terminology management and alike. Yet, they could also benefit the translators and interpreters' community at large, given that the so produced terminology collections were made available to the general public via the Internet[22]. Moreover, ever since TERMit's creation, students could engage on topics of their own choice. For this reason, the database nowadays contains around 400 collections, which belong not only to a wide array of domains, ranging from medicine to law, from architecture to sports, etc., but also to more specific subdomains that reflect the students' most varied interests and passions, such as speech disorders, restorative justice, beekeeping, fly fishing or Gothic architecture.

In 2012, the Advanced School of Modern Languages for Interpreters and Translators was converted into the Section of Studies in Modern Languages for Interpreters and Translators (SSLMIT) of the newly founded Department of Legal, Language, Interpreting and Translation Studies (IUSLIT). While maintaining its main research interests in the theory and practice of translation and interpreting in general, the SSLMIT now co-exists with the Section of Legal Studies, which has given a new boost to research on legal translation and interpreting. This new academic setting has also led to a greater interaction between linguists and lawyers in the two Sections, which resulted in the launch of shared academic projects[23] receiving European, national or local funding and dealing mainly with legal

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[20] This co-authored paper is the result of collaborative efforts by researchers within the Department of Legal, Language, Interpreting and Translation Studies of the University of Trieste. However, as regards the organisation and the actual writing of the paper, Katia Peruzzo, who was responsible for the analysis of lawyers' terminological needs, wrote Sections 1 and 2 and Subsections 2.1 and 2.1.1, whereas Marella Magris, who is in charge of the TERMit and TERMitLEX projects, wrote Subsection 2.1.2 and Section 3.

For an illustration of the structure and the fields included in TERMit terminological template, see Magris, Musacchio, Rega & Scarpa (2002).

[21] The research team in charge of the development and management of the terminological database TERMit was originally composed of Marella Magris, Maria Teresa Musacchio, Lorenza Rega and Federica Scarpa.

[22] The web portal TERMit is no longer available.

[23] The IUSLIT participated in the following projects related to legal translation and interpreting:

• *AVIDICUS 3 – Assessment of Video-Mediated Interpreting in Criminal and Civil Justice – Assessing the Implementation*: a two-year European project with financial support from the Criminal Justice Programme of the European Commission, Directorate General Justice, http://wp.videoconference-interpreting.net/;

• *QUALETRA – Quality in Legal Translation*: a two-year European project with financial support from the Criminal Justice Programme of the European Commission, Directorate General Justice, http://www.eulita.eu/qualetra;

translation, legal interpreting and legal terminology. As far as the latter research field is concerned, the University of Trieste has funded a project[24] for the development of a multilingual knowledge base containing legal terminology only, which will be presented and discussed in the remaining part of the paper.

2. TERMitLEX: a work-in-progress TKB

Legal terminology is a research field of great interest for both linguists and lawyers. This is why a team of translation studies and law scholars within the IUSLIT is currently working on a shared project whose aim is to develop a new terminological knowledge base (TKB) intended as a repository of terminological records related to the legal domain only. The inspiration for this new resource derived from the TERMit project, but the decision to create a separated TKB was taken for three main reasons. Firstly, the complexity and multidimensionality of legal terminology (Sandrini 1996, 2014, Wiesmann 2004, Magris 2004, Peruzzo 2014), especially when it is not only multilingual but also embedded in different legal systems, as is the case with the research on legal terminology carried out at the IUSLIT, reveals the clear need to keep it separated from the terminology of other specialised domains. Secondly, the launch of a new TKB would allow the Department also to develop a devoted website to make it available worldwide and thus disseminate the research outcomes obtained by BA and MA students. Finally, the co-existence of very different professional profiles but with common research interests 'under the same roof' in the IUSLIT brings to the fore the possible usefulness of such a resource not only for legal translators and interpreters, but also for law students and legal practitioners. Therefore, when considering the potential end users of the new TKB, an immediate question arose as to whether the terminological record template used in TERMit, which was originally designed to suit translators and interpreters' needs, as well as the type of data usually contained in it were capable to satisfy also lawyers' needs and expectations.

2.1 TERMitLEX: the project stages

The project can be divided into three stages, all of which are interconnected. The first stage consists in the revision of the TERMit template by taking into account the needs of lawyers together with those of translators and interpreters. The second stage requires the existing collections to be updated and new records (or even full collections) dealing with cutting-edge legal topics, such as immigration and 'third generation rights', to be added to the TKB. The third stage implies the dissemination of the TKB by means of the creation of a new website to host it and will not be discussed in this article.

2.1.1 Understanding lawyers' terminological needs

The idea underlying the needs analysis conducted within this project was to clarify what legal practitioners and legal scholars expect from a terminological resource available online. For the purposes of this project, however, the needs analysis was conducted by means of questionnaires to be completed not by legal professionals, but by students attending the Single-Cycle Master Degree Programme in Law at the IUSLIT. This choice was motivated by a practical reason: law students were a convenient respondent group as they were readily available in the Department to complete the questionnaire.

• *FRA 2014: "Sistemi multilivello delle fonti e tutela della proprietà industriale in ambito europeo: la traduzione del codice della proprietà industriale in tedesco"*: a project funded by the University of Trieste for the translation of the Italian Code of Industrial Property into German.

• *FRA 2013 "Qualità e costi dei servizi linguistici nel procedimento penale tra direttive europee e sistemi nazionali"*: a project funded by the University of Trieste on the implementation of Directives 2010/64/EU, 2012/13/EU and 2012/29/UE in national legal systems and the relevant quality and costs;

• *FRA 2011 "Traduzione in inglese del codice di procedura penale italiano"*: a project funded by the University of Trieste for the translation into English of the Italian Code of Criminal Procedure;

• *FRA 2011 "Bisogni e bisogni formativi nella comunicazione interlinguistica con i servizi di polizia e nei procedimenti penali"*: a project funded by the University of Trieste for the analysis of needs in terms of interlinguistic communication of local law enforcement agencies;

• *FRA 2011 "Il modello franco-tedesco di un regime patrimoniale fra i coniugi. Strumenti di circolazione in Europa"*: a project funded by the University of Trieste to foster, through translation into several languages, the dissemination of the agreement between Germany and France on an optional matrimonial property regime.

[24] *FRA 2015 "Sviluppo di una base di conoscenza terminologica multilingue in ambito giuridico"*.

More specifically, two groups of final-year students were selected and asked to participate on a voluntary basis, namely students[25] reading either Legal English or Criminal Enforcement as their elective modules. As regards the structure of the questionnaire, it was subdivided into five sections: the first allowed students to provide demographic information and self-assess their knowledge of English[26]; the second focussed on the knowledge and use of both traditional (paper) and electronic (online) linguistic resources, such as dictionaries and encyclopedias; the third contained a practical task to be performed on a simple legal text dealing with the concept of probation in the UK; the fourth and fifth consisted in the observation and evaluation of a terminological record on the concept of 'probation' in IATE and TERMit respectively. Although the illustration in detail of the questions and tasks included in the questionnaire goes beyond the scope of this article, the main results affecting the terminological template of the new TKB structure- and content-wise are summarised below.

The first consideration that can be made on the basis of the students' answers is the different attitude towards a TKB and the data contained in it if we compare language experts[27] on one hand and lawyers on the other. For the former, a TKB can be considered as both a starting and an ending point in one of the tasks within the translation process, since once a translation difficulty is identified (the need for an equivalent in the target language in this case), the translator or interpreter checks one or more resources and may be satisfied with the solutions provided therein. On the contrary, for lawyers in most cases the same TKB is considered the starting point for further research: the identification of an equivalent in a different language may serve as the basis for finding other material, sources, texts, etc. in another language. This consideration is closely linked to the different use language experts and lawyers make of textual material: while the former are first and foremost text producers, the latter are mostly text users.

The second result, which is of greater concern for the research team as trainers of future professionals, is the lack of knowledge of the features, bases and possible uses of different linguistic and terminological resources. Strikingly enough, some students didn't distinguish between a dictionary, a glossary or a translation memory. However, "[t]he use of language is crucial to any legal system" (Endicott 2002/2016), let alone because "[l]awmakers characteristically use language to make law, and law must provide for the authoritative resolution of disputes over the effects of that use of language" (ibid). In an increasingly globalised world, legal practitioners are constantly faced with the challenges posed by interacting legal and linguistic systems. Therefore, it is the writers' opinion that law students probably need more linguistic training, above all in terms of knowledge of both foreign languages, but also as regards the availability of linguistic resources.

As far as terminological records are concerned, the participants to the survey were asked to express their preferences in relation to the structure and content based on their observation of the IATE and TERMit records and their personal experience with dictionaries and other linguistic resources. Considering the structure first, law students appreciated IATE's research function and user interface due to the possibility of selecting the relevant domain and thus saving time as compared to having to scroll a full online or paper dictionary entry to find the meaning appropriate to the content. When considering TERMit's template structure, on the contrary, some of them suggested a change in the layout and the sequence of fields. In this respect, it must be noted that TERMit is currently not available in its electronic format and that students could only access a paper version of the terminological record, whose format and functionalities clearly differ from the online display format. Another feature that was highly valued in IATE was the reliability score, a field that probably infuses trust in the resource and confidence in the use of language. The reason for such a field being absent in TERMit lies in the fact that only completed

[25] The questionnaire was compiled in April-May 2016 by a total of 41 students.

[26] Among the array of foreign languages covered by the new TKB (i.e. Italian, English, German, French, Spanish, Dutch, Croatian), English was considered the best available option for making students reflect on their knowledge of linguistic resources and terminological needs, given its diffusion worldwide.

[27] From now on, 'language experts' will be used to refer mainly, but not exclusively, to translators and interpreters.

and validated (by at least two supervisors and possibly one or more domain experts) terminological collections are uploaded in the system, which should render a field containing the reliability score superfluous. As regards the fields and the content in both IATE and TERMit, participants praised the presence of definitions and contexts. From the research team's perspective, the students' highlighting of the context as a very useful field came as a surprise, since an initial assumption was that contexts are more relevant to language experts than lawyers. However, a closer look at the context provided in TERMit's record gives a hint as to the reason for this result: the context accompanying the term 'probation' provides additional conceptual information compared to the definition and can thus be considered an integration. The same can be said about the TERMit's field named 'Note', which is generally used to add encyclopedic information that does not fit the analytical definition per *genus et differentiae* widely used in terminography. In relation to this aspect, it must be noted that what emerges from the questionnaire is that what is generally considered additional or encyclopedic information by a terminologist or a language expert may not be deemed so by a professional in the field. In other words, given the first consideration above on the use of a TKB as a starting point for further research, a lawyer may be interested in knowing more, for instance, on the historical origin and development of a legal concept or on the classification of such a concept within a certain subfield in different legal systems. Therefore, is should not be surprising that participants also acknowledged the usefulness of another field which is present in TERMit but is lacking in IATE, i.e. the so-called 'Equivalence' field, where the linguistic and conceptual differences and similarities between the Italian language and legal systems on the one hand and another language and the relevant legal system(s) are stated. However, despite the inclusion of this type of information in the record, the students' comments revealed the need for a more structured organisation of the fields to contain legal data, such as a field listing the references to the sources of law providing for a certain legal institution or the official bodies responsible for the law enforcement in a specific legal subfield.

2.1.2 Updating and creating terminological collections

As stated above, the second stage of the project consists in updating existing collections containing legal terminology and populating the TKB with new records or even new collections[28], especially dealing with either ground-breaking legal topics, such as stepchild adoption in the Italian legal system, or topics related to the current political, economic and social situation of Europe, such as immigration. In the same line as the questionnaires used to identify lawyers' terminological needs, the practical problems encountered in updating existing collections and adding new records constituted the starting point to reconsider some basic choices concerning both the terminological working method and the template structure and, eventually, to discuss them with our law experts.

By way of example, a brief illustration of the research team's experience in updating and integrating a bilingual collection on non-marital relationships (Lampis 1996–97), dating back to the late 1990s, will be provided below. In Italy, the topic has come to the fore again in recent times: after long political debates, in 2016 a law has been passed which regulates this type of relationships for the first time in this country. The new records (Zudè 2015–16) added to the collection concern some key terms in Italian and Dutch, which are embedded in the Italian, Dutch and Belgian national legal systems as well as in the European Union system. Due to space constraints, only the terms *unione registrata, unione civile* and *convivenza di fatto* in Italian and *geregistreerd partnerschap* and *wettelijke samenwoning* in Dutch are discussed below.

In former TERMit collections dealing with the legal domain, when the multi-layered dimension of legal systems in Europe, i.e. the co-existence of EU and national law in the same legal space, needed to be considered, the approach introduced in comparative law by Rodolfo Sacco (1991: 27) was adopted. According to this approach, a genotype (the "core" of a legal concept) must be distinguished by its phenotypes (the actual manifestations of the genotype in a specific law system, which may lead to

[28] The SSLMIT holds 50 legal terminology collections, for a total of around 2500 records, and 5 new collections are under way.

differences among legal systems)[29]. Following this line, in TERMit the EU and the national levels were usually combined in one single record, which was intended to group all the possible phenotypes of a genotype (and the relative terms). Given the complexity of the legal domain, however, due attention was paid to describing the differences, which involved, among other things, providing different legal definitions in relation to the supranational and the national level and, if necessary, specifying further details in text fields such as Note, Synonyms and Equivalence.

At the beginning of the updating of the collection on non-marital relationships, the intention was to follow the same genotype-phenotype approach. However, the interaction with legal scholars led the team to reconsider and abandon it, at least for the key terms, given the challenges posed by the topic and the relevant terminology. The Italian and Dutch terms used in the EU Regulation providing for this type of relationships[30] are *unione registrata* and *geregistreerd partnerschap* and correspond to the English term "registered partnership", which is defined as follows: "the regime governing the shared life of two people which is provided for in law, the registration of which is mandatory under that law and which fulfils the legal formalities required by that law for its creation" (Article 3(1)(a)). The Dutch term *geregistreerd partnerschap* is also the official term pertaining to the law system of the Netherlands, whereas *wettelijke samenwoning* is the official Belgian term. The Dutch terms, although defined in a slightly different way in the national laws of the Netherlands and Belgium, would still have fitted the relationship between genotype and phenotype. The Italian terms *unione civile* and *convivenza di fatto*, however, added further complexity to the picture. Indeed, while the former is a new form of legally recognized relationship which can be chosen by homosexual couples only, the latter is open to both homosexual and heterosexual couples, but is only "minimally" regulated by the law. These intralingual and intrasystemic differences, which are far from negligible, would have excessively strained the genotype-phenotype relation with *unione registrata*. Moreover, they would also make it impossible to establish a synonymic relation between the Italian national terms. On the contrary, when compared to the Dutch national terms, both terms can be considered as a kind of 'closest equivalent', each for different legal aspects. Therefore, while the original terminological collection contained one bilingual record developed on the basis of the genotype-phenotype relation, the updating phase required the conceptual area in question to be structured differently and split into three separate records, one of which devoted to the EU level (*unione registrata – geregistreerd partnerschap*), and two of them referring to the national level (*unione civile – geregistreerd partnerschap*, *wettelijke samenwoning*; *convivenza di fatto – geregistreerd partnerschap, wettelijke samenwoning*)[31].

3. Innovations in TERMitLEX

The identification of lawyers' terminological needs through questionnaires and the cooperation between different professional profiles within the IUSLIT on the updating and integration of existing terminological collections have led to a series of innovations to the terminological record template used by SSLMIT students.

The most evident innovation that affects the template structure is the introduction of two new fields, i.e. 'Legal system'[32] and 'Legal framework'. The former is generally followed by the name of a country (e.g. Italy, Belgium, the Netherlands) or of an international or supranational organisation with legislative powers (e.g. EU, Council of Europe, UN). This field, which will help to immediately identify the scope of application of official terms, was missing in the original TERMit template and now adds to the existing 'Regional label' field, which signals diatopic variants. On the contrary, the 'Legal framework'

[29] For a more detailed discussion on the application of the genotype-phenotype distinction to a multilingual legal TKB, see Peruzzo (2014).

[30] The main EU source of law in this field is "Council Regulation (EU) 2016/1104 of 24 June 2016 implementing enhanced cooperation in the area of jurisdiction, applicable law and the recognition and enforcement of decisions in matters of the property consequences of registered partnerships", *OJ L 183*, 08/07/2016, 30–56.

[31] An example of how the equivalence relation is explained in the 'Equivalence' field is provided in Appendix.

[32] For an illustration of the 'Legal system' field in a multilingual legal TKB dealing with different legal systems, see Peruzzo (2013: 225–26).

field is meant to contain a concise description of the legal background of a concept, i.e. its historical origin, main sources of law and further legal aspects which are not an essential part of the definition, but could prove useful to a lawyer[33].

However, this collaborative project also allowed the research team to point out which existing fields needed greater attention to be paid, given the importance accorded to them by both language experts and lawyers. Two of them are the 'Synonyms' and the 'Equivalence' fields. In this regard, it can be said that the possible synonymy relations within a single language and equivalence relations when considering national terms require very detailed descriptions. This is so because the identification and illustration of such relations are not only fundamental for translators and interpreters who need accurate terminological data to provide a high-quality product or service, but also for lawyers who may not have a high level of language proficiency and may rely on a terminological resource to find a clue to solve a legal problem. Moreover, as has been shown through the examples discussed in the previous Section, synonymy and equivalence relations may determine a change in the overall methodological approach adopted to manage the terminology in a TKB. Moreover, it emerged that lawyers tend to give an absolute priority to authentic definitions found in official legal texts, while language experts, who do not usually have the same legal knowledge nor mindset as lawyers, may prefer unofficial but more explicative definitions. Therefore, a fundamental aspect to bear in mind first when designing a terminological record template and then when compiling it is how to strike a balance between the language experts and the lawyers' needs.

The innovations just described lead to a final general remark. A paramount decision to be taken at the outset of any terminological project concerns the assessment of the intended end users of the TKB resulting from the project itself and their needs. In this specific case, the end users are professionals belonging to two communities interested in the same domain but with different information needs. The main challenge for the research team in this case is to design a terminological record template that is well structured, clear and user-friendly, able to contain information relevant to both professional communities, without at the same time giving rise to an information overload.

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[33] For examples of use of the 'Legal framework' field, see Appendix.

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Appendix

Example of 'Equivalence' field:

Equivalence it-nl: La "convivenza di fatto", introdotta appositamente per garantire alle coppie, sia etero- che omosessuali, che non possano o non vogliano contrarre né matrimonio né unione civile il riconoscimento agli occhi della legge del loro status di conviventi e la tutela dei diritti e degli effetti giuridici derivanti da tale status, si può accostare, per corrispondenza funzionale e analogia con gli effetti giuridici depotenziati rispetto a quelli derivanti dal matrimonio, all'istituto olandese della "geregistreerd partnerschap" (lett. "partnership registrata") e a quello belga della "wettelijke samenwoning" (lett. "coabitazione legale"), a cui risulta più affine. In mancanza di un istituto olandese o belga rivolto esclusivamente alle coppie same-sex, a causa della politica della gender-neutrality (che in Italia viene adottata nel caso della "convivenza di fatto"), l'"unione civile" italiana viene anch'essa associata ai suddetti termini olandesi. Si precisa, inoltre, che la denominazione olandese attiene anche al diritto comunitario, ambito in cui acquisisce una definizione diversa; al riguardo, si veda la scheda *unione registrata — geregistreerd partnerschap*.

Examples of 'Legal framework' field:

Legal framework: I principali riferimenti normativi rilevanti per il presente termine sono: la Proposta di Regolamento del Consiglio del 3 marzo 2016, n. 0060, relativo alla competenza, alla legge applicabile, al riconoscimento e all'esecuzione delle decisioni in materia di gli effetti patrimoniali delle unioni registrate e il Regolamento del Consiglio dell'Unione Europea del 24 giugno 2016, n. 1104, che attua la cooperazione rafforzata nel settore della competenza, della legge applicabile, del riconoscimento e dell'esecuzione delle decisioni in materia di effetti patrimoniali delle unioni registrate.

Legal framework: Het Europees Parlement, door middel van de resolutie A5–0050/00 over de eerbiediging van de rechten van de mens in de Europese Unie, die op 16 maart 2000 werd goedgekeurd, "stelt met tevredenheid vast dat er in zeer veel lidstaten een juridische erkenning van het samenwonen buiten de banden van het huwelijk en zonder onderscheid naar geslacht aan de gang is; roept de lidstaten — op voorzover zij dat al niet gedaan hebben — om hun wetgeving aan te passen die geregistreerd partnerschap van personen met hetzelfde geslacht erkent en hun dezelfde rechten en plichten geeft zoals die bestaan voor geregistreerde man-vrouw-partnerschappen; vraagt de lidstaten die nog niet over wettelijke erkenning gezorgd hebben om hun wetgeving te verbeteren en over te gaan tot wettelijke erkenning van samenwonen buiten het huwelijk, zonder onderscheid naar geslacht; meent dan ook dat er snelle vorderingen moeten worden gemaakt in de wederzijdse erkenning van de verschillende wettelijk erkende niet-huwelijkse samenlevingsvormen en van het wettig huwelijk van personen van hetzelfde geslacht in de Europese Unie".

Inspirés par le passé, ancrés dans le présent et regardant vers l’avenir

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Résumé en français

Les étudiants de l’ancienne École d’études avancées en langues modernes pour interprètes et traducteurs et de l’actuelle Section d’études en langues modernes pour interprètes et traducteurs de l’Université de Trieste ont travaillé sur des projets de recherche terminologique depuis bien longtemps, c’est-à-dire en fait depuis 1996, quand a été lancée la première base de données terminologique de cet établissement. En raison du caractère interdisciplinaire du Département d’études juridiques, langues, interprétariat et traduction – nouvellement créé à l’Université de Trieste, d’une part, et puisqu’aussi bien linguistes que gens de robe s’intéressent aux questions juridiques, encore que selon des approches sensiblement différentes, il n’y a rien d’étonnant à ce que ce Département soit impliqué dans bon nombre de projets académiques ayant à faire avec divers aspects juridico-linguistiques.

Une équipe de linguistes et de juristes est en train de travailler sur un projet de recherche commun, et s’attache à tirer le meilleur d’une coopération entre professionnels à compétences, qualifications et formations académiques des plus différentes.

Principal objectif du projet : moderniser, voire refondre la base de données terminologique en place, TERMit, qui fonctionnait, à l’état certes embryonnaire, il y a une vingtaine d’années déjà. Il faudra donc développer un outil entièrement nouveau, accessible au grand public, et qui recèle des entrées concernant à la fois des problèmes juridiques traditionnels et des questions juridiques de pointe, telles que la législation des contrats ou l’immigration.

Par conséquent, le projet impose en tout premier lieu de procéder à une révision du patron de l’entrée terminologique, de sorte à ce que celle-ci réponde non seulement aux besoins des langagiers (traducteurs ou interprètes), mais aussi à ceux des juristes. Aussi a-t-on commencé par une enquête de terrain visant à identifier de tels besoins.

La seconde étape du projet consistera à remettre à jour les entrées déjà en place, dans le domaine juridique, tant pour ce qui est du contenu que pour ce qui est de la forme, tout en ajoutant de nouvelles entrées sur des thèmes juridiques novateurs.

La troisième et dernière étape concernera le téléchargement et la dissémination des données, par l’intermédiaire d’une plateforme terminologique.

La principale visée de notre article est de donner un aperçu global de ce projet (en cours de déroulement à ce jour) tout en illustrant de manière plus détaillée la façon dont les besoins des juristes peuvent exercer leur influence sur l’architecture d’une BDT.

[Traduit de l’anglais par Anca-Marina Velicu, Université de Bucarest, relecture-révision stylistique par Virgile Prod’homme, Service de Coopération de l’Ambassade de France en Roumanie]

EU Terminology for a semantically interoperable IATE

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Introduction

The aim of this study is to experience easy solutions to make the multilingual terminology database of the European Union, IATE, a resource of the Web of Data. Nowadays, IATE is the largest EU repository for terminological data, aligned in the 24 official languages.

IATE's terminological entries can be a resource for interoperability, only if updated and maintained by links to the documentary sources of the European Union and Member States. The first step to make IATE a resource for the Web of data is across linking to the various already Linked Open Data resources as Eur-Lex and law and institutional portals of the Member States, for example, the Italian government portal of Laws, Normattiva.

The linguistic-terminological information can be a valid supporting tool for the semantic web technologies and for fostering the modernization of public administrations and the commercial and interinstitutional relations within the European Union. Nowadays, however, it has not been used yet as metadata for interoperability solutions among the informative systems of EU institutions and bodies and Member States' public administrations.

An explanatory definition of *interoperability* is given the same EU documents. Interoperability is "the ability to interoperate in terms of content (semantic), format (syntax), and transmission. Semantic interoperability implies that the precise meaning of the exchanged information is preserved and well understood in an unambiguous manner, independently of the way in which it is physically represented or transmitted"[36].

IATE can be not only a resource for translation and terminology-sharing but also a hub to link the terms to legal and information documents of EU and the Member States across the main documentary sources of local, regional, national and EU administrations.

We believe that IATE can be a double-sided resource because the terms used by the applications for e-government in different natural languages could be used as metadata linked to IATE entries to connect to the IATE terminological cards that describe the meaning and use in the various institutional domains; on the other side, IATE entries can become a hub in order to link the terms to the institutional documents in which they are contained. In order to become effective in this sense, IATE entries should have, however, quality standards: they should be constantly updated, completed with linguistic-terminological information with terms' lexical and domain variants contained in the national languages and EU institutional documents, and linked to them.

It is from this perspective that our study is developed, focusing on a semantic domain 'Municipal Waste Management' that concerns a public service for the local community. It is a domain whose terms are relevant to administrative communication for trade transboundary.

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[36] In the informatics field, the concept of interoperability is defined in institutional documents from the EU. For this study we use as a definition reference the Proposal for a Directive of the European Parliament and of the Council on electronic invoicing in public procurement /* COM/2013/0449 final - 2013/0213 (COD) */.

For this specific topic we are developing[37] IATE entries – starting from Italian[38] – that can have a specific string of the coding scheme in informatics localization, a URI (Uniform Resource Identifier), that identifies them as open and reusable resources in the Web.

The URIs of IATE entries can be included in the metadata schemas of the Core Public Service Vocabulary, a controlled vocabulary already developed for this public service[39] in the field of the ISA and ISA² programmes[40].

In addition, the legal texts in Eur-Lex have already a specific URI reference. Many EU legislative and administrative acts have also another kind of identification string, named ELI, European Legislation Identifier, that allows to associate each legislative text with a URI reference.

> "ELI uses 'HTTP URIs' to specifically identify all online legal information officially published across Europe. These URIs are formally described by machine-readable URI templates (IETF RFC 6570), using components that carry semantics both from a legal and an end-user point of view. Each Member State will build its own, self-describing URIs using the described components as well as taking into account their specific language requirements"[41].

We know well that this work of revision and implementation in terms of interoperability of IATE entries cannot be done for all the 8.5 million terms actually present in it, that are part of 689 domains from 10 different institutions of the European Union. We can, however, begin with this study a "consolidation"[42] work for specific topics that concern the public management of transboundary services and the structural funds.

1. EU terminology: a resource for the semantic interoperability

In the last years, the European Union has become a prominent law source for the Member States and consequently its institutions' and bodies' legislative and information activities stabilize and spread specialized terminologies from various fields.

The EU often creates terms for representing "principi, istituti giuridici, organismi, procedure e per designare quant'altro necessita alle complesse attività delle istituzioni e degli organismi unionale per svolgere le specifiche finalità operative giuridico-istituzionali e divulgative"[43].

Consequently, terminology harmonization can be a tool for semantic interoperability. In fact, IATE entries can be a valuable support for interoperability solutions between the information systems of EU institutions and bodies and Member States' governments only if they contain constantly updated terminological information, with linguistic data and links to EU and national documentary sources of terms.

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[37] The Political, Social and Communication Department of University of Salerno has subscribed a cooperation agreement with the Terminology Coordination Unit of the European Parliament finalized to the creation of terminological entries for IATE's development. The research group's scientific coordinator is Daniela Vellutino; Francesco Rossi is responsible of the relations with the Terminology Coordination Unit of the European Parliament.

[38] D. Vellutino, "Risorse linguistiche e Open Data per la comunicazione pubblica della gestione dei rifiuti" in D. Vellutino, M.T. Zanola (a cura di), *Comunicare in Europa. Lessici istituzionali e terminologie specialistiche*, Educatt, Milano, 2015.

[39] Vassilios Peristeras, "Semantic Standards: Preventing Waste in the Information Industry", IEEE Intelligent Systems, vol.28, no. 4, 72–75, July-Aug. 2013.

[40] The *ISA² programme Interoperability Solutions for European Public Administration* (ISA) supports the development of digital solutions that enable public administrations, businesses and citizens in Europe to benefit from interoperable cross-border and cross-sector public services. ISA² is running from 1 January 2016 until 31 December 2020. The programme was adopted in November 2015 by the European Parliament and the Council of European Union.

[41] Council conclusions inviting the introduction of the European Legislation Identifier (ELI), GUE 2012/C 325/02

[42] Referencing IATE Management Group terminology, "consolidation" is the activity of harmonization, merging and cleaning-up of data.

[43] D. Vellutino, *Comunicare in Europa. Lessici istituzionali e terminologie specialistiche*, in D. Vellutino, M.T. Zanola, (eds.) *Comunicare in Europa. Lessici istituzionali e terminologie specialistiche*, Educatt Milano 2015, 7–8.

Therefore, an easy first step to make IATE an interoperable Linked Open Data resource is to cooperate to create IATE entries about specific topics of the transboundary public services, for example the municipal waste management services and management of EU funds.

IATE's specialized terminology comes from previous databases of the various institutions and bodies involved in its management. IATE terms are collected by different institutional sources and its domains are based on EuroVoc, the thesaurus developed taking into account the areas of EU's activity.

Our study starts from a corpus-based research[44] on Italian language with the purpose to identify the terminological units that convey the concepts of the specific topic of Municipal Waste Management.

In order to create the terminological repository of this specific topic, I developed a knowledge representation model by identifying the basic concepts[45]. They designate the substances, the procedures for treatment, disposal, recovery and recycling; the administrative management procedures; the systems and techniques for waste collection and of treatments installations.

The terminological units of specialized knowledge of the EU lexicon are represented by entries (often multiword lexical units) from different domains, whose meaning is often defined in the EU legal texts in which they are contained.

Other terminological units that represent specific knowledge of the EU lexicon are named Authorities, administrative territorial units of the EU Member States, Territorial Units for Statistics (NUTS), EU corporate bodies, EU projects and document types. Within the specific domain "Municipal Waste Management", the European Waste Catalogue (EWC) includes waste terminological units with the list of commonly used waste descriptions and their related codes.

Many EU terms are defined in legal documents, i.e. Regulations, therefore, for this, they might be standardized – without the validation of domains experts – and they should be collected in controlled vocabularies, useful for indexing and interoperability processes.

Hence, terminological work is extremely important and its objective is to constantly monitor specialized terminology created from EU sources. This task cannot be completed solely by automatic applications.

Even though the concept of semantic interoperability is supposed to be language independent, we believe that the terminological work is necessary in order to identify institutional terms of national languages in relevant specific topics that concern public service management or financing opportunities management.

In such a way, it is our opinion that it is necessary to develop lists of controlled institutional terms (aligned among languages) that can be created and then used for metadata schemes. Our idea is not far from the current work done in the Publication Office that manages the metadata registries.

Currently the Publication Office is maintaining the Metadata Registry and it has developed controlled vocabularies containing lists of denominations of authorities, States, Regions, addresses etc., in order to harmonize and standardize the codes and metadata used on an interinstitutional level and in data-sharing among institutions involved in EU decision-making procedures[46].

An easy first step towards the semantic interoperability is to connect IATE to other Linked Data resources. The legal texts in Eur-Lex have already a specific URI reference linking to other data. Moreover, many EU legislative texts have also another kind of identification string, named ELI, European Legislation Identifier, that allows to associate each legislative document with a URI reference.

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[44] D. Vellutino, *Risorse linguistiche e Open Data per la comunicazione pubblica della gestione dei rifiuti urbani*, in D. Vellutino, M.T. Zanola (eds.), *Comunicare in Europa. Lessici istituzionali e terminologie specialistiche*, Educatt Milano 2015

[45] D.Vellutino e V. Formisano, «MWM-Lexicon»: studio per una risorsa terminologica bilingue sulla «Gestione dei Rifiuti Urbani», in AIDAinformazioni, Vol. 1–2. 2016, Aracne, Roma, pag, 167–178.

[46] The Metadata registry can be consulted on the Publication Office website http://publications.europa.eu/mdr/authority/index.html

> "The process of cooperation within the European Union has increased the need to identify and exchange legal information originating from regional and national authorities at the European level. This need is partially met by digitally available legal information and the widespread use of the internet. However, the exchange of legal information is greatly limited by the differences that exist in the various national legal systems, as well as the differences in their technical systems used to store and display legislation through their respective websites. This hampers the interoperability between the information systems of national and European institutions, despite the increased availability of documents in electronic format."[47]

The use of ELI could help overcoming these problems. ELI offers a set of metadata elements to describe legislation in compliance with a recommended ontology, but they can also be used with customized metadata schemas. Using URIs and structured metadata would allow effective, user-friendly and faster search and exchange of information.

> "While a structured URI can already identify acts using a set of defined components, the attribution of additional metadata established in the framework of a shared syntax will set the basis to promote interchange and enhance interoperability between legal information systems."[48]

It should be necessary, therefore, that IATE entries have their own URIs that would be identified as open and reusable resources on the Web. The URIs can be annotated in the metadata schemes of the vocabularies for the representation of public services (Core Public Service Vocabularies), developed in the framework of Action 1.1 Interoperability Solutions for European Public Administrations (ISA) of the Digital Agenda for Europe program.

It is important to remember, moreover, that the Regulation (EU) n.283/2014 on the orientation of transeuropean networks in the telecommunication infrastructure sector focused on the transboundary interoperability facilities, foresees the so-called "elements", such as electronic identification, documents' electronic emission and automated translation. For these reasons, it is necessary to make IATE a "controlled" repository of EU terminology through the enhancement of its terminological work.

2. Case Study: terminology of the public service "Municipal Waste Management (MWM)"

In the Environment sector, the directive 2007/2/CE of the Parliament and the Council[49] asserts the adoption of common dispositions that establish technical procedures for interoperability. In particular, the directive imposes the adaptation of national infrastructures in order to guarantee that data and territorial services are interoperable and accessible on a transboundary level in the European Union.

Starting from the directive and from the events related to waste management in Campania's territory, it is possible to find the root of our interest for the case study: the domain terminology of the public service "Municipal Waste Management (MWM)".

In a previous corpus-based study[50] in Italian on the specific topic "Municipal waste separate collection management", 414 terms have been identified as candidate terms for this specific topic: 87 terms are in single-word form, 327 are multi-words expressions. From this list, all terms that concern the Italian specific institutional lexicon have been removed, for example Ambito Territoriale Ottimale (ATO), Comando Carabinieri Tutela Ambientale (CCTA); Modulo Unico di Dichiarazione Ambientale (MUD),

[47] Council conclusions inviting the introduction of the European Legislation Identifier (ELI), Official Journal of the European Union (2012/C 325/02)

[48] ibid

[49] Directive 2007/2/CE of the Parliament and the Council, 14th March 2007, that establishes an infrastructure for territorial information in the European Community (OJ L 108 of 25.4.2007, 1).

[50] D. Vellutino, "Risorse linguistiche e Open Data per la comunicazione pubblica della gestione dei rifiuti" in D. Vellutino, M.T. Zanola (a cura di), *Comunicare in Europa. Lessici istituzionali e terminologie specialistiche*, Educatt, Milano, 2015.

Consorzio Nazionale Imballaggi (CONAI). Following this operation, 314 units representing the specialized domain on this specific topic of EU lexicon.

These candidate terms were then researched in EU's main terminographic resources: ECHA-term, the terminological database of chemical legislation, in 23 languages; European Environment Agency (EEA) institutional glossary, in 26 languages, that gathers 14 terminological resources produced by EU bodies responsible for environmental matters; and, obviously, IATE. The verification work has revealed that most of them are contained in EU Regulations but are not recorded in these terminographic resources and in IATE. Frequently, moreover, IATE entries do not have updated legal references.

From the analysis, it has been identified that in IATE there are 85 single-word, 18 in ECHA-term, 37 in the European Environment Agency (EEA) institutional glossary. Multi-word expressions are 177 in IATE, 20 in ECHA-term and 52 in the European Environment Agency (EEA) institutional glossary. Moreover, EU terminographic resources do not contain lexical variants in the form of synonyms contained in the Italian texts, for example *acqua di scarico* has *acqua di scolo* and *acqua luride* as variants and *sito di stoccaggi*o has *luogo di stoccaggio* and *deposito di stoccaggio*.

This preliminary study has revealed the need to produce terminological entries in Italian that include URIs linking to the legal texts that contain them, inserting also the lexical variants retrieved in the Italian institutional texts produced in the different contexts of use and the linguistic annotations on lexical entry[51].

The objective is the creation of a gold standard[52] for this specific topic of the public service "Municipal waste management (MWM)" initially in Italian and, in a second step, in other EU languages.

We think that in order to reach this goal it is necessary that candidate terms are put under evaluation of domain experts, such as operators of agencies that deal with waste clean-up and activists from environmentalist associations that represent different typologies of audiences: Legambiente Campania, environmentalist association that gathers a wide audience with different environmentalist vocations, and CittadiniReattivi, environmentalist association that supports the civic journalism.

2.1. The MWM terms in IATE

In IATE's domain "Environment" there are currently 20 916 Italian terms. The domain has three subdomains or, in order to use EuroVoc[53]'s terminology, three microthesauri, namely "Environmental policy" (code 5206), "Natural environment" (code 5211) and "Deterioration of the environment" (code 5216). Each of them has some further microthesauri, shown in the picture below.

[51] McCrae J. Et al., (2011). Linking lexical resources and ontologies on the semantic web with lemon. In The Semantic Web: Research and Applications – 8th Extended Semantic Web Conference, ESWC 2011, Heraklion, Crete, Greece, May 29-June 2, 2011, Proceedings, Part I, 245–259

[52] References about the methodology for the development of a gold standard in P. Faber "Frames as a framework for terminology", in *Handbook of Terminology*, John Benjamins Publishing Company, 14–33.

[53] EuroVoc is a multilingual, multidisciplinary thesaurus covering the activities of the EU. It contains terms in 23 EU languages (Bulgarian, Croatian, Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hungarian, Italian, Latvian, Lithuanian, Maltese, Polish, Portuguese, Romanian, Slovak, Slovenian, Spanish and Swedish), plus in three languages of countries which are candidate for EU accession: македонски (mk), shqip (sq) and српски (sr). EuroVoc is managed by the Publications Office, which moved forward to ontology-based thesaurus management and semantic web technologies conformant to W3C recommendations as well as latest trends in thesaurus standards. EuroVoc users include the European Union Institutions, the Publications Office of the EU, national and regional parliaments in Europe, plus national governments and private users around the world. Source: http://eurovoc.europa.eu/drupal/?q=node

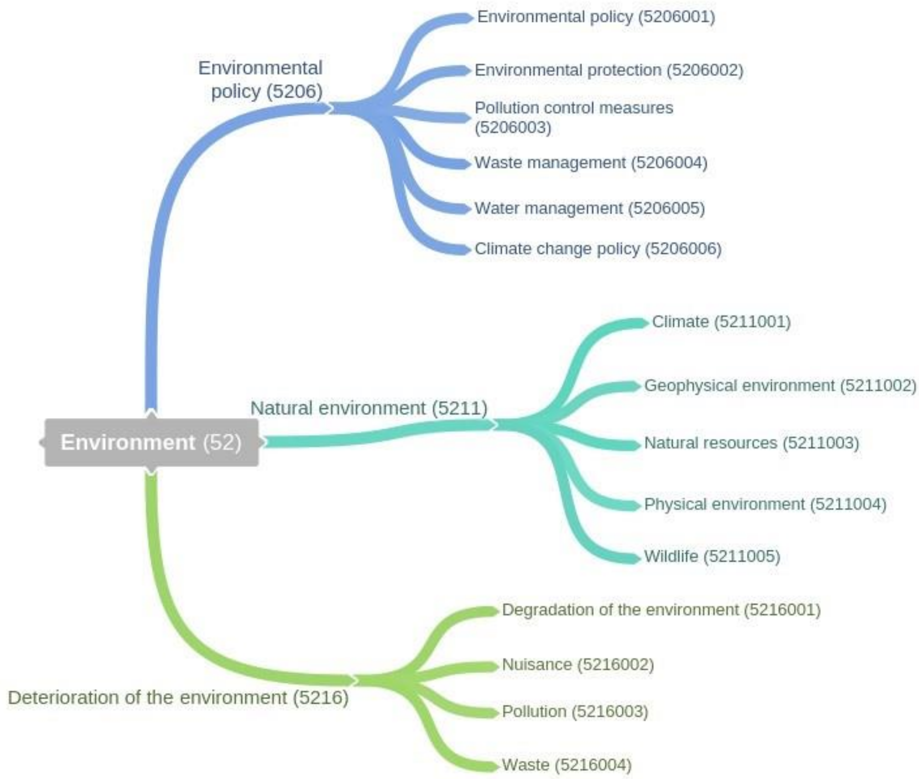

Figure 1. The hierarchical relation of IATE's Environment subdomains

For the scope of our study, "Natural environment" is less relevant because it is about the physical characteristics of the environment and it has minimal relation with the Waste field, while "Environmental policy" and "Deterioration of the environment" contain, respectively, the microthesauri "Waste management" and "Waste". This leads to make a preliminary consideration on IATE's domains setup and granularity. IATE's domains are based on EuroVoc's domain structure, that was initially conceived for treating and collecting documentary information from the EU institutions and became an indexing tool just in a second moment, resulting therefore less pertinent for specialized documents. Consequently, this structure is not perfect for a specialized institutional terminology database and it inevitably contains approximations already on the language independent level. Therefore, as stated, "Waste" and "Waste management" are subdomains of two separate domains, while they should rather have a relation between them. Another case of ambiguity is "Environmental policy" (code 5206), that has "Environmental policy" (code 5206001) as microthesaurus, showing that the same naming has been adopted for two different domain levels that have a hierarchical relation. In EuroVoc, in Italian, the higher-level domain name (code 5206) is translated with *politica dell'ambiente* and its subdomain (code 5206001) with *politica ambientale*. The adjectivation, however, does not reduce the semantic ambiguity.

For our study, we searched in IATE 377 multi-word expressions (MWEs) and 102 simple words from our corpus. 210 MWEs were absent and 167 contained in IATE but not all of them were clearly relevant for the field. For example, *tariffa del servizio*, contained in the corpus, is contained in IATE just in the "Communication" domain, therefore the term in IATE refers to a different concept. However, the IATE entries that are relevant for our study are mainly marked with the domain "Environment".

In IATE, it is possible to create different entries that have the same term but are marked with different domains. It is the case of those terms that designate different concepts and for which it is therefore necessary to create separate entries. There are other cases, however, in which a term designates one and only concept but it is still present, in IATE, with more than one entry.

As an example, let's take *dispositivo di depurazione*.

AMBIENTE [EP]	Voce completa
IT	dispositivo di depurazione
DA	rensningsanordning
DE	Reinigungseinrichtung
	Reinigungsvorrichtung
EL	σύστημα καθαρισμού
EN	purification device
ES	dipositivo de depuración
	dispositivo de purificación
FR	système d'épuration
NL	rookgasreinigingsinstallatie

Ricerca, AMBIENTE [Council]	Voce completa
IT	dispositivo di depurazione
DE	Reinigungsvorrichtung
EN	purification device
FR	dispositif d'épuration
PT	dispositivo de depuração

Figure 2. IATE's results of "dispositivo di depurazione"

In the picture, we can see that IATE suggests two relevant results. One is produced by the European Parliament (EP) and the other one by the Council. The domain "Environment" (*Ambiente*, in Italian) has been chosen as the only domain for the EP entry, while for the second one, both "Environment" and "Research" have been chosen. This shows that, while in IATE it is possible to choose more than one domain (a feature that sometimes is even more desired than a more restrictive approach), it is also possible to have duplicates, that are two entries with the same term referring to the same concept, and in this case with the only difference of the domain choice.

Anyway, among the 167 MWEs of our corpus contained in IATE, only 20 are marked with "Waste" as domain and 16 with "Waste management". Many more could have more precise domain information, for example the term *rifiuto inerte* (inert waste), that belongs only to "Environment" and not to "Waste".

Considering all the terms that are relevant for this study, 97 entries are created by the Commission, 56 by the Parliament, 52 by the Translation Centre, 49 by the Council and 8 by the Committee of the Regions.

Concerning the 102 simple words research in IATE for this study, 88 are present and 12 are absent in the database. Similarly, to the MWEs, the domains' choice accuracy is quite variable and, since they are simple words, they have also a wider range of concepts to which they can refer to. The domain "Environment" is used for 35 entries, while "Waste management" for 6 entries and "Waste" only for 2 entries. Particularly significant are the cases of the terms *rifiuti* e *rifiuto* (that in English have the only equivalent "waste"). The term *rifiuto* appears in 10 entries, marked with the domains "Chemistry", "Communications"[54], "Medical science", "Chemical compound", "Building and public works, Land transport, TRANSPORT", "Intellectual property, Insurance", "LAW", "Insurance", "Insurance, EU law". It is expected that the term refers to different concepts, therefore it is legitimate to get a certain number of entries referring to different domains; however, no one of these includes the domain "Environment" nor its subdomains, among which "Waste".

[54] There are two entries containing *rifiuto* in the "Communications" domain

The term *rifiuti* triggers four results: one is an entry marked with the domain “Nuclear industry” created by the Commission, and the others are all marked with the domain “Environment” and they are created by the Commission, the Parliament and Com Swiss Data. None of these entries is marked with the domain “Waste”.

Moreover, it is relevant to report that the only entry that shows the definition of *rifiuto*, as expressed by the Directive n.2008/98/CE[55], it is an entry created by the Translation Centre with “Chemistry” as domain. Considering all the terms that are relevant for this study, 46 entries are created by the Commission, 22 by the Translation Centre, 12 by the Council and 8 by the Parliament.

Terms’ and their definitions’ sources are considerably different: many are European Directives, like the 2008/98/CE mentioned above, but there are also other sources, like workshops’ articles, multilingual institutional glossaries, publications, dictionaries, experts and Wikipedia.

Some terms lack of definition or context reference. More generically, the sources and contexts’ management is not perfectly harmonized: some entries have institutional sources with hyperlinks and CELEX[56] but others have secondary sources and less detailed information. This characteristic is, however, a common and more generic issue in IATE, and is more frequent in a language like Italian, among the first languages to be included in IATE[57].

2.2. An example of an IATE terminology entry

For our example, we have chosen the term *rifiuto ingombrante* (bulky waste) that is in IATE in its canonical form. There is no reference, however, to the Regulations in force – Regulation n. 1357/2014/UE – and to the European Waste Catalogue (EWC), that came into force on the 1st June 2015, with the relevant code "20 03 07" that identifies it.

EWC codes are numerical sequences composed of 6 numbers (three couples): in the code 20 03 07 for *rifiuti ingombranti* (the EWC contains the plural) the first couple comes from the fundamental chapter "Municipal Wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions"; the “03” couple shows the productive process, that is "other municipal wastes"; couple “07” identifies the specific kind of waste.

EWC code can be used for interoperability solutions applied, for example, for the *Registri di Carico e Scaric*o and for *Formulari di identificazione dei rifiuti*, therefore we believe that it is necessary that the EWC code is put as a reference in the IATE entries’ "Term Reference" field (see Picture 5).

Hence, our proposal is to insert in them information concerning normative references and EWC code entries’ fields, in order to link the IATE entry to an already linked data resource like the Regulation or other resources useful for interoperability like the EWC code.

[55] Directive 2008/98/CE of the European Parliament and the Council of 19 November 2008 on waste. Source: http://eur-lex.europa.eu/legal-content/IT/TXT/HTML/?uri=CELEX:32008L0098&from=IT

[56] Unique identifier of each Eur-Lex document, independent from its language version

[57] The presence of "noise" in IATE is more frequent in languages like Italian or other so-called "pre-2004 enlargement" languages, because they went through a long series of changes, like merging previous databases before IATE.

ENVIRONMENT [CdT]		Full entry
IT	rifiuto ingombrante	
DA	vanskeligt håndterligt affald	
DE	Sperrmüll	
EL	Ογκώδη απορρίμματα	
EN	bulky waste	
ES	residuos molestos	
FI	vaikeasti käsiteltävä jäte	
FR	déchet encombrant	
NL	moeilijk te behandelen afval	
PT	resíduos sólidos volumosos	
SV	svårhanterligt avfall	

Figure 3. The result page of "rifiuto ingombrante" in IATE

Domain ENVIRONMENT

it

Term	**rifiuto ingombrante**
Reliability	3 (Reliable)
Term Ref.	Institution: EEA; Title: GEMET - GEneral Multilingual Environmental Thesaurus; Publication Year: 1999; Publication Month: August; Volume No: 5;
Date	03/07/2002

Figure 4. The current terminology entry about "rifiuto ingombrante"

InterActive Terminology for Europe

italiano (it)

Schermo di ricerca Aiuto

Torna ai risultati

Feedback

Dominio AMBIENTE

it

Termine	**rifiuto ingombrante**
Definizione	Un rifiuto residuo di grandi dimensioni che non ha trovato collocazione in altre tipologie di raccolta differenziata; in altre parole è ingombrante il rifiuto che residua da tutte le raccolte differenziate, avente dimensioni unitarie tali da non poter essere conferito all'ordinario sistema di raccolta del secco residuo.
Rif.della definizione	Regolamento per la disciplina dei servizi di gestione dei rifiuti urbani e dei rifiuti assimilati di nettezza urbana, Consorzio Azienda Intercomunale di Bacino Treviso Tre, 10/11/08 http://www.tvtre.it/downloads/_52_D09901%20Regolamento%20disciplina%20gestione%20rifiuti%2010-11-08%20Rev4.pdf
Affidabilità	3 (Affidabile)
Riferimento relativo ad un termine	Decisione della Commissione del 18 Dicembre 2014 (2014/955/UE), Codice CER 20 03 07 http://eur-lex.europa.eu/legal-content/IT/TXT/PDF/?uri=CELEX:32014D0955&qid=1432761359210&from=IT [28.05.2015]
Nota	La Decisione 2014/955/UE si riferisce al Regolamento (UE) N. 1357/2014 della Commissione del 18 dicembre 2014
Data	28/05/2015

Fonte: IATE ID: 112509

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Figure 5. Our proposal for a terminology entry

Conclusions

An easy first step in order to transform IATE in a Linked Open Data resource[58] can be to link the IATE cards to those documents that are already identified by a URI reference, such as Eur-Lex documents and information documentations from the Publication Office. IATE entries themselves should be identified by a URI reference in order to become open resources and annotated in the metadata schemes used for interoperability solutions of the ISA2 program.

In addition, IATE can contain also linguistic-terminological information, such as lexical variants and annotations on lexical formation of terms. This information can be a valid tool not only for integral multilingualism, but also as the first way is to disambiguate the words and a support for semantic web technologies for Public Administrations' modernizations and for interinstitutional and commercial relations within the European Union.

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Terminologie de l'UE pour une IATE douée d'interopérabilité sémantique

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Résumé en français

L'information terminologique linguistique peut être un instrument fiable qui soutient les technologies du web sémantique tout en encourageant la modernisation des administrations publiques et l'essor des relations commerciales et interinstitutionnelles à l'intérieur de l'Union Européenne. De nos jours, cependant, les informations terminologiques linguistiques n'auront pas encore été exploitées en tant que métadonnées pour des solutions d'interopérabilité entre les systèmes d'information des institutions de l'UE et respectivement des administrations publiques des divers Etats membres.

L'interopérabilité est « l'aptitude à collaborer en termes de contenu (sémantique), de forme (syntaxe) et de transmission. L'interopérabilité sémantique implique que la signification exacte de l'information échangée soit préservée et bien comprise d'une manière non ambiguë, indépendamment de la manière dont elle est physiquement représentée ou transmise ». Cette définition technique permet aux non experts de saisir l'importance d'un nouvel usage de la ressource terminographique IATE, la base de données terminologique multilingue interinstitutionnelle de l'UE, qui héberge la terminologie spécifique de l'Union pour toutes les 24 langues officielles. IATE peut être non seulement une ressource permettant le partage des terminologies et de leurs traductions, mais également un outil à double volet facilitant des solutions d'interopérabilité entre administrations publiques locales, nationales et européennes. Elle peut être un outil à double volet puisque les termes utilisés au niveau des applications de gouvernement électronique (e-gouvernement) dans les diverses langues peuvent être aussi utilisés comme des index, des métadonnées et des liens vers les entrées IATE décrivant leur signification et leur emploi dans les divers domaines institutionnels ; d'autre part, les entrées IATE elles-mêmes peuvent fonctionner comme de vraies plaques tournantes qui relient les termes aux documents où ils sont attestés.

Afin de se laisser vraiment exploiter de cette manière, les entrées IATE devront cela dit d'abord respecter certaines normes de qualité : elles devraient être constamment remises à jour, augmentées d'informations terminologiques à proprement parler linguistiques, telles que les variantes lexicales et spécialisées des termes, attestées dans les langues nationales et dans les documents des institutions européennes, et être connectées à ces variantes.

C'est dans cette perspective que nous avons entrepris la présente étude, qui traite d'un service public essentiel à l'échelon de l'administration locale, service pouvant être envisagé aussi en tant que marchandise d'échange transfrontalière : la gestion des déchets. Nous avons compilé des entrées IATE pour ce domaine particulier, à partir de l'italien, entrées ayant une séquence spécifique dans leur code de localisation numérique – un Identificateur de Ressource Uniforme (URI), qui les identifie en tant que ressources ouvertes et réutilisables sur la Toile.

Les identificateurs de ressource uniformes des entrées IATE peuvent être inclus parmi les schémas de métadonnées du Vocabulaire des services publics centraux, un vocabulaire contrôlé déjà développé pour ces services publics, dans le cadre du programme ISA. Nous sommes bien conscients de ce que ce travail de remise à jour en termes d'interopérabilité des entrées IATE ne saurait être réalisé pour tous les 8,5 millions de termes actuellement traités, qui relèvent de 689 domaines de 12

institutions et organismes de l'Union européenne. Nous pouvons, néanmoins, par cette étude, entamer un travail de « consolidation » pour des micro-domaines concernant les services publics transfrontaliers.

Au bout du compte, nous estimons qu'il est important de mettre en relation cette recherche avec les vrais processus de modernisation de IATE, qui concernent le partage du travail terminologique et l'utilisation des bases de données, les fonctionnalités terminologiques d'outils d'aide à la traduction tel SDL Studio. Ces outils vont en effet faciliter le travail terminologique, en renforçant le rôle de IATE comme instrument du multilinguisme complet.

[Traduit de l'anglais par Anca-Marina Velicu, Université de Bucarest, relecture-révision stylistique par Virgile Prod'homme, Service de Coopération de l'Ambassade de France en Roumanie]

SESSION 3:
QUALITY MATTERS

Uncovering the value of forgotten Slovak terminological data

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Abstract

In spite of countless terminology units springing to life at the end of the 20th century, Slovakia saw a break with the tradition of systematic institutional terminology mapping, description and counselling based on a solid theoretical basis of terminology work which started in the 1950s.

The paper aims to present a research initiative of the Ľ. Štúr Institute of Linguistics, Slovak Academy of Sciences, tackling both the quality and the possibility of reusing the data compiled and written within the Institute in the second half of the 20th century.

A number of theoretical works as well as quality terminology sources remain scattered and forgotten, therefore the key issue is their identification, gathering, description, evaluation and presentation. As far as older terminology sources are concerned, their digitalisation and availability on-line would not only enable the research in the area of terminology dynamics but also their partial reusage after a professional and linguistic revision.

The on-going project has been concentrating on gathering theoretical papers written by leading Slovak linguist and terminologist Ján Horecký, on their processing, annotation and presentation on-line.

Availability of terminology sources and guidelines of terminology work by means of a terminological portal will, in a way, establish a continuity with activities of the first generation of Slovak terminologists and more importantly it might help to provide the public with efficient tools for terminology management.

Découvrir la valeur de données terminologiques slovaques oubliées

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Abstrait

Malgré l'apparition d'innombrables unités terminologiques à la fin du 20e siècle, la Slovaquie aura connu une rupture avec la belle tradition institutionnelle de cartographie, de description et de conseil systématiques, en terminologie, remontant aux années '50, époque à laquelle le travail terminologique était étayé par une base théorique solide.

L'article s'attachera à présenter une initiative de recherche de l'Institut de Linguistique Ľ. Štúr, auprès de l'Académie Slovaque des Sciences, dont le principal objectif est l'évaluation de la qualité des données terminologiques recensées et compilées dans le cadre de l'Institut, et celle d'autres écrits théoriques qui y ont été rédigés dans la première moitié du XXe siècle, ainsi que l'évaluation de la possibilité de les réutiliser.

Bien des ouvrages terminologiques théoriques, ainsi que d'excellentes ressources documentaires restent encore à ce jour éparpillés et oubliés, de sorte qu'il est plus que jamais nécessaire de les identifier, de les réunir, de les décrire, de les évaluer et de les publier.

Numériser et assurer l'accès en ligne à de tels documents relativement anciens favoriseraient non seulement la recherche en dynamique des terminologies, mais également la réutilisation de tout ou partie de ces ressources comme références primaires, après une révision par des spécialistes et par des linguistes.

Le projet en cours a pour principal objectif de recenser, de compiler, de numériser, de traiter, d'annoter et d'afficher en ligne les articles théoriques rédigés par le linguiste et terminologue slovaque Ján Horecký, chef de file de l'école slovaque de terminologie.

L'accès à des ressources documentaires, à des ressources terminologiques mais aussi aux principes méthodologiques du travail terminologique par l'intermédiaire d'un seul et même portail de terminologie va en quelque sorte constituer un lien avec le travail de la première génération de terminologues slovaques, tout en pourvoyant le public en outils efficaces de gestion des terminologies.

[Traduit de l'anglais par Anca-Marina Velicu, Université de Bucarest, relecture-révision stylistique par Virgile Prod'homme, Service de Coopération de l'Ambassade de France en Roumanie]

20 years of terminology data base archiving and exchange, past and future

Alan Melby

American Translators Association (ATA)

Klaus-Dirk Schmitz

Cologne University of Applied Sciences

The past twenty years

- **1994**

  Third version (P3) of Guidelines of the Text Encoding Initiative (TEI) was published

  Chapter 13 of TEI-P3 was about representing terminological data
- **1999**

  MARTIF (ISO 12200) was published, based on Chapter 13 of TEI-P3

  ISO 12620 (data categories for use with MARTIF) was published
- **2003**

  TMF (ISO 16642) was published, providing an abstract data model for termbases
- **2008**

  TBX (ISO 30042) was published, based on MARTIF; co-published by LISA

  It includes a set of data categories (see also: www.isocat.org)
- **2016**

  TBX is under revision

What about the next twenty years?

How to make the next version of TBX better than the 2008 version

How can TBX be used?

- Archiving the information in a termbase
- To support future software change
- Exchanging information between systems (three examples)
- Authoring (send monolingual information from a termbase to an authoring tool)
- Translation (send a subset of the information from a termbase to a translator)
- Data mining (export most/all information from a termbase for analysis using XML)
- Guiding the design of a new termbase for interoperability

Examining the current version of TBX

What needs to change?

Consensus within the TBX team

- Change the root element from MARTIF to TBX (and other "historical item")
- Require every TBX file to indicate a dialect name
- Allow two XML styles (DCA and DCT)
- Separate dialect creation rules from actual dialects
- How to create a dialect and validate a TBX file (goes into new ISO 30042)
- Freely available industry definitions of TBX dialects (on www.tbxinfo.net)
- TBX-Basic
- TBX-Min
- Emphasize integrated schemas as alternative to TBX checker (using either ISO or W3C schema definition languages)

What are the problems with TBX?

Are they addressed by the previous five points?

We really want to know!

- What's right with TBX?
- What's wrong with TBX?

Under discussion

- What to do with unmapped data categories? (those in termbase but not in target TBX dialect)
- How to encourage tool developers to
- implement or improve support for TBX
- Third-party TBX certification body
- Whether to modify core structure
- How to maintain www.isocat.org

SESSION 4: RESPONSABILITY AND AWARENESS

Visions of new responsibilities and opportunities for terminologists and terminology centres

Virpi Kalliokuusi

National Institute for Health and Welfare, Finland

Katri Seppälä

Finnish Terminology Centre TSK

The Finnish Terminology Centre TSK is an independent non-profit organization founded in 1974. The main goal of TSK is to ease communication and information transfer with the help of systematic terminology work. This work requires continuous development of the principles and methods and maintenance of the terminological know-how.

In the early years of TSK terminology work was done mainly for the needs of technical subject fields, but gradually also other fields of expertise showed interest in improving the expert communication through clearly defined concepts and controlled term usage. Until the early 21st century the terminology work driven by TSK concentrated on supporting human communication, but a lot has changed since then. With the ever-growing volumes of digital information, flooding in various IT systems and applications, there is a constant need for better semantic interoperability of the systems. When experiencing the digital revolution of the society also terminologists have faced new challenges leading to new opportunities. Nowadays, most of the terminology projects are set up to support the development of various information systems and building up of e.g. large-scale ontologies, is more and more in demand for the purposes of indexing, information retrieval and data mining. Even if the practical work of terminologists has changed during the past decade, systematical concept analysis lies in the heart of terminology work. It is an indispensable method, whatever the context and goal of terminology work.

Another essential part of a terminologist's work has always been co-operation with subject field specialists. None of TSK's projects is carried out without a working group consisting of experts from other fields of expertise. The co-operation with customers is important for every project, but it also offers TSK many possibilities to expand the terminological knowledge and to develop new services.

Since mid-1990s TSK has co-operated with the National Institute for Health and Welfare (THL), a pioneer organization in building advanced national information systems for the health and welfare sector in Finland. In THL's terminology projects, TSK has had the possibility of expanding terminological methods for the purposes of concept and data modelling. In our presentation, we will discuss, with some concrete examples, how the results of terminology work have been used to support THL's work on harmonized information structures, especially in client documentation of social services.

Standardization of terminology and terminology in standardization. The role of Standards Norway

Håvard Hjulstad

Standard Norge

Terminology work is in a sense a form of standardization, whether it is an explicit purpose of the activity or not. On the other hand, standardization needs terminology; and standardization work probably “is” terminology work to a greater extent than standardizers regularly care to admit.

This paper looks at how terminology issues are dealt with in the context of standardization, both from an organizational point of view and when it comes to the publication and presentation of the results of the activity.

My focus is on “formal” standardization. The main international organizations are ISO and IEC. In Europe CEN and CENELEC correspond to ISO and IEC. And in all countries, there are national standardization bodies that cooperate through CEN, CENELEC, ISO, and IEC. These organizations form a tight network of thousands and thousands of technical experts in all fields of science and technology. Their aim is standardization; one of their products is high quality terminology.

Standardization is about making interested parties agree on technical and organizational solutions. If all parties agree in all respects of a particular field, then there is no need to standardize, since everyone does things the same way anyway. If *all* parties in a standardization committee are “happy”, then they didn’t have to meet to standardize. It is when everyone is “rather happy” and no one is “ecstatically happy” that the standardization process has been successful.

Terminology is (normally) not an issue where the parties compete. Consequently, competitors all benefit from sharing their knowledge relating to terminology.

ISO/TC 37

The International Organization for Standardization (ISO) realized very early the importance of terminology. The technical committee that now bears the name *Terminology and other language and content resources* was established in the 1930’ies, actually by ISO’s predecessor ISA.

ISO/TC 37 doesn’t produce terminology, but it has established the principles by which international standardized terminology is developed. A large part of terminology work even outside the standardization community is done per the principles of ISO/TC 37 standards.

ISO/TC 37 has extended its scope over the years. Most language-related issues that are suitable for standardization, has a “home” in this committee, which has five sub-committees and several working groups.

- ISO/TC 37/SC 1, *Principles and methods*
- ISO/TC 37/SC 2, *Terminographical and lexicographical working methods*
- ISO/TC 37/SC 3, *Systems to manage terminology, knowledge and content*
- ISO/TC 37/SC 4, *Language resource management*
- ISO/TC 37/SC 5, *Translation, interpreting and related technology*

A small selection of ISO/TC 37 standards and projects:

- ISO 639, *Codes for the representation of names of languages*

- ISO 704, *Terminology work — Principles and methods*
- ISO 860, *Terminology work — Harmonization of concepts and terms*
- ISO 1087, *Terminology work — Vocabulary*
- ISO 10241, *Terminological entries in standards*
- ISO 11669, *Translation projects — General guidance*
- ISO 12616, *Translation-oriented terminography*
- ISO 12620, *Computer applications in terminology — Data categories*
- ISO 14080, *Assessment of translations*
- ISO 15188, *Project management guidelines for terminology standardization*
- ISO 17100, *Translation services — Requirements for translation services*
- ISO 22128, *Terminology products and services — Overview and guidance*
- ISO 23185, *Assessment and benchmarking of terminological resources — General concepts, principles and requirements*
- ISO 24618, *Terminology and language resources assessment of public language use*
- ISO 26162, *Systems to manage terminology, knowledge and content — Terminology databases*
- ISO 29383, *Terminology policies — Development and implementation*

A complete listing of standards can be found at www.iso.org or at your national standards organization.

Other standardization committees and bodies

It is all the other 300-some ISO technical committees that do the actual terminology work. Every committee and working group needs, uses, and develops terminology.

ISO has 771 published standards with the word "terminology" or "vocabulary" in the title, and practically all standards contain a terms and definitions clause. There are more than 200 000 defined terms in ISO standards.

Standards Norway being one of the small siblings in the European family of standards organizations, has several hundred "terminology standards" and more than 55 000 entries in our terminology database (which, by the way, is publicly available, free of charge: http://www.termbasen.no/).

Writing a standard (and its terminology)

The rules for writing standards are given in the *ISO/IEC Directives*. Its Part 2 (*Principles and rules for the structure and drafting of ISO and IEC documents*) requires standards writers to follow "Wüsterian" terminology principles. The ISO/IEC rules are also used in regional and national formal standardization.

Standards Norway has put much emphasis on the quality of terminology. All project managers at Standards Norway are given in-house terminology training as one measure to that end.

I am using ISO 14004 as an example: ISO 14004:2016, *Environmental management systems – General guidelines on implementation*. That is a "support standard" to ISO 14001, which is one of the core Management Systems Standards; others are ISO 9001 (quality), ISO 50001 (energy), ISO 30301 (documentation), etc.

Like practically all standards, this standard has a clause 3 "Terms and definitions". In ISO 14004 clause 3 contains 33 defined concepts. The standard has been published by ISO in English, French, and Spanish. In addition, many national standardization bodies have published it in many additional languages. The result is internationally coordinated terminology:

3.2.1
environment
surroundings in which an *organization* (3.1.4) operates, including air, water, land, natural resources, flora, fauna, humans and their interrelationships
Note 1 to entry: Surroundings can extend from within an organization to the local, regional and global system.
Note 2 to entry: Surroundings can be described in terms of biodiversity, ecosystems, climate or other characteristics.
3.2.1
environnement
milieu dans lequel un *organisme* (3.1.4) fonctionne, incluant l'air, l'eau, le sol, les ressources naturelles, la flore, la faune, les êtres humains et leurs interrelations
Note 1 à l'article: Le milieu peut s'étendre de l'intérieur de l'organisme au système local, régional et mondial.
Note 2 à l'article: Le milieu peut être décrit en termes de biodiversité, d'écosystèmes, de climat ou d'autres caractéristiques.
3.2.1
medio ambiente
entorno en el cual una *organización* (3.1.4) opera, incluidos el aire, el agua, el suelo, los recursos naturales, la flora, la fauna, los seres humanos y sus interrelaciones
Nota 1 a la entrada: El entorno puede abarcar desde el interior de una organización hasta el sistema local, regional y global.
Nota 2 a la entrada: El entorno se puede describir en términos de biodiversidad, ecosistemas, clima u otras características.
3.2.1
miljø
omgivelsene for en *organisasjons* (3.1.4) virksomhet, inkludert luft, vann, jord, naturressurser, planteliv, dyreliv, mennesker, og deres innbyrdes forbindelse
Oppslagsmerknad 1: Omgivelsene kan strekke seg fra organisasjonens indre forhold til det lokale, regionale og globale systemet.
Oppslagsmerknad 2: Omgivelser kan beskrives i form av biologisk mangfold, økosystemer, klima eller andre egenskaper.

One of the strengths of formal standardization is the enormous network of technical experts. This network is made available for the development of terminology. There are about nine international standardization meetings every single day of the year. It is likely that each of them has some discussion relating to terminology issues.

Making terminology available

ISO is making the entire standards searchable and available through the Online Browsing Platform for internal users. External users have access to the scope and the terms and definitions clause of all standards. If a standard is published in multiple languages, you can easily jump from one language to another. https://www.iso.org/obp/

One challenge is that some concepts are defined in many different standards, sometimes quite differently.

In the early days of computerization ISO was reluctant to compile all its terminology into one publicly available database, because it would "reveal" all the inconsistencies. Now ISO fortunately has a different position: By making the terminology available, the inconsistencies will gradually be reduced as standards (and definitions) are revised and improved.

Another source for terminology in standards is the Electropedia, which is being maintained by IEC, the International Electrotechnical Commission: http://www.electropedia.org/.

The Electropedia contains terms and definitions in English and French, and terms in several additional languages:

IEV ref	**712-01-01**
en	**antenna** aerial (deprecated) that part of a radio transmitting or receiving system which is designed to provide the required coupling between a transmitter or a receiver and the medium in which the radio wave propagates Note 1 – In practice, the terminals of the antenna or the points to be considered as the interface between the antenna and the transmitter or receiver should be specified. Note 2 – If a transmitter or receiver is connected to its antenna by a feed line, the antenna may be considered to be a transducer between the guided waves of the feed line and the radiated waves in space.
fr	**antenne**, f aérien (terme à proscrire dans ce sens) m système d'antenne (terme déconseillé dans ce sens) m partie d'une installation d'émission ou de réception d'ondes radioélectriques destinée à assurer le couplage entre un émetteur ou un récepteur et le milieu où se propagent les ondes radioélectriques Note 1 – Dans chaque cas particulier, on doit spécifier le point considéré comme accès de l'antenne ou comme sa jonction avec l'émetteur ou le récepteur. Note 2 – Si l'émetteur ou le récepteur est relié à l'antenne par une ligne d'alimentation, l'antenne peut être considérée comme un dispositif qui permet de passer d'un régime d'ondes guidées à un régime d'ondes libres et inversement.
ar	هوائى
de	Antenne, f
es	antena
fi	antenni
it	antenna
ja	アンテナ
pl	antena
pt	antena
sl	antena
sv	antenn

At Standards Norway, we are making all terminology in all Norwegian standards freely available. Our terminological database is called SNORRE: http://www.termbasen.no/.

SNORRE has the same "problem" as the ISO Online Browsing Platform: Many concepts are defined multiple times. However, we also hope that inconsistencies will gradually be reduced. We couldn't have done that without first publishing them.

Standardizers have been "hiding" behind the introductory wording in the terms and definitions clause: "For the purpose of this document the following terms and definitions apply". Standards users, however, want and need consistent terminology throughout a field of standardization. Both national and international standardization to an increasing degree responds to this need, and our terminology databases serve as a tool to identify and resolve unnecessary inconsistencies.

SNORRE contains terms and definitions in Norwegian (Bokmål and Nynorsk), English, German, and French. Some standards are published in Norwegian only, but by far most Norwegian standards are identical to or based on European or international standards, and terms and definitions of the source documents are also captured in SNORRE.

There are currently over 55 000 entries in SNORRE. Most entries have terms in Norwegian and English; about 19 000 have terms in German; about 18,000 have terms in French.

European and international standards that are published as Norwegian standards in English only, have not been included in SNORRE. However, with government funding we have started to add Norwegian term equivalents even though the text of the standard isn't translated. The Norwegian terms are published in SNORRE together with terms and definitions of the source document (normally in English). In some cases, we will also be able to translate the definitions.

The terminology of a field should be established *before* standardization of that field begins. Experts tend to come back to the terms and definitions clause multiple times during the standardization process. A next step in the close cooperation between standardization and terminology might be to develop a consistent set of terms and definitions before the standards are developed.

Normalisation de la terminologie et terminologie de la normalisation

Håvard Hjulstad

Standard Norge

Résumé en français

L'activité même de l'organisation nationale de normalisation terminologique norvégienne est, de manière explicite ou implicite, une forme de normalisation. D'autre part, la normalisation elle-même requiert une certaine terminologie, et le travail de normalisation en soi « est » du travail terminologique dans une mesure plus large qu'il n'est communément admis par les normalisateurs eux-mêmes.

Toute norme comporte au moins un paragraphe énumérant les termes employés et définissant les concepts désignés par ces termes.

Les règles de la normalisation internationale imposent en effet de préfacer toute norme par de telles définitions, ce qui n'est pas sans mettre en vedette l'importance essentielle des termes et des définitions correspondantes.

Cela dit, le paragraphe en question commence typiquement par « aux fins de ce document, les définitions suivantes s'appliquent ». Autrement dit, les mêmes termes et définitions pourraient bien ne pas être de mise dans d'autres contextes. Ce qui n'a pas l'air d'être un point de départ bien solide.

Heureusement, il n'en est pas vraiment ainsi. Les organisations et les comités de normalisation soulignent sans exception la portée de l'harmonisation terminologique transversale, entre divers domaines, voire entre diverses régions géographiques. À l'aube de l'informatisation, il répugnait à l'Organisation Internationale de Normalisation (ISO) de recenser tous les termes et définitions dans une base de données commune. La principale raison en était l'hésitation à fournir aux usagers différentes définitions des mêmes concepts, au gré de normes distinctes. Tout cela aura bien changé de nos jours, quand tous les termes et définitions sont en libre accès, ne serait-ce qu'en tant qu'outil d'harmonisation pour le normalisateur, qui pourra ainsi réduire les contradictions ou inconsistances relatives survenues en diachronie. Ainsi l'organisation norvégienne de normalisation héberge-t-elle une base de données terminologique en libre accès – SNORRE – qui porte pour l'essentiel sur les termes norvégiens tels qu'ils apparaissent dans les normes nationales et dans les normes européennes ou internationales traduites en norvégien.

[Traduit de l'anglais par Anca-Marina Velicu, Université de Bucarest, relecture-révision stylistique par Virgile Prod'homme, Service de Coopération de l'Ambassade de France en Roumanie]

SESSION 5:

INTERACTION AND DIVERSITY/DOMAIN LOSS

Terminology Policy Standards

Delyth Prys

Bangor University

Background

Terminology Policy as a scientific and academic discipline, or sub-field of the science of terminology in general, is of fairly recent origin. Its beginnings can be traced back to the latter half of the 1980s and by the mid-2000s it had gained significant momentum due to the work of UNESCO's Infoterm and the ISO/TC37 terminology technical committee. Terminology Policy emerged as a combination of aspects from two different disciplines: Terminology Science, and Language Planning. Terminology as a science is usually traced back to the founding activities of Eugen Wüster, who pioneered Terminology Standardization as a scientific endeavour, leading to the foundation of the Technical Committee for Terminology Standardization (ISO/TC37) in 1936 (Infoterm, 2004). Language Planning, on the other hand dates back to the work of Einar Haugen, (Fettes, 1997). Haugen first coined the term 'Language Planning' in 1959, developing it as a new discipline, but with others soon joining him.

Ironically for a field devoted to the clear labelling of concepts and the avoidance of ambiguity, the general discipline of Terminology Science, of which Terminology Policy is taken to be a subfield, is referred to as both 'Terminology' and 'Terminology Science' interchangeably. Whilst the label 'Terminology Science' is less ambiguous and avoids clashing with the meaning of terminology as technical vocabulary, many experts in the field prefer to call it simply 'Terminology', aligning it with other -ologies such as Biology and Sociology. At the time of writing there were two separate, unlinked articles on Wikipedia for 'Terminology' and 'Terminology Science'. The article for 'Terminology' defined the discipline as 'the study of terms and their use', and emphasized features such as its concept-based nature, its use in specialized domains, and its interdisciplinary nature. This is the definition that will be followed in this paper.

Language Planning, as the other 'parent' of the subfield of Terminology Policy, attempts to influence the function, structure or acquisition of languages within a speech community (Kaplan and Baldauf, 1997). As a discipline, it is also concerned with the subfields of Corpus Planning and Acquisition Planning, (Fettes, 1997). Within Corpus Planning, Terminology Planning is a characterized by Zarnikhi (2016) as a Language Planning activity that deals with terms and their related issues. In this context Terminology Policy is sometimes taken to mean 'Terminology Planning Policy' as it is difficult to envisage a terminology policy that does not include the development of terminology planning. A useful list of resources on terminology policies and planning may be found on the Infoterm (n.d.1) website.

These two different traditions of Language Planning and Terminology Science have both influenced the theory, practice and study of Terminology Policy. Language planners regard it as a subfield of Language Policy, aimed at helping in delivering their linguistic objectives for the language in question, which may include language revitalization, nation building, and modernization, and may be top down and government led or bottom up from a community grass-roots level. Terminologists on the other hand view it as a subfield of Terminology Science, helping them in their standardization activities, their delivery of terminology services and the theoretical advancement of Terminology as a science. Terminology Science is more likely to be top down, led by government, academia or large corporations, whereas Language Planning may also be driven, in part at least, by pressure from grass root language communities. It may be because of this merger of different traditions and viewpoints that terminology policy-making is a complex process, addressed to many different audiences and serving many different needs, as elaborated by Infoterm (n.d.2) on their website.

Terminology policy guidelines and standards

Infoterm, initiated by Eugen Wüster and established in Vienna in 1971 by contract with UNESCO, was instrumental in highlighting terminology policies as an issue pertaining both to Terminology Science and Language Planning. In 2005 UNESCO published its Guidelines for Designing Terminology Policies, prepared for it by Infoterm, which lay down the basic principles and advice for activity in this field. This was a seminal document, published by a well-respected global organization and intended to be inclusive, aimed at both governmental and non-governmental bodies, professional fields, industry and academia, as well as educators and community level activists. It emphasised inclusivity, with the needs of minority languages and disadvantaged speech communities highlighted in the guidelines, whilst at the same time arguing the needs of governments and large corporations in order to facilitate technical and scientific communication. Its strength was in recognising that, despite some possible tensions, the same broad standards and methodologies were applicable across this broad range of constituencies, and that a comprehensive framework was possible to support designing, planning, and implementing terminology policies in many diverse environments.

Inspired in part by the publication of the UNESCO document, EAFT held a special seminar in Dublin, Ireland on Minority Languages and Terminology Policies in 2007. The seminar was informed especially by the standardization needs of Irish language terminology, and the unique circumstances of Irish as a minority or less-resourced language but with national and EU official status. It also featured presentations and discussions, later published as proceedings (EAFT 2008) on other small language communities such as Basque, Slovene, Catalan, Romani, Ladin, Welsh, and the multilingual situation in South Africa. This provided a valuable opportunity for many terminology experts working with minority or less-resourced languages to consider their domestic terminology planning and policy needs in the context of a rigorous international framework, and to be part of the wider terminology activity that also encompasses large-scale, corporate and commercial interests.

Other activities during this period show the increased attention paid by government agencies to the contribution that well-thought out terminology policy guidelines and policies could make for their domestic situations, in complex linguistic environments such as post-apartheid South Africa (Alberts, 2008), as well as in more well-established bilingual settings such as Canada (Chan, 2008).

In 2007 ISO/TC 37, the International Standards Organization's Terminology Technical Committee, published a Technical Report, Practical guidelines for socioterminology (ISO/TR 22134:2007), preparing the ground for the first full ISO standard on terminology policies in 2010, Terminology policies – development and implementation (ISO 29383:2010). Following the inclusive stance first seen in the UNESCO 2005 Guidelines, this standard again emphasised its aim to be comprehensive in nature, designed for "policy makers in governments, administration, non-profit and commercial organizations". It was also designed to facilitate terminology planning resulting in the development of resources to ensure successful communication within and across domains (ISO 29383:2010 section 4.3).

The key parts of the standard guide the user through the process of establishing and promoting a terminology policy, and ensuring its success (ISO 29383:2010 section 6). Its four phases of Preparation, Formulation, Implementation and Sustainability are well-known business management tools, but had not previously been adapted for the terminology community. This may already have been well-known to terminology planners in corporate environments, but would not have been familiar to those other backgrounds, many of whom would have been unused to applying the methods of strategic business thinking to their academic, linguistic or knowledge orientated disciplines.

As outlined in the standard, preparation incudes assessment of the current language and terminology environment, awareness creation, possible methodology, preliminary documents and consultation process. Formulation includes drafting the terminology policy itself, and aligning it with other strategic planning policies, through to submission and official approval. Implementation and sustainability are reported as the two aspects more likely to be overlooked in terminology policy planning, as the work is sometimes thought to be brought to conclusion with official approval of the policy itself. The standard therefore recommends a policy for managing and planning the implementation of the policy, including, importantly, the planning of publicity and promotional activities, evaluating the success of the terminology policy, and also publication of the results. Finally, the longterm sustainability of the policy is addressed, in terms of long term financial support and of capacity building. The need for further adaptations to policy and infrastructure is dealt with, as is monitoring and evaluation of the results, and ongoing awareness raising.

Critique and revision

Some of these activities are akin to lobbying efforts to persuade an unwilling or unengaged government or other higher authority of the continued value and need for terminology planning and policy. This is important where authorities and organisations everywhere are under pressure to cut costs, and where the economic and social benefits of a terminology policy may not be immediately obvious. More emphasis could be placed in the standard on presenting evidence of the economic benefits of such policies, especially by reference to good practice in business and industry. The socioterminology aspect of the standards, with its inclusion of activities such as outreach and media events for local audiences, and long-term awareness-raising and capacity-building exercises, may not be so relevant to corporate audiences, but it may be argued that they might also benefit from better communication not only with their internal workforce and industrial partners, but also with the wider public who do not at present form part of their perceived audience.

The amalgam of a language planning orientation, with its emphasis on community involvement, education and participation, and terminology standards, with their orientation towards industry working methods and applications, is not always easy to achieve. Possible tensions between the ISO model and academia were identified by Bhreathnach (2011). She quotes criticism of ISO's tendency to commodify terminology, and the danger of treating vocabulary in the same way as industrial objects. The tension with academia however here relates to research activities, rather than teaching and training of terminologists, translators or language planners. The emphasis on industrial terminology and industrialized countries in ISO standards was noted, but ISO 29383 on terminology policies seems to be excluded from this criticism, as its language-planning orientation is acknowledged. On the other hand, the case for the importance of terminology standards for developing economies, in facilitating specialized communication, helping the process of quality management, and contributing to the success of international trade, was made by Díaz Vásquez (2010) in his PhD thesis on the influence of ISO 29383 in the context of Columbian exports.

In June 2016, the original ISO 29383:2010 came up for revision. This entailed gathering comments from all member countries of ISO/TC/37 and provided an objective way to receive feedback on the perceived success or otherwise of the standard and needs for revision, in a standardized format and template. The responses overall were positive, with the standard's impact on teaching terminology at university level especially noted. Amongst the comments received from ISO member countries, one stated that "In general I think that it has become quite a reference in the International Organization", and another noted that "ISO 29383 is a module taught in all the ECQA training". Yet another noted (my translation): "This standard is a very important document … also for a number of emerging countries that are confronted with problems of managing the use of languages."

The need for revision was however also highlighted, due in part to new technology which had appeared in the meantime. A plea was also made for the inclusion of more concrete examples in the standard. Annex B in the document which purported to show an authentic example of a corporate terminology policy was criticized as not giving a clear picture of how one should look in reality, possibly reflecting again difficulties in addressing both the needs of corporate, industrial-orientated terminology policy and language planning needs in the same document.

Other, informal comments recently seem to have focused on problems of dissemination and awareness raising. Bhreathnach (2011) touched upon the lack of discussion of marketing and awareness-raising work in the literature, but if stake-holders are becoming increasingly aware of this deficit, there is hope that it may be remedied. The high cost of ISO standards, although necessary to fund the activities of the International Standards Organization, is seen by many as an impediment to their effective dissemination and uptake. This may be more of an issue for standards such as ISO 29383 which is partly aimed at developing countries and less-resourced language communities, but even industry is sensitive to such costs, especially when perceived as 'nice to have' rather than 'essential' for their profit margins. Additional dissemination methods such as wiki articles, academic papers, seminars, and on-line forums have been suggested as ways of reaching target audiences. Such activities have in actual fact increased in recent years, with terminology policy the subject of PhD studies, published academic volumes and events such as those organised by EAFT facilitating dissemination and discussion. They are part of a developing healthy ecosystem informing the formulation of terminology policy standards, and the theory and practice of terminology policy.

Conclusions

The activities and discussions mentioned above shows the maturation of Terminology Policy as a science or academic disciple, and as a useful tool for standardizers and language planners. Terminology Policy has continued to develop since the early days of the 1980s, with the publication of the first edition of the ISO 29383 standard in 2010 being a notable achievement. Despite the standard's attempt to cater for such a broad range of stakeholders, and the sometimes inherent tensions in so wide a remit, it has succeeded in addressing the needs of its intended audience. Participants from two very different traditions have come together in a successful interdisciplinary partnership, and both traditions have benefited.

Further standards with a narrower focus, e.g. a standard on language planning itself, might also be developed in future, benefiting from solid groundwork that has already been laid. The revision of the standard starting in June 2017 should lead to further useful contributions, both within ISO and in the wider international terminology community.

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Normes de politique terminologique

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Résumé en français

En 2006, l'UNESCO publiait ses Recommandations pour l'élaboration et la mise en œuvre des politiques terminologiques. Une année plus tard, l'AET organisait à Dublin un séminaire spécialement dédié aux langues minoritaires et aux politiques terminologiques, et en 2010 l'Organisation Internationale de Normalisation (ISO) publiait une nouvelle norme d'élaboration et de mise en œuvre des politiques terminologiques (ISO 29383 : 2010). Toutes ces manifestations, ainsi que d'autres manifestations du même type pendant les dix dernières années auront témoigné d'un intérêt croissant pour les besoins en planification terminologique, seule une bonne planification terminologique étant à même de garantir la communication non ambiguë dans des situations mono-, bi- ou multilingues.

L'enjeu est de taille non seulement pour les gouvernements régionaux ou nationaux, mais également pour nombre d'organisations, d'affaires ou de commerces de par le monde.

En juin 2016, ISO a décidé de réviser la norme de politiques terminologiques, vu l'accueil très favorable dont celle-ci avait joui, ainsi que les nouveaux développements en la matière depuis la publication de sa première version. Parmi les nombreux commentaires reçus, il y en a eu qui ont souligné l'importance de la norme dans la formation des terminologues, et son impact sur l'enseignement de la terminologie à l'université. D'autres commentaires ont mis en vedette la nécessité d'une planification terminologique à même de gérer le marché numérique unique européen multilingue (pour l'instant seulement émergent) – un aspect repris également dans cette révision de la norme en question.

Aussi notre article va-t-il pourvoir un état des lieux mis à jour, de la question des politiques terminologiques actuellement en place, tout en examinant la voie à suivre pour aboutir à une nouvelle révision de la norme ISO 29383.

[Traduit de l'anglais par Anca-Marina Velicu, Université de Bucarest, relecture-révision stylistique par Virgile Prod'homme, Service de Coopération de l'Ambassade de France en Roumanie]

IDITE: applying new technologies to give a step forward in terminology quality assessment and control

Begoña Arrate

UZEI

New technologies can play a crucial role in terminology quality assessment and control. IDITE is a tool that has been fully developed by UZEI, the Basque Centre for Terminology and Lexicography. It is very valuable for the quality assessment and control of terminology used in texts written in Basque, as it is the only tool that is available nowadays for automatically checking the correct use of terminology contained in texts written in Basque.

Some peculiarities of the Basque language

The political-administrative reality of the Basque language is peculiar, as its territory, which is inhabited by 3 150 000 people, is administratively divided into three parts:

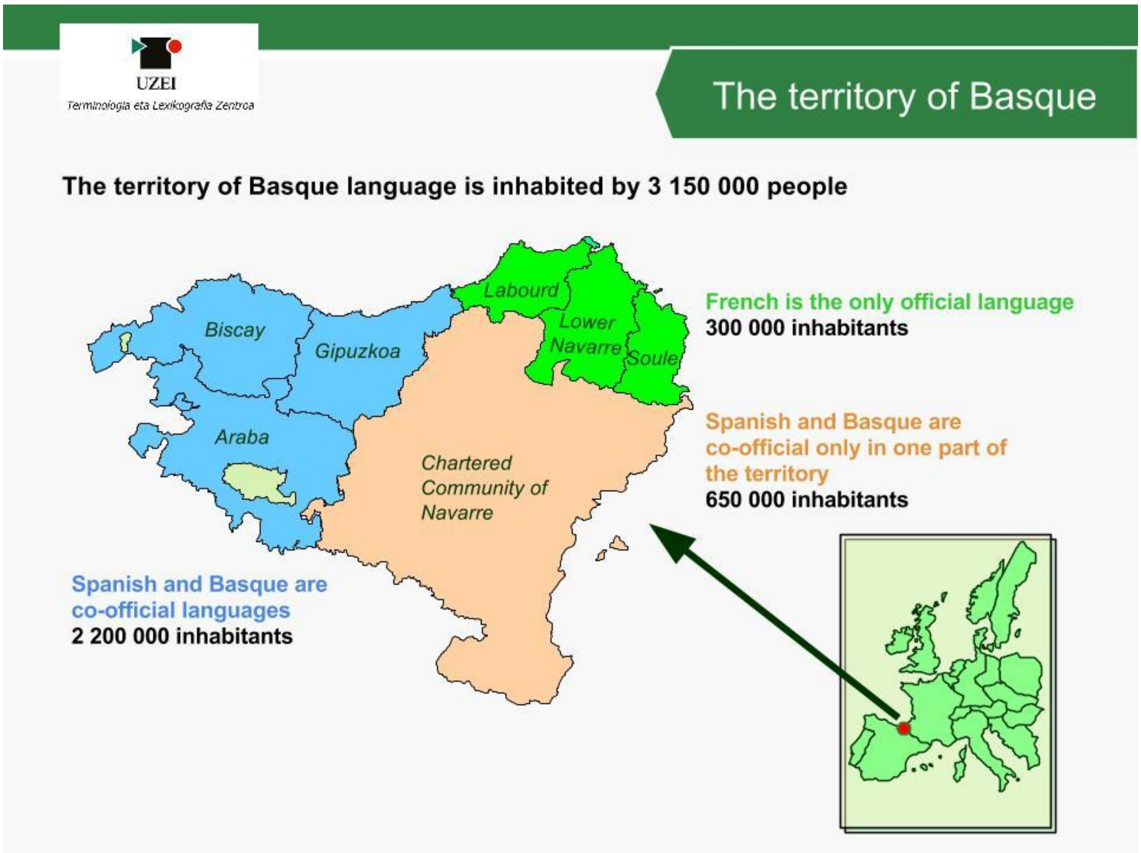

Figure 1: The territory of Basque

1. The Autonomous Community of Euskadi (shown in blue), where Spanish and Basque are co-official languages. The number of inhabitants living in the Autonomous Community of Euskadi is 2 200 000.
2. The Chartered Community of Navarre (shown in peach), where Spanish and Basque are co-official languages only in a part of that community. The Chartered Community of Navarre is inhabited by 650 000 people.

3. The three provinces located in the French territory (shown in green), where French is the only official language. The number of inhabitants living here is 300 000.

As a result of the political-administrative division existing in the territory of the Basque language, the management of language planning policies is especially complicated in our case.

Other peculiarities of the Basque language are its agglutinating nature (which creates specific natural language processing needs) and its sociolinguistic situation, as it is a language undergoing a normalization process.

The complexity of natural language processing in the case of the Basque language

One of the reasons why the automatic treatment of Basque can be really complex is that it is an agglutinating language. Here are some linguistic characteristics of Basque language:

In Basque there are 15 base declination cases that can take the form of 22 variants. Comparing Basque to English and Spanish, a noun can have 2 forms in English and Spanish, while in Basque the possible number of forms a noun can have is 275. In turn, an adjective can have 1 form in English, 4 in Spanish and 825 in Basque. In addition, Basque makes no gender distinction.

On the other hand, the automatic treatment of Basque is complex because both Basque vocabulary and terminology are undergoing a normalization process.

IDITE, a tool fully developed by UZEI, the Basque Centre for Terminology and Lexicography

UZEI is a non-profit organization that was declared of public interest because of its role in language research and promotion of the Autonomous Community of Euskadi. UZEI's working areas are Terminology, Lexicography, Language Technologies and Translation. The synergies created by integrating activities from these 4 working fields are UZEI's main strength. UZEI plays an important role when it comes to the standardization and modernization of Basque language. This is UZEI's greatest contribution to Basque society.

IDITE and terminometry

According to Auger (1986), terminological standardization only makes sense within a framework of general language planning, with six basic functions: “research”, “standardization”, “dissemination”, “implementation”, “evaluation and control” and “updating”.

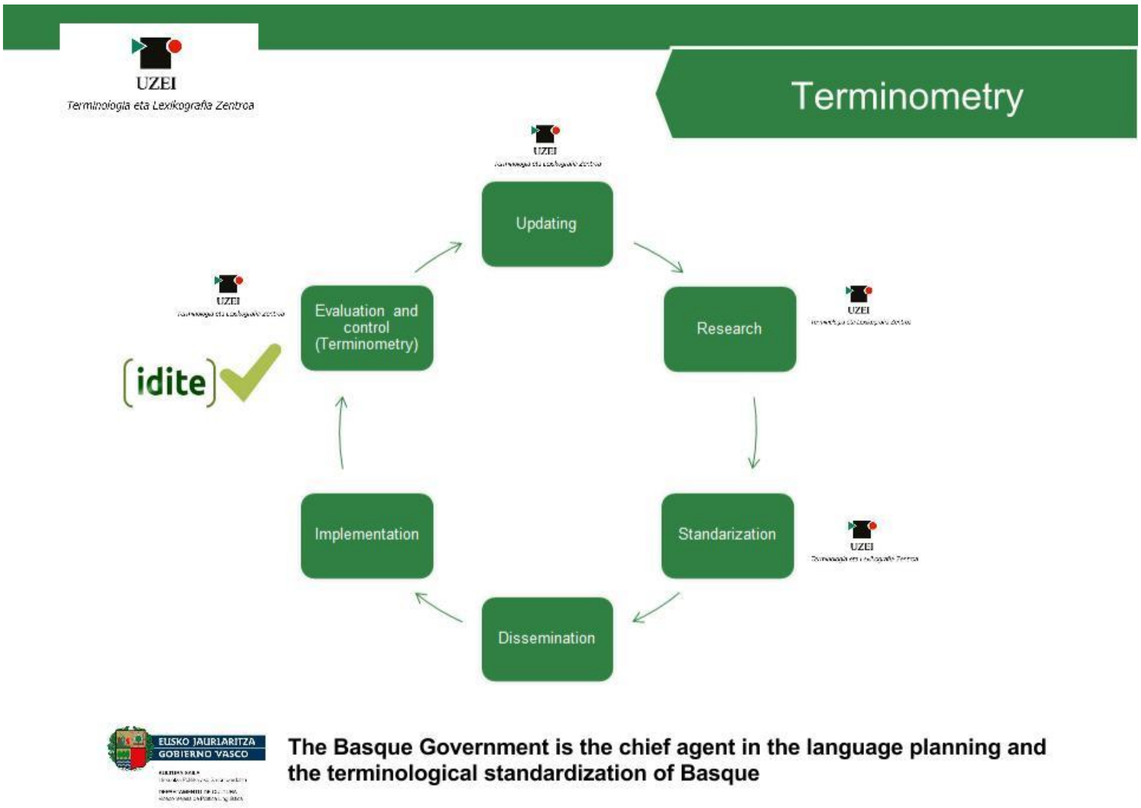

Figure 2: Terminometry

The Basque Government is the chief agent in the language planning of Basque and, so, also in the terminological standardization of Basque.

UZEI's contribution is essential in 4 of the 6 basic functions shown in the diagram:

- Research
- Standardization
- Evaluation and control
- Updating

The analysis of terminology implantation (that is, terminometry) must lead to improving the terminological standardization process. The Basque Government, UZEI and other important agents in the field have worked for years for the terminological standardization of Basque, mainly in the "research", "standardization", "dissemination" and "implementation" levels. As a consequence, nowadays there is a real need to analyze to which extent the terminological proposals made by the linguistic authority in Basque terminology have been assimilated or followed by the Basque society.

Although no analysis of terminology implantation has been made so far in the case of Basque, IDITE could be valuable for a first approach as it is the only tool that has been developed for the evaluation and control of Basque vocabulary and terminology. Nowadays IDITE is mainly used by institutions and companies where Basque is a working language for ensuring that their texts use the right and up-to-date vocabulary and terminology.

What is IDITE exactly and how does it work?

IDITE is a tool that automatically checks the adequacy of Basque vocabulary and terminology contained in a text. It can be used to check a big text mass at a time, which makes it ideal for the quality assessment and control of vocabulary and terminology used in books such as textbooks for example.

As mentioned before, the technology at the base of IDITE has been fully developed by UZEI.

The constituents of IDITE are a lexical database, a computer application and a collection of linguistic rules.

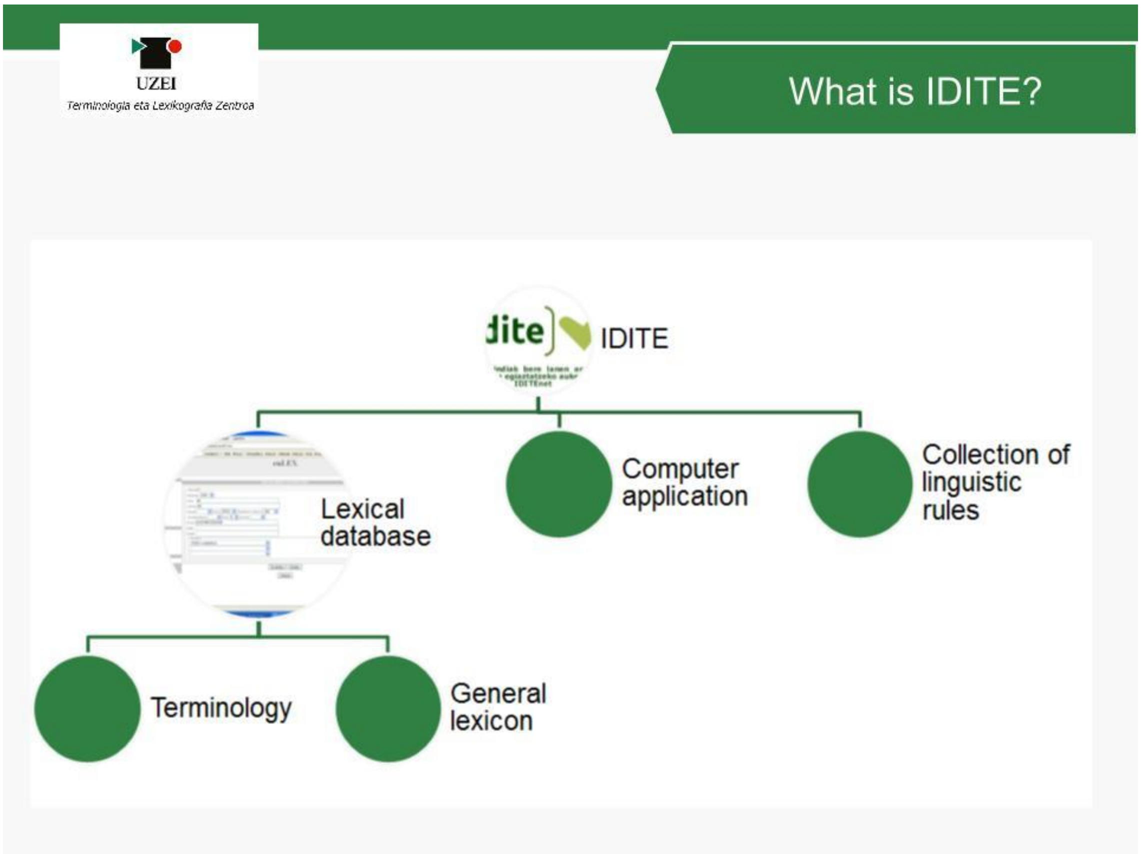

Figure 3: What is IDITE?

Inside the lexical database there is a terminological part and a vocabulary part. On the one hand, the terminological part inside the lexical database used by IDITE is called *UTH*. UTH is a database that is tagged for NLP and comprises:

- the collection of all the terminological decisions taken by UZEI along its terminological activity
- and
- the terminological proposals made by the linguistic authority in Basque terminology: the Basque Government's Terminology Assessment Commission, one of whose members is UZEI.

UTH comprises 94 400 terminological records which are classified by subject.

On the other hand, the vocabulary part inside the lexical database used by IDITE is called *euLEX*. EuLEX is a lexical database that contains the information provided by Hiztegi Batua, which is the unified and prescriptive dictionary of the Basque Language Academy, Euskaltzaindia. EuLEX also contains rules and use recommendations provided by other reference works published by Euskaltzaindia, as well as entries that have been extracted from other reference Basque dictionaries and corpora. EuLEX comprises 145 600 entries.

Both the terminological part and the vocabulary part of the lexical database used by IDITE not only include up-to-date information on the forms considered as correct by the linguistic authorities in Basque terminology and lexicography respectively, but also those forms that have been rejected by them. As a consequence, the incorrect forms are also detected by IDITE, and when that happens the tool automatically proposes the prescribed or recommended form for each case.

Here is shown an example of a report created by IDITE after checking a text.

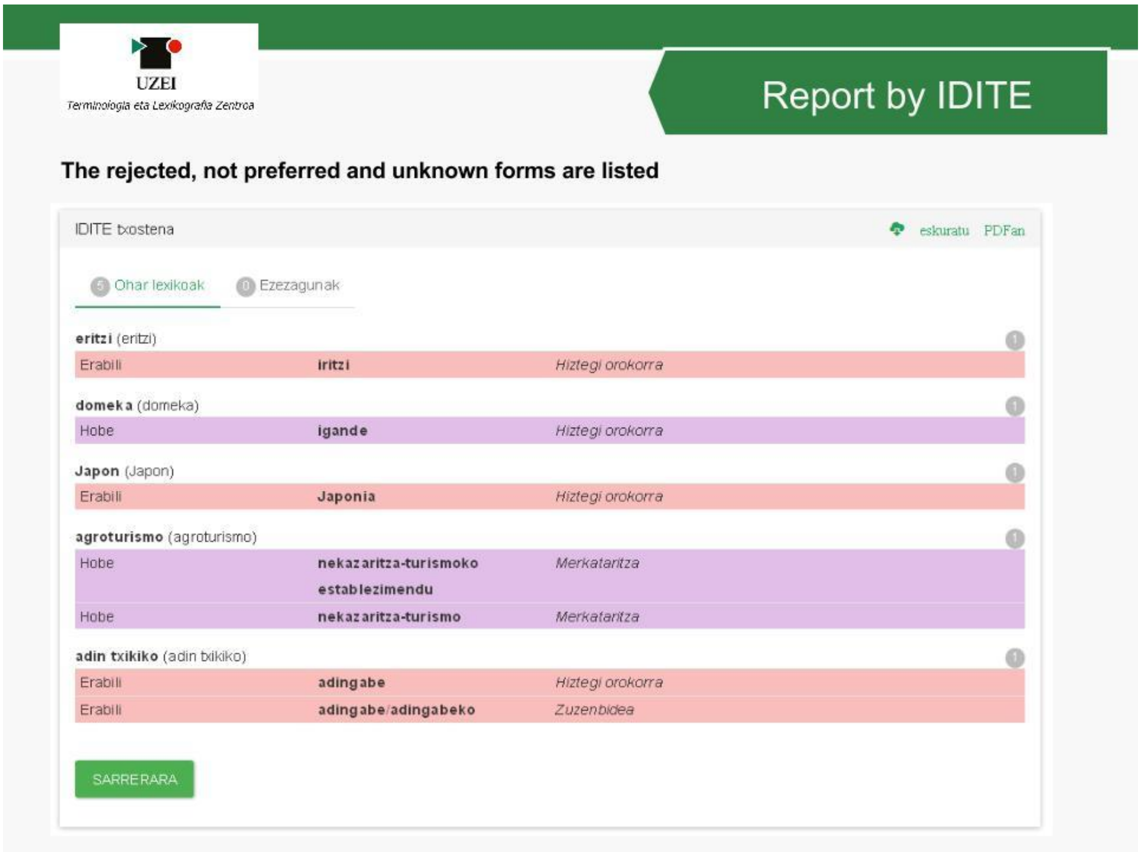

Figure 4: A report by IDITE

When analyzing a text, IDITE automatically detects the rejected and not preferred forms and shows them in a report (along with the unknown forms or misspellings, which are not present in the lexical database). The correction proposals for rejected forms are shown in pink. When the form detected is not rejected but another form is preferred, the improvement proposal is shown in purple.

Furthermore, for each correction or improvement proposal made IDITE indicates if the proposed form belongs to general vocabulary or, if it is a term, which thematic domain it belongs to.

The correction proposals made by IDITE can be classified into 4 categories:

1. The first example shown in the example picture is a general vocabulary correction proposal that indicates that the orthographical variant *iritzi* should be preferably used instead of *eritzi*.
2. The second example corresponds to a general vocabulary improvement proposal. It proposes the use of the unified Basque name for “Sunday”, *igande*, instead of the dialectal variant *domeka*.
3. The third example shown is a general vocabulary correction proposal. It indicates that the prescribed geographical name *Japonia* should be used instead of the rejected form *Japon*.
4. The fourth example corresponds to a terminology improvement proposal. It indicates that in the thematic domain “Commercial activity” the preferred terms *nekazaritza-turismoko establezimendu* or *nekazaritza-turismo* should be used instead of agroturismo.
5. The last example shows a terminology correction proposal, as in the thematic domain “Law” the form *adin txikiko* is rejected and *adingabe* or *adingabeko* should be used.

How does IDITE contribute to the evaluation and control of Basque terminology?

Checking texts that have been recently written with IDITE enables users to make sure that vocabulary and terminology used are coherent with the forms considered as correct by the linguistic authorities in Basque lexicography and terminology respectively.

As a consequence, IDITE:

- ensures the good quality of vocabulary and terminology used in those texts, as well as their orthographical adequacy.
- enables to detect and correct vocabulary, terminology and spelling mistakes in a quick and economical way.

IDITE can also be used for the evaluation and control of vocabulary and terminology used in texts written at different times. This last option makes it possible to use IDITE to get a picture of the diachronic changes undergone by terminology from a particular field along the terminological standardization process. As shown in the example report, when IDITE checks a text, misspellings are also detected as unknown forms. So, IDITE also fulfils the function of conventional spelling checkers.

Another possible application of IDITE is neologism detection. The unknown forms listed in IDITE's reports usually are misspellings, but neologisms can also be present. UZEI has an agreement with the main newspaper in Basque that enables us to check its texts using IDITE and incorporate in Euskalterm our terminology proposals for the neologisms detected this way.

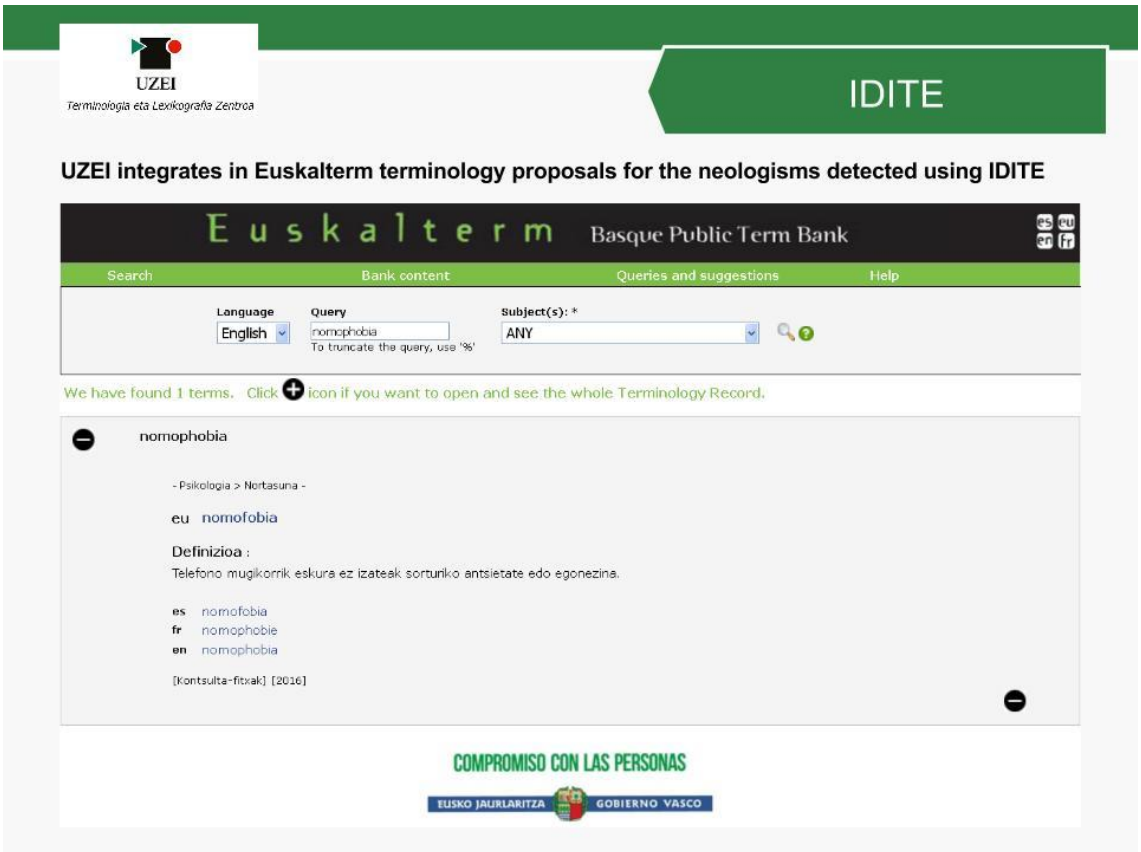

Figure 5: Euskalterm

Euskalterm is the Basque Government's Public Term Bank, and it is expanded and updated by UZEI. As a matter of fact, UZEI constantly updates Euskalterm's content with the rules prescribed by *Euskaltzaindia* and the recommendations made by the Basque Government's Terminology Assessment Commission.

Sometimes the forms listed in IDITE's reports are frequently used by the users and they want them not to be unknown forms for in tool; or, on the contrary, they want the tool to make the corresponding correction or improvement proposal when those forms are used in a text.

Then the option offered by IDITE to create personal dictionaries becomes very interesting, as the preferred forms can be included in the personal dictionary together with the correct but not preferred forms and the incorrect forms. As a consequence, correction and improvement proposals based on the information contained in personal dictionaries are made by the tool in the same way we just saw in the example report.

Furthermore, when including a new form in IDITE's personal dictionary, the user can indicate if it belongs to general vocabulary or, if it is a term, which thematic domain it belongs to. As a consequence, that information is also shown in the report created by the tool just like in the example report we just saw.

Who uses IDITE?

IDITE is a valuable tool for ensuring that text written in Basque uses the right and up-to-date vocabulary and terminology, which is crucial in sectors where good linguistic quality is necessary.

It is used by several institutions where Basque is a working language, among which the most relevant are:

- The Provincial councils of Gipuzkoa and Biscay, and the town hall of Gipuzkoa's capital, San Sebastian
- The Basque Parliament
- HABE, an autonomous institute of the Basque Government whose main goal is fostering the basquization and the literacy training of adults
- Euskaltzaindia, the Basque Language Academy
- Elkar, one of the main Basque publishers

Of course, UZEI also uses IDITE to check all the texts it produces.

Possible future applications of IDITE

The technology at the base of IDITE could be applied to create new versions of IDITE for languages other than Basque. UZEI and the University of Salamanca are nowadays studying the possibility to tailor the technology of IDITE to develop a Spanish version that would suit their specific needs, which would be used by the University of Salamanca to detect neologisms in texts with a high specialization level.

Other NLP tools created by UZEI

As previously mentioned, IDITE is a tool that was entirely developed by UZEI and is really valuable for evaluating and controlling Basque vocabulary and terminology used in written texts. R&D&I undertaken by UZEI have made it possible to develop a variety of products that make an important contribution to Basque terminology and machine translation.

Apart from IDITE, UZEI has created, among others, the following tools:

- A spelling checker called Hobelex.
- UZEI has also taken part in the creation of the Public Bank of Translation Memories of the Basque Government.
- LEX2, a tool for parallel lexicon extraction.

Apart from creating these tools, UZEI has also played an important role in the development of the Spanish–Basque, Basque–Spanish, English–Basque and Basque–English machine translators, which have been developed for the Basque Government.

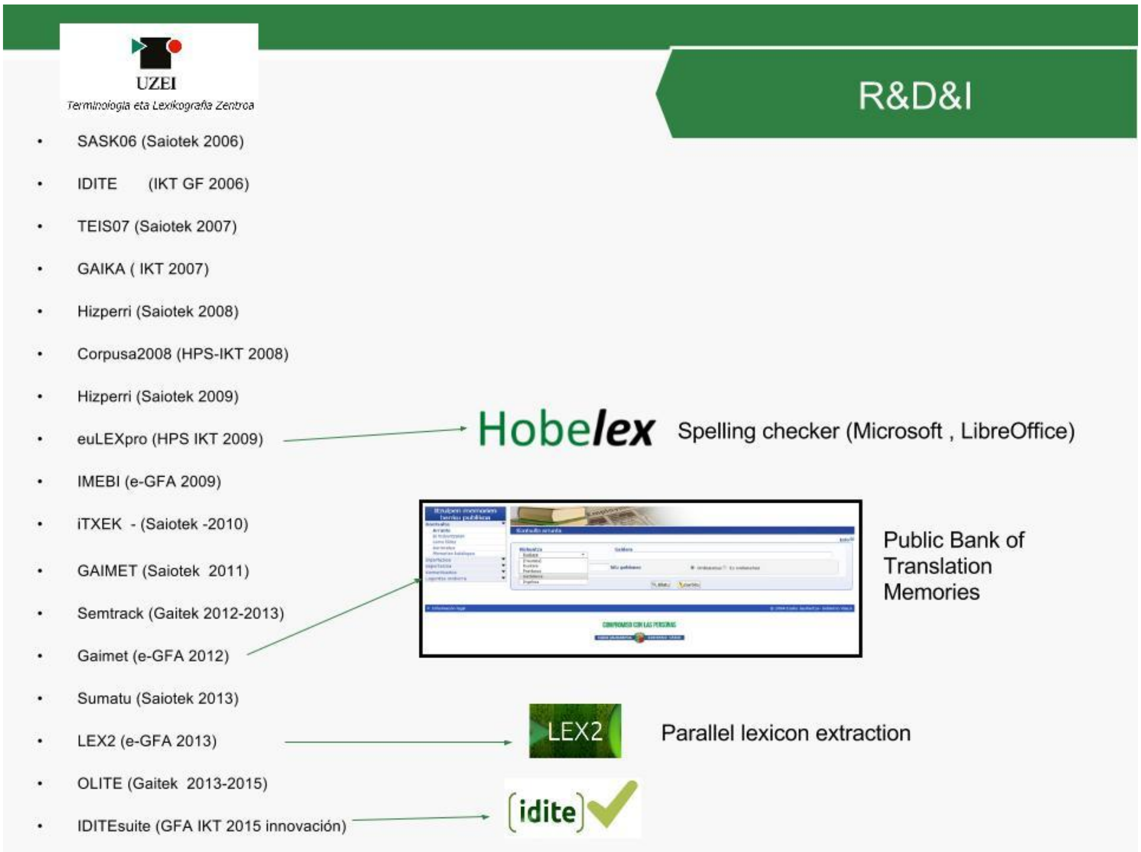

Figure 6: Hobelex

Conclusion

IDITE is the only tool that is nowadays available for automatically checking the adequacy of vocabulary and terminology contained in texts written in Basque. It makes correction and improvement proposals basing on the information contained in its lexical database, which includes preferred forms together with correct but not preferred forms and forms that are considered as incorrect. It has been fully developed using UZEI's technology and linguistic resources.

IDITE can also be used for neologism detection and for analyzing the diachronic changes undergone by terminology from a particular field along the terminological standardization process.

Finally, it is possible to create IDITE's new versions for languages other than Basque. Furthermore, the first steps are already being given to create a Spanish version of this tool in the near future.

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Recourir aux nouvelles technologies afin d'avancer d'un pas dans le contrôle et l'évaluation de la qualité des terminologies

Begoña Arrate

UZEI

Résumé en français

La langue basque comporte des caractéristiques particulières : sa réalité politico-administrative, sa nature agglutinante (d'où des besoins spécifiques en TALN) et sa situation sociolinguistique (en tant que langue en cours de normalisation).

Le vocabulaire et la terminologie étant des composants essentiels dans le processus de normalisation du basque, il faut disséminer les règles et recommandations formulées par les autorités linguistiques en lexicographie et en terminologie basques.

C'est précisément afin d'entreprendre cette tâche de dissémination que le centre basque de terminologie et lexicographie UZEI a créé IDITE, en mettant en œuvre sa propre technologie et ses ressources. IDITE vérifie l'adéquation du vocabulaire et de la terminologie d'un texte donné. La base de données lexicales qu'il exploite comporte des informations remises à jour régulièrement, tant sur les formes considérées comme correctes que sur les formes rejetées par les autorités linguistiques en lexicographie et terminologie basques.

En analysant un texte, IDITE repère automatiquement les formes rejetées et les affiche dans un rapport ; il en va de même des formes inconnues, non recensées dans la base de données lexicale. Qui plus est, pour chaque forme rejetée d'identifiée, IDITE proposera la forme correcte correspondante.

IDITE est un outil très précieux d'assurance-qualité, puisqu'il permet de vérifier que les textes rédigés en basque emploient un vocabulaire et une terminologie mis à jour, ce qui est essentiel dans des secteurs requérant une bonne qualité linguistique.

De plus, IDITE peut être employé pour analyser les évolutions en diachronie subies par la terminologie d'un certain domaine, en vérifiant des textes rédigés à des dates différentes. Une autre finalité d'IDITE est l'identification des néologismes. En effet, les formes inconnues enregistrées dans les rapports d'IDITE sont d'habitude des coquilles, mais il peut y en avoir aussi des néologismes.

Le centre basque de terminologie et lexicographie UZEI a signé un accord avec le principal journal de langue basque, grâce auquel il peut vérifier les textes parus dans ce journal, recenser les néologismes qui y sont attestés, proposer d'autres variantes pour ces néologismes et incorporer les termes proposés dans Euskaterm (la banque terminologique publique du Gouvernement Basque, alimentée par UZEI). IDITE est à son tour exploité par les éditeurs, par les medias et par plusieurs institutions utilisant le basque comme langue de travail.

[Traduit de l'anglais par Anca-Marina Velicu, Université de Bucarest, relecture-révision stylistique par Virgile Prod'homme, Service de Coopération de l'Ambassade de France en Roumanie]

SESSION 6: TERMINOLOGIST(S) PROFILE(S)

The Terminologist of the 21st Century

Georgeta Ciobanu

Politehnica University of Timişoara

The present paper is based on the presentation delivered at the 8th EAFT Terminology Summit. The very title of this paper is related specifically to the terminologist's profile in the twenty first century. Starting from the examination of previous resources dealing with this topic – handbooks, manuals, conference proceedings, etc., an outline of the state-of-the-art represents the background for the discussion on present and future peculiarities of terminologists. From among these peculiarities we highlight: new skills and competences correlated with 21st century skills; improved managerial skills; improved social skills (communication, intercultural awareness, diversity); new jobs; new position in organization's management; contribution to brand consolidation; diversified certification and specialization according to market requirements; increased contribution in the development of internet of things, management of big data; increased involvement in the use of social media facilities; involvement in W3.0; use of gamification in solving terminology problems; active participation in the globalization context.

As the terminologist's profile has been tackled in the literature quite often by most distinguished terminologists, our main effort focused on finding a different approach by: involving more stakeholders able to judge the terminologist's profile and more information sources, by adding new 'visions' on the future terminologist's profile and by including the game component as part of the terminologist's contribution.

Starting from the Sumerian terminologist (2600 B.C.) carving thematic monolingual dictionaries on clay bricks, after several centuries we can outline the profile of the **traditional terminologist**: competence in terminological theory and practice; linguistic competence (mainly specialized languages); knowledge in one or more subject fields

The development of computers helps in identifying the **modern terminologist**'s profile:

IT competence; competence in managing data bases; competence in information theory and management; specific research competences; competence in standardization; competence in project management

Speaking of **contemporary terminology**, new elements are added to the terminologist's profile: competence in using new technologies/ new media; competence of using semantic webs in representing ontologies; combined competences tailored to the needs of the client; competences embedded in global context; competences related to netiquette, confidentiality, data safety

Job descriptions prove to be valuable information sources as well, linking the terminologist profile requirements to the labour market. Our samples justifying this statement are quite relevant: terminology jobs for NATO, Central European Bank, United Nations, International Telecommunications Unit.

Realizing the huge potential provided by the **interviews** published by the Terminology Coordination Unit of the European Parliament, we processed all the information existing in these interviews and summarized the conclusions in the lines to follow. Moreover, we benefitted from the presence of two questions occurring in most of the interviews:

1) How would you define the profile of a terminologist?

2) How do you see the future of terminology?

Here is a selection of the answers to the first question.

The terminologist should

- be knowledgeable in: terminology management, lexical semantics, sociolinguistics, cognitive linguistics, language policy, specialism knowledge in various domains;
- have interest in: language philosophy, philosophy of science, knowledge engineering, ontology management, semantic webs, standards, new trends in society, new workflow procedures, corpus linguistics, computational linguistics;
- consider: cultural differences, corporate culture

Skills: information retrieval, knowledge acquisition, research skills, project and process management skills, diplomatic skills, language skills, group / team work

Personal skills: flexible, open to innovation, creative ideas, patient, determined, diligent, excellent communicator, eye for detail, logical brain

The following is a to do list (a selection) based on interviewees' answers:

- Get sound training with theoretical and practical basis
- Avoid excessive technologization
- Remember terminology is crucial in any form of communication
- Consider terminology as part of everyday life
- Meet the requirements of various user groups
- Approach terminology in multilingual settings
- Cover needs of domains lacking terminology
- Treat all domains equally important
- Protect regional languages
- Support awareness raising campaigns in favour of terminology
- Localize terminology
- Develop diversified terminology services
- Create interactive TDBs
- Assure quality of term data
- Provide terminological education and training
- Encourage 'hands-on' training envisaging real-life solutions
- Certify trainings

For the second question, the terminologist profile relates to:

- Possible theoretical changes due to Web 3.0 developments
- Interdisciplinary research projects aiming at solutions to real-life problems
- Networking: industry experts/public services and academia
- Improved awareness/attitude of companies towards terminology
- Increased involvement with new media / crowdsourcing
- Terminology closer to the people (lay persons)
- Terminology: collaborative, customized, cloud-based solutions
- Promotion of best practices
- Terminology: high technologization
- Terminology: important actor in the globalized society
- Terminology training: life-long learning approach
- Further collaboration between terminology and interpreting

Our predictions for the future profile of the terminologist include such ideas as:

- Terminologist's new/additional competencies/skills: leadership, innovation, people management, change management, knowledge curation, operational efficiency, reflection skills, etc.

- New jobs
- New position in organization's management
- Increased contribution in the development of Internet of Things, management of big data
- Involvement in Web 3.0
- Increased involvement in the use of social media facilities
- Improved social skills (communication, intercultural awareness, diversity)
- Use of games in solving terminology problems:
- Games and terminology teaching
- Games and terminology in industrial environments

Profile of "**gamer – terminologist**"

- competences in designing and using SARGs (serious alternate reality games)
- competences in dealing with the new media, respectively, Web 2.0 and Web 3.0
- competence to communicate with the "digital natives";
- competence to socialize by getting involved in social communities;
- competence to collaborate virtually with (groups of) people from various cultures;
- competence to adapt to the intercultural / cross- cultural diversity of the partners;
- increased competence to evaluate and validate the quality of data produced by "collective intelligence", corroborated with development of critical thinking;
- competence to select realistically Web 2.0 technologies and adapt them to the specific needs of terminology users;
- specific behaviour competences, such as: encourage active participation, develop trust in the community members, increase responsibility for personal contribution to collective heritage, accept advice and suggestions from others; create an informal atmosphere

The traditional text-type conclusions are replaced by an invitation:

Let's play a terminological game

✓ Define the term "summit" in a tweet

!! Not more than 140 characters

✓ Send your tweet to the Summit Jury of Awards (@_eaft) and win one of the 2 prizes:

1) Theoretical contribution (proper terminological definition)

2) Originality / Creativity

Le terminologue du 21^{e} siècle

Georgeta Ciobanu

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Résumé en français

Un aperçu à vol d'oiseau du profil du terminologue repose pour l'essentiel sur des ressources textuelles traitant du sujet (monographies, manuels, actes de conférences, etc.). Un tel état des lieux préfacera la discussion des caractéristiques actuelles et futures du profil du terminologue. À cet égard nous envisagerons ici les aspects suivants :

- les nouveaux emplois et postes dans la direction de l'entreprise actuellement accessibles aux terminologues ;
- la contribution des terminologues à la consolidation de l'image de marque et à la responsabilité sociale de l'entreprise ;
- l'accès à diverses formules de certification et de spécialisation, dans le respect des exigences du marché ;
- les nouvelles compétences et habiletés des terminologues, propres au 21e siècle :
- de meilleures habiletés de gestion ;
- de meilleures habiletés sociales (communication, prise de conscience interculturelle, diversité) ;
- un recours de plus en plus fréquent aux réseaux de socialisation et autres médias sociaux ;
- une contribution toujours plus importante au développement de l'internet des objets et à la gestion des données massives (donc, au web 3.0) ;
- le recours aux jeux, pour résoudre des problèmes de terminologie ;
- la participation active, dans un contexte de globalisation.

[Traduit de l'anglais par Anca-Marina Velicu, Université de Bucarest, relecture-révision stylistique par Virgile Prod'homme, Service de Coopération de l'Ambassade de France en Roumanie]

Le profil du terminologue – reloaded[59]

Donatella Pulitano

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30 ans après la création, à l'Université de Genève, du Certificat de spécialisation en terminologie, plus de 20 ans après la fondation de nombreuses associations de terminologie partout en Europe et ailleurs[60], et 12 ans après la publication du « Profil du terminologue »[61] par le Conseil de la terminologie allemande (Rat für Deutschsprachige Terminologie, RaDT), il convient – dans ce contexte où les **visions** et les **révisions** des aspects terminologiques sont à l'affiche – de faire le point sur la situation actuelle de la profession de terminologue et de réfléchir aux nouveaux défis qui se profilent à l'horizon. Concrètement, il s'agit dans cette contribution de déterminer si la figure professionnelle du terminologue est désormais établie et s'il y a eu des progrès concernant la reconnaissance de la profession et des professionnels, et de réfléchir aux contextes dans lesquels travaille le terminologue aujourd'hui et dans lesquels il travaillera dans les années à venir.

Quand le RaDT a publié son profil, en 2004, c'était une nouveauté. Il existait certes des descriptifs de tâches, mais – à notre connaissance – rien d'aussi synthétique et facilement applicables à différentes situations : en effet, il décrivait les tâches habituelles du terminologue et ses champs d'activité, et il énumérait les compétences requises tout en donnant un aperçu sur la formation nécessaire. Il n'est donc pas étonnant que ce profil ait été traduit en plusieurs langues, et que d'autres initiatives similaires aient vu le jour un peu partout dans le monde.

Ce même document a d'ailleurs servi de point de départ, en 2008, pour les travaux qui ont mené, en 2010, à la publication du premier classeur terminologique du Deutscher Terminologie-Tag (« Best-Practices-Ordner »)[62]. La deuxième édition de cette publication date de 2014. Comme la première édition, elle contient un module 6 consacré à la formation et aux débouchés professionnels, qui présente divers profils avec des descriptions de tâches et énumère les compétences requises, avec des propositions de cursus pour les différents profils.

Si on fait le point par rapport à la réalité décrite en 2004 – et présentée au 3ème sommet AET de Bruxelles en novembre 2006 –, on constate qu'il y a eu des développements à plusieurs niveaux, que nous allons analyser ci-après.

De nouvelles tâches

Le terminologue n'est plus seulement chargé de « faire » des fiches et de gérer des banques de terminologie.

Si le terminologue continue bien entendu de préparer et de mettre à jour des fiches, il a entretemps développé bien d'autres responsabilités. Il est notamment devenu responsable de la gestion informatique des outils et du support. Il fournit son aide tout au long du processus de traduction – en alimentant notamment les différents outils impliqués – et ne fait plus uniquement une « livraison de termes ».

Souvent, il assure sa propre veille technologique, et il ne dépend plus du service informatique pour connaître les nouveautés dans les outils d'aide à la traduction. Il est à même de faire ses propres évaluations des outils.

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59 Tous mes remerciements à mes collègues Aurélie Picton et Julie Humbert-Droz pour la relecture du manuscrit et leurs suggestions très précieuses.

60 Au Québec par exemple, l'OTIAQ est devenu « Ordre des traducteurs, terminologues et interprètes agréés du Québec » en l'an 2000.

61 http://radt.org/images/veroeffentlichungen/RaDT_Berufsprofil_franzoesisch.pdf (16.5.2017)

62 http://dttev.org/images/downloads/dtt-publikationen/Best-Practices-2-0-Inhalt.pdf (16.5.2017)

Il est également impliqué dans des projets transversaux grâce à ses compétences de synthèse et de structuration qui sont de plus en plus appréciées dans le monde du travail.

De nouveaux contenus

Le terminologue doit faire face à des contenus protéiformes.

Les documents produits dans les entreprises et les administrations sont de plus en plus riches en terminologie, une terminologie souvent « éclectique » et variée, qui ne se conforme pas toujours aux règles méthodologiques connues. Le terminologue intervient à plusieurs niveaux, en particulier et de plus en plus, en amont de la chaîne de production de textes, où il doit assurer la cohérence tant dans la langue de départ que dans la langue d'arrivée.

Le « cycle de vie du terme » se raccourcit, la terminologie évolue donc très rapidement et il faut garder trace des changements, et notamment dans les outils. Le terminologue doit en outre faire face à des défis tels que les anglicismes – allant de pair avec la thématique de la perte de domaines[63] – et la terminologie utilisée pour les technologies nouvelles (Web 2.0 et médias sociaux). De plus, les terminologues modernes s'appuient sur les nouveaux outils pour diffuser des informations terminologiques allant du mini-cours à l'actualité en passant par des astuces : pensons aux nombreux blogues, bulletins et sites d'informations etc. qui sont nés les deux-trois dernières années – sans compter la communauté de gazouilleurs qui grandit à vue d'œil[64].

De nouvelles compétences

Les compétences du terminologue 2.0 vont outre les compétences « classiques ».

En 2016, qui dit « terminologie » dit « technologies et médias sociaux ». Cela signifie que, plus que, jamais le terminologue doit idéalement maîtriser le *travail terminologique outillé*, afin de pouvoir travailler sur une masse toujours plus grande de textes. Il doit avoir de l'aisance à passer d'un outil à un autre – en jonglant d'un format à un autre – et, de ce fait, assurer une veille technologique.

Le terminologue moderne doit cependant aussi faire preuve de compétences managériales, notamment quand il est en charge d'un groupe de projet. Il doit savoir justifier ses activités d'un point de vue économique, mais aussi faire du marketing et « vendre » la terminologie. Des concepts comme le « ROI » ne doivent pas lui faire peur, et il doit être à l'aise avec des « business plans » tout comme les outils sociaux que nous avons évoqués plus haut.

Ces nouvelles compétences ne peuvent être négligées dans les programmes de formation, comme nous le verrons plus bas.

Une nouvelle clientèle

Le terminologue doit servir une clientèle disparate, avec des profils très variables.

La clientèle du terminologue classique a changé : si autrefois, le terminologue servait essentiellement un public langagier (traducteurs, rédacteurs) en mettant à disposition les « bons termes » grâce à son travail terminologique – thématique, mais très souvent ponctuel –, aujourd'hui il s'adresse à une clientèle qui *a priori* ignore même ce qu'est la terminologie.

En effet, le public langagier est désormais en mesure de faire une grande partie de ses recherches en autonomie, puisqu'il dispose d'outils beaucoup plus puissants (internet, corpus, bases de données, pour n'en citer que quelques-uns) et qu'il sait faire des recherches circonstanciées et ciblées.

Le nouveau public cible du terminologue est une clientèle variée, la plupart du temps sans connaissance de ce qu'est terminologie. Cela implique pour le terminologue une adaptation à la typologie des problèmes à résoudre (beaucoup de questions relevant en effet de la compréhension de la

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[63] Voir par exemple http://radt.org/images/veroeffentlichungen/RaDT-DomaenenpapierAktuell.pdf (16.5.2017) et Lauren/Myking/Picht Heribert, *Sprache, Domäne und Domänendynamik*, in Fachsprache, 2004

[64] Pensons notamment à In My Own Terms, terminologia.etc, .., parmi beaucoup d'autres.

langue et non pas de la terminologie) et aux contenus, tant du point de vue de la « densité des informations » que de celui de la forme ou de la présentation (version allégée pour les appareils mobiles ou fiches terminologiques « banalisées » pour le grand public, etc.).

De nouvelles formations

Les terminologues ne sont plus formés uniquement en faculté de traduction.

Du point de vue de la formation, nous avons vécu des changements de programmes – dus en partie à la réforme de Bologne –, qui ont eu pour conséquence la disparition de formations à proprement parler en terminologie, mais en revanche à davantage de formations continues et de cours *ad hoc*.

Depuis une bonne trentaine d'année, les formations en terminologie ont été dispensées dans les universités ou hautes écoles, dans les cursus de traduction ou rédaction technique – et sporadiquement comme filière indépendante. Dans ces institutions d'enseignement, on assiste de plus en plus à un déplacement des enseignements en terminologie du volet purement linguistique à un volet plus informatique. De plus, les occasions de stage – voire de travail de projet dans le cadre d'un diplôme – se multiplient, donnant aux étudiants la possibilité d'entrer en contact avec la vie professionnelle. Les diplômés sont donc en mesure d'assumer les tâches, évoquées plus haut, liées à la dimension outillée de la terminologie.

À côté, les cours de formation continue organisés par les associations professionnelles ou par les institutions de type universitaire ont été complétés, ces dernières années, par des certifications : p. ex. « TermNet ECQA Certified Terminology Manager »[65] ou « DTT-Terminologiezertifikat »[66]. Cette offre répond au besoin de plus en plus marqué des « terminologues de terrain » d'attester de leurs connaissances qui n'ont pas pu être validées par des études. Quelques universités, telle que l'Université Pompeu Fabra à Barcelone, ont même développé des formations en ligne (« Máster Online en Terminología »[67] et « Online Terminology Workshops »[68]).

La formation en terminologie des dernières années tient compte des exigences évoquées ci-dessus pour préparer les terminologues aux nouvelles tâches, aux nouveaux contenus et aux nouvelles compétences.

On remarque en effet que les cursus comportent une part beaucoup plus élevée d'enseignements consacrés aux outils et à l'acquisition de compétences pour leur utilisation et leur évaluation. Ils sont complétés par des cours qui montrent toutes les facettes de la terminologie, de la politique linguistique à la gestion de projets en passant par des cours de communication, réseautage, médiation, gestion des conflits. Les enseignants essaient dans la mesure du possible de construire des programmes pour une mise en situation réelle et pour viser à l'intégration de la terminologie et de ses outils dans le processus de traduction.

Un nouveau statut

Être terminologue est aujourd'hui une fonction reconnue.

Force est de constater que la communauté des terminologues a beaucoup grandi ces dernières années, de même que les initiatives en faveur de la profession. Beaucoup de professionnels langagiers, mais aussi des experts de la connaissance, ajoutent la terminologie à leur portefeuille d'activités. Nous assistons à une augmentation des pigistes dans le domaine, tant pour le travail terminologique à proprement parler que pour le conseil en terminologie. Mais nous remarquons aussi l'embauche de terminologues dans des contextes *a priori* peut-être plus « atypiques » pour la terminologie (bibliothèques nationales, instituts de normalisation, etc.).

[65] http://www.termnet.org/english/products_service/ecqa_ctm-basic/
[66] http://dttev.org/images/aktuelles/dtt-zertifikat-fortbildung_Flyer.pdf
[67] https://www.upf.edu/web/terminologiaonline
[68] http://www.iula.upf.edu/teronltlluk.htm

Paradoxalement, les contraintes d'économie ont obligé les services linguistiques des entreprises – même prestigieuses – et les sociétés de prestations linguistiques – même prospères – à réduire les effectifs, les prestations linguistiques étant souvent externalisées.

Cela signifie que les questions sur le recrutement d'un terminologue et sur son statut professionnel sont toujours d'actualité.

Au début de la profession, les terminologues étaient classés, dans les entreprises et dans les administrations, comme « traducteurs ». Les tests d'admission étaient en grande partie pour les traducteurs : faire dépouiller un texte ou corriger une fiche n'était pas prévu dans les procédures d'engagement. Depuis plusieurs années, « terminologue » est une fonction à part entière, avec des procédures d'engagement et de recrutements spécifiques, ce qui permet aussi de prévoir toute la panoplie d'une carrière de terminologue : junior, senior, chef, etc.

Le profil du terminologue à l'avenir

Si le terminologue est – et personne n'en doute – un « knowledge worker », donc un travailleur de la connaissance, il va de soi qu'il est aussi un *gestionnaire* des connaissances, donc un « knowledge manager ».

Nous le savons tous, la richesse, le capital des prochaines décennies est le savoir, la connaissance. Le terminologue est ainsi appelé à jouer un rôle fondamental dans ce contexte. La plupart des terminologues sont aujourd'hui des personnes qui mènent des projets et qui prennent des décisions importantes. Malheureusement, notre vision du « terminologue leader » ne s'est pas encore transformée en une réalité partout.

Le fait est que le terminologue est la *personne-ressource* pour tout ce qui a trait aux connaissances et à la langue – sans oublier la formation dans ces domaines. Il a une habileté certaine à faire face à des contraintes et contextes différents qui demandent un traitement diversifié de mêmes contenus terminologiques. Il peut ainsi répondre aux attentes d'une clientèle qui – comme nous l'avons vu plus haut – est de plus en plus variée et a des exigences toujours plus hétérogènes.

Le terminologue est un acteur fondamental dans la visualisation des terminologies et la modélisation des connaissances, vu qu'il peut faire le lien entre le « monde » linguistique et le « monde » conceptuel. Depuis toujours, le terminologue prépare des arbres de domaine et des arbres de concepts pour mettre en relation concepts et termes, et ceci en plusieurs langues. Le terminologue est en mesure d'élaborer des données qui seront utilisées par des ontologies et, partant, par des agents intelligents : des données qui seraient donc comprises non seulement par des humains, mais aussi par des machines.

Le Web sémantique, l'intelligence artificielle, les données massives, les données ouvertes et liées, l'Internet des objets : autant de mots-clés pour l'avenir professionnel du terminologue. Où s'arrête le rôle du terminologue et où commence celui du gestionnaire des connaissances ? Voici une question sur laquelle sont en train de travailler plusieurs institutions, et notamment le RaDT, le DTT et le Deutsches Institut für Terminologie[69].

[69] http://dttev.org/images/img/abbildungen/DITeV_org_Terminologie_und_KI_2017_03_22_v2.pdf

SESSION 7:
TERMINOLOGY TRAINING

Notion de crochet terminologique revisitée (domaine français–roumain)

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En terminologie bilingue, dans une logique explicite de traduction, le **crochet terminologique** (Dubuc 2002 / 1978 : 76–77) a été défini d'entrée de jeu comme notion instrumentale, référée au premier degré du moins aux **désignations** de concepts, non aux concepts eux-mêmes, en tant qu'ensemble des éléments **textuels** ou **contextuels** sur lesquels s'appuie l'équivalence interlinguale (perspective explicitement sémasiologique). Robert Dubuc distinguait en effet, dans un manuel pratique de terminologie (premier manuel de terminologie en français, paru à la fin des années '70), selon la présence ou l'absence de *descripteurs* communs dans les *contextes* en langue$_1$ et en langue$_2$ (au niveau de l'article terminologique bilingue), **crochet explicite** (contextes à *descripteurs* communs) et respectivement **crochet implicite** (*sens global* des *contextes* permettant le rapprochement des concepts en langue-culture source et en langue-culture cible, en l'absence de descripteurs communs).

Plus de 20 ans plus tard, dans leur *Précis de terminologie*, Silvia Pavel et Diane Nolet étendront la notion de **crochet terminologique** à la **définition**, « l'application la plus importante du principe de l'uninotionnalité » et « le principal moyen d'établissement du crochet terminologique » (Pavel & Nolet 2001 : 22). Maintenant, les auteures appréhendent la définition terminologique en tant que « brève **formule lexicographique** qui indique les traits sémantiques distinctifs d'un concept », « censée décrire le concept » (ibidem, nous soulignons). Ce qui, d'une part, ne correspond qu'à l'un des deux types de définitions de concepts (en terminologie) au sens de la norme ISO 704/ 2000 (F) – les **définitions par compréhension** – excluant de fait les définitions par extension ; d'autre part, une définition-formule lexicographique ne correspond pas directement au niveau des conceptualisations (ou niveau de la **structuration du concept** en soi[70]), mais toujours au niveau des **désignations**. Le crochet terminologique continue donc à être situé du côté des indices ou indicateurs textuels d'uninotionnalité, et non pas au niveau des notions elles-mêmes.

Dans le glossaire en fin d'ouvrage, toutefois, le crochet terminologique recevra une définition univoquement sémantique, qui situe l'élément décisif pour l'établissement de l'équivalence interlinguale (et/ou interculturelle), au premier degré, au niveau des conceptualisations, plutôt qu'à celui des descripteurs ou des contextes et autres énoncés définitoires, explicatifs ou illustratifs : « identité des **traits sémantiques** trouvés dans plusieurs **contextes** ou **définitions** et prouvant **l'uninotionnalité** des données consignées sur une fiche terminologique » (idem, 106).

Une retombée pratique de l'opérationnalisation de la notion de crochet terminologique, en terminographie axée sur la traduction : l'article terminologique bilingue comprendra des données relatives au concept (définition, explication, contexte) formulées dans les deux langues envisagées (obéissant à la logique des corpus comparables vs parallèles). Ce principe est asserté à la fois dans la norme ISO 12616:2002 que dans la norme ISO 16642:2003 (*Applications informatiques en terminologie – Plateforme pour le balisage de terminologies informatisées*, disponible seulement en anglais).

[70] Pour la relation entre objet et concept (ou : « notion »), et structuration du concept *per se*, voir Felber 1987 : 98–101.

1. Crochet terminologique et uninotionnalité

L'exigence d'avoir deux définitions, deux explications, deux contextes (un(e) pour chaque langue-culture) vient aussi de ce que les concepts ont parfois des charges culturelles irréductibles[71] (perçues au niveau de la dénotation du terme, dans les contextes d'attestation). En sciences sociales (droit, économie), mis à part les concepts ayant fait l'objet de normalisation internationale, l'identité parfaite d'intension et d'extension sont plutôt l'exception, et l'équivalence interculturelle sans faille et biunivoque (deux étiquettes pour exactement le même concept), fort rare.

2. Concepts à intensions identiques et extensions divergentes

2.1. Extensions faiblement divergentes (sous isomorphisme structural du microsystème conceptuel) : les causes d'irresponsabilité

En fait de responsabilité pénale, le Nouveau Code Pénal roumain (NCP_{ro} 2014) opère, dans les chap. II et III du Titre II (« L'Infraction »), une distinction entre *cauzele justificative* (les 'causes justificatives') d'une part, et *cauzele de neimputabilitate* (les 'causes de non imputabilité'), de l'autre.

Les deux catégories y reçoivent d'abord une définition générique en intension, assez minimaliste (dans les articles 18 et respectivement 23, intitulés « Dispositions générales », dont les premiers alinéas assertent, pour les deux catégories, le caractère d'exonération totale[72], et le second, le caractère respectivement objectif[73] et subjectif[74] de chaque catégorie) et ensuite (au gré des articles subséquents, dans chaque chapitre) une définition par extension[75] (définition d'un genre par énumération de ses espèces).

Les définitions extensionnelles des deux genres relèvent pour l'essentiel, des « headline definitions » au sens de Nilsson 2015 : 90, l'intitulé de chaque chapitre désignant le genre, et les intitulés des articles immédiatement subséquents aux « dispositions générales » désignant chacun une espèce.

Les espèces énumérées seront, elles, assorties, dans les articles respectifs, de définitions en intension assez étoffées et parfois d'exemples. Le tableau ci-contre rend compte des extensions des deux concepts coordonnés, au sens de la loi pénale roumaine :

Cauzele de neimputabilitate (NCP_{ro} 2014, art. 23-31)	Cauzele justificative (NCP_{ro} 2014, art. 18-22)
1. constrângerea fizică[76] 2. constrângerea morală[77] 3. **excesul neimputabil**[78] 4. minoritatea făptuitorului[79] [minorité sans discernement ou à discernement confondues] 5. **iresponsabilitatea** (din cauza unei boli psihice)[80]	1. legitima apărare[84] 2. starea de necesitate[85] 3. exercitarea unui drept sau îndeplinirea unei obligaţii (impuse de lege [3a]

[71] Pour Diki-Kidiri 1999, la lieu privilégié des « perceptions culturelles » serait le signifié – appelé de ce fait « percept » (art. cit., 579).

[72] « Ne constitue pas une infraction le fait prévu par la loi pénale s'il existe l'une des causes justificatives (suivantes) » « ___ s'il a été commis dans les conditions de l'une des causes de non imputabilité suivantes ».

[73] « L'effet des causes justificatives s'étend aux (autres) participants »

[74] « L'effet des causes de non imputabilité ne s'étend pas aux (autres) participants, à l'exception du cas fortuit »

[75] Pour typologie des définitions, voir ISO 704/2000 (F) : §6.2, pour hiérarchisation normative des définitions intensionnelles (« les plus correctes »), et extensionnelles (« moins correctes »), voir Pitar 2013 : 89–91, et Nilsson 2015 : 95, pour une critique plus nuancée des définitions par extension.

[76] Litt. 'la contrainte physique'.

[77] Litt. 'la contrainte morale'.

[78] Litt. 'l'excès non imputable'.

[79] Litt. 'la minorité de l'agent'.

[80] Litt. 'l'irresponsabilité (à cause d'une maladie psychique)'. Définie, dans le texte, comme : « le fait prévu par la loi pénale, accompli par une personne qui, au moment même de l'accomplissement, ne pouvait se rendre compte de ses actions ou inactions, ou ne pouvait pas les contrôler, à cause d'une maladie psychique sinon pour d'autres raisons » (*fapta prevăzută de legea penală săvârşită de persoana care, în momentul comiterii acesteia, nu putea să-şi dea seama de acţiunile sau inacţinile sale ori nu putea*

6. intoxicarea involuntară cu alcool sau cu alte substanţe psihoactive[81] 7. eroarea (**necunoaşterea „existenţ[ei] unei stări, situaţii ori împrejurări de care depinde caracterul penal al faptei** ; „necunoaşter[ea] sau cunoaşter[ea] greşit[ă] a caracterului ilicit al acesteia” [7a: erreur sur le fait]; „necunoaşterea unei dispoziţii legale extra-penale [7b: erreur sur le droit]”)[82] **8. cazul fortuit**[83]	sau de autoritatea competentă [3b])[86] 4. consimţământul persoanei vătămate („ nu produce efecte în cazul infracţiunilor contra vieţii”)[87]

Tableau 1 : Causes de non imputabilité et causes justificatives dans le Nouveau Code Pénal Roumain (2014)

En français (langue-culture), la distinction entre <faits justificatifs> d’une part, et <causes de non imputabilité>, de l’autre, relève non de la loi (du Code Pénal en particulier), mais des textes de doctrine (commentaires des lois, théorie du droit) ainsi que des textes de vulgarisation juridique s’y rapportant (voir synopsis sous Tableau 3 infra, qui élabore sur Genninet 2004, où l’on souligne que « ces deux catégories ne sont distinguées ni par le code, ni par la jurisprudence. Il s’agit d’une distinction exclusivement doctrinale » – op. cit., 61).

La loi ne mentionne explicitement, quant à elle, qu’une seule catégorie, superordonnée, dont l’extension contient (entre autres) l’extension des deux notions discriminées par la doctrine (Code Pénal 2016, Titre II[88], Chap. II, Articles 122-1 à 122-8 – voir Tableau 2 ci-contre). Cette catégorie superordonnée est elle-même désignée, dans l’intitulé du chapitre concerné, non par un terme, mais par une glose extensionnelle (énumération des espèces immédiatement subordonnées) : les *causes d’irresponsabilité* ou *d’atténuation de la responsabilité*.

La distinction des deux espèces coordonnées (<causes d’irresponsabilité> et respectivement <causes d’atténuation de la responsabilité>) n’est pas assertée, puisque lesdites espèces ne sont plus guère nommées, au-delà de cette glose : il n’y a pas de sous-chapitres/ intitulés préfaçant des articles portant exclusivement sur l’une ou sur l’autre d’entre elles). Elle se laisse cependant opérer à partir de formulations explicites et systématiques dans les articles de ce chapitre unique : « n’est pas pénalement responsable la personne qui » préface tous les énoncés des espèces particulières de causes d’irresponsabilité, et « demeure punissable » (Article 122-1, second paragraphe, portant sur les troubles psychiques ou neuropsychiques ayant *altéré* (vs aboli) le discernement) et respectivement « sont pénalement responsables » (Article 122-8, portant sur la minorité à discernement) préfacent les énoncés de <causes d’atténuation de la responsabilité>. L’extension de chacune des deux espèces est donc entièrement reconstruite dans le Tableau 2 ci-après. Il en va de même des sous-espèces de <causes d’irresponsabilité> prévues par les textes de doctrine (Tableau 3). Autrement dit, la structure hiérarchisée à deux niveaux du système conceptuel générique est le fait d’une reconstruction conceptuelle par des théoriciens du droit et/ou des terminologues (dont nous-même), non le fait du législateur français.

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să le controleze, fie din cauza unei boli psihice, fie din alte cauze) – NCP$_{ro}$ 2014, Art. 28. La doctrine roumaine souligne que l’irresponsabilité doit être *totale*, sinon, c’est une simple circonstance d’atténuation de la peine (Pascu 2014 : 200).

[84] Litt. ‘la légitime défense’.

[85] Litt. ‘l’état de nécessité’. Noter que le NCP$_{ro}$ ne fait pas mention de la force majeure en tant que ‘cause justificative’ (fait justificatif) distincte de l’état de nécessité, bien que la définition de l’état de nécessité ne corresponde qu’au concept désigné, en droit roman, par état de nécessité au sens strict (action nécessaire

[81] Litt. ‘l’intoxication involontaire à l’alcool ou à d’autres substances psychoactives’.

[82] Litt. ‘l’erreur (ignorance de l’existence d’un état, d’une situation ou d’une circonstance dont dépend le caractère pénal du fait’ (= de l’acte !) : ‘ignorance ou méconnaissance du caractère illicite de celui-ci’ ; ‘ignorance d’une disposition légale extra-pénale’.

[83] Litt. ‘le cas fortuit’.

[86] Litt. ‘l’exercice d’un droit ou l’accomplissement d’une obligation (imposée par la loi ou par l’autorité compétente)’.

[87] Litt. ‘le consentement de la personne lésée (ne produit pas d’effets dans le cas des infractions contre la vie)’.

[88] Intitulé « De la responsabilité pénale ».

Causes d'irresponsabilité ou d'atténuation de la responsabilité (CP fr 2016, Chap. II)	
Causes d'irresponsabilité	**Causes d'atténuation de la responsabilité**
• [absence[89] de discernement ou de contrôle pour cause de] trouble psychique ou neuropsychique (Art. 122-1, premier paragraphe) • force ou contrainte (Art. 122-2) • erreur sur le droit (inévitable) (Art. 122-3) • acte prescrit ou autorisé par des dispositions législatives ou réglementaires (Art. 122-4, premier paragraphe) • acte recommandé par l'autorité légitime (Art. 122-4, second paragraphe) • légitime défense (Art. 122-5 à Art. 122-6) • [état de nécessité] (Art. 122-7*[90]) • minorité sans discernement**	• [altération du discernement ou contrôle entravé] pour cause de trouble psychique ou neuropsychique (Art. 122-1, second paragraphe) • minorité à discernement (Art. 122-8)

Tableau 2 : Causes d'irresponsabilité ou d'atténuation de la responsabilité dans le Code Pénal français 2016

*Terme non employé dans le texte du Code : « acte nécessaire » (séquence non terminologisée). La définition intensionnelle fournie dans cet article[91] correspond à ce que les textes de doctrine appellent *état de nécessité*.

** Information *inférée à partir* du texte de l'Art. 122-8 (qui ne parle que de la minorité à discernement, comme d'une cause d'atténuation de la responsabilité : 10–18 ans).

[89] Terme effectivement employé : « abolition ».

[90] Des textes de jurisprudence et de vulgarisation juridique interprètent ainsi cet article, voir : .http://www.lemondepolitique.fr/cours/droit_penal/faits-justificatifs/etat_de_necessite.html

[91] « acte nécessaire à la sauvegarde de la personne ou du bien », « face à un danger actuel ou imminent », sauf disproportion entre moyens employés et gravité de la menace. Le sens de l'opérateur disjonctif *ou* n'est pas clair : reformulation paraphrastique (« c.-à-d. »), ou disjonction exclusive (« ou bien actuel = en cours/ ou bien imminent ») ? Sous l'interprétation reformulative, l'article peut viser de fait seulement un <état de nécessité>, sous l'interprétation disjonctive exclusive, à la fois un <état de nécessité> et un cas de <force majeure>

Code pénal **(CP$_{fr}$ 2016)**	**Causes d'irresponsabilité**		**Causes d'atténuation de la responsabilité**
Doctrine	**Causes de non-imputabilité**	**Faits justificatifs**	
Nature [∈intension]	i. subjectives: se réfèrent à la personne elle-même ii. ne font pas disparaître l'élément légal de l'infraction (la culpabilité) iii. préexistent à la consommation de l'infraction **iv. exonération totale**	i. objectifs: se réfèrent aux actes ii. font disparaître l'élément légal de l'infraction (la culpabilité) iii. interviennent lors de la commission de l'infraction **iv. exonération totale**	i. subjectives: se réfèrent à la personne elle-même ii. ne font pas disparaître l'élément légal de l'infraction (la culpabilité) iii. pré-existent à la consommation de l'infraction **iv. exonération partielle**
Bénéficiaire [∈intension]	(puisque personnelles, elles ne profitent pas à autrui) v. Seul l'auteur en bénéficie pour se disculper	(puisqu'objectifs, ils profitent à autrui) v. L'auteur, les co-auteurs et les complices en bénéficient	(puisque personnelles, elles ne profitent pas à autrui) v. Seul l'auteur en bénéficie pour se faire pénaliser moins
Domaine [= extension]	**1. absence de discernement ou de contrôle pour cause de trouble psychique (1a) ou neuropsychique (1b)** **2. minorité sans discernement (<10 ans)*** **3. force** [3a] **ou contrainte** [3b] **4. erreur sur le droit** : (inévitable)	**1. acte prescrit ou autorisé par des dispositions législatives ou réglementaires** **2. acte recommandé par l'autorité légitime** **3. légitime défense** **4. état de nécessité**** **5. force majeure*****	**1. trouble mental n'abolissant pas entièrement le discernement** **2. minorité (à discernement)**

Tableau 3 : Causes d'irresponsabilité et causes d'atténuation de la responsabilité, causes de non imputabilité et faits justificatifs en droit français (synopsis de notre main, prenant appui sur Genninet 2004)

* information qui se laisse inférer à partir de l'information explicite dans l'article du code (Art. 122-8)

** fait justificatif non mentionné en tant que tel dans le Code pénal, mais cité dans les textes français de doctrine

*** fait justificatif non mentionné en tant que tel dans ce chapitre, mais évoqué à l'article 121-3 du Code (dernier alinéa, relatif aux contraventions, non constituées comme infractions « en cas de force majeure »)

Notons aussi, avant de poursuivre plus avant la comparaison extensionnelle, que les notions juridiques de <cas fortuit> (cause de non imputabilité en droit pénal roumain), d'<état de nécessité> (<fait justificatif> aux yeux du législateur roumain et de la doctrine française, et <cause d'irresponsabilité> aux yeux du législateur français) et de <force majeure> (<fait justificatif> aux yeux du législateur français) sont assez proches l'une de l'autre, en droit romain en général, pour mériter une analyse à part (voir Tableaux 4 et 5 et références citées).

état de nécessité	force majeure
l'impossibilité d'exécuter l'obligation = comportement nécessaire	
Comportement adopté : • *intentionnel (acte ou omission intentionnels)* • *préventif (action préventive face à un danger imminent)* *Evénement source :* • *évitable (mais : seulement au prix de l'infraction déculpabilisée)* • *pas la conséquence d'une faute de l'agent exonéré*	*Comportement adopté :* • *involontaire (acte ou omission non intentionnels)* • *réactif (réaction à un événement en train de se produire)* *Evénement source irrésistible (inévitable & insurmontable) :* • *catastrophe naturelle* • *événement politique majeur (guerre, révolution)* • *accident (panne informatique)* • *maladie*

Tableau 4 : état de nécessité vs force majeure (droit romain)

Sources :

(1) Document A/CN.4/315 *"Force majeure" et "cas fortuit" en tant que circonstances excluant l'illicéité: pratique des États, jurisprudence internationale et doctrine* – étude établie par le Secrétariat, Extrait de l'*Annuaire de la Commission du droit international*,1978, vol. II (1 sujet: Responsabilité des Etats)

http://legal.un.org/ilc/documentation/french/a_cn4_315.pdf (consulté le 12 janvier 2017)

(2) http://fr.jurispedia.org/index.php/%C3%89tat_de_n%C3%A9cessit%C3%A9_(fr)#Les_conditions_relatives _au_danger (dernière consultation le 18 mai 2017)

(3) http://www.lemondepolitique.fr/cours/droit_penal/faits-justificatifs/etat_de_necessite.html

cas fortuit	force majeure
Evénement ou situation imprévisibles, mais, *s'ils avaient été* prévus, évitables	Evénements ou situations imprévisibles, mais également inévitables et insurmontables (*vis cui résistif non potest*)

Tableau 5: cas fortuit vs force majeure (droit romain)

Source :

(1) Document A/CN.4/315 *"Force majeure" et "cas fortuit" en tant que circonstances excluant l'illicéité: pratique des États, jurisprudence internationale et doctrine* – étude établie par le Secrétariat, Extrait de *l'Annuaire de la Commission du droit international*,1978, vol. II (1 sujet: Responsabilité des Etats)

http://legal.un.org/ilc/documentation/french/a_cn4_315.pdf (consulté le 12 janvier 2017)

À comparer les extensions des concepts français et roumains de <faits justificatifs[92]> et respectivement de <causes de non imputabilité>, telles que reconstruites sous la synopsis du Tableau 3, nous remarquerons d'abord que la notion de <cause de non imputabilité> est plus étendue en droit roumain (où elle comporte plus d'espèces qu'en droit français) : 8 espèces de <causes de non-imputabilité> à la roumaine, contre seulement 4, à la française (*prima facie*).

Corrélativement, des 5 espèces de <faits justificatifs> à la roumaine ('causes justificatives'), seulement 4 se retrouvent aussi en droit français[93], mais il en va de même dans l'autre sens : point de <consentement de la personne lésée>, parmi les <causes d'irresponsabilité/ faits justificatifs>, en droit français (loi ou doctrine), mais également, point de <force majeure> comme <fait justificatif> distinct de l'<état de nécessité[94]>, dans le Code pénal roumain.

[92] Français langue de la description (métalangue). Cela ne préjuge en rien du signifié compositionnel distinct du terme roumain ('causes justificatives').

[93] [1]ro = [3]fr, [2]ro = [4]fr, [3a] ro = [1]fr, [3b] ro = [2]fr ; [4]ro, la cinquième espèce en fait, n'est pas comprise dans l'extension du concept français de <fait justificatif>.

[94] Le terme n'est attesté nulle part, dans ce texte.

Le crochet terminologique serait-il alors, à chaque coup, de l'ordre de l'intension du concept seulement ? Cela reverrait à la baisse l'équivalence interculturelle, et devrait sans doute parasiter l'équivalence terminographique bidirectionnelle. Pourtant il n'en est rien :

(9) *cauzele justificative* (ro, code) ⇔ *faits justificatifs* (fr, doctrine)

(10) *cauzele de neimputabilitate* (ro, code) ⇔ *causes de non imputabilité* (fr, doctrine)[95]

Serait-ce dû à la prévalence des espèces communes ?

À un examen plus fin, il s'avère effectivement qu'il subsiste moins de divergences entre conceptualisation roumaine et française des <causes de non-imputabilité> que la comparaison des chiffres des tableaux 1 et 3 ne le suggèrent de prime abord[96]: des 8 espèces de <causes de non-imputabilité> à la roumaine, seulement [3]ro, [7a]ro et [8]ro n'ont pas de corrélat du tout, au niveau de l'extension du concept français correspondant, et [4]ro (minorité de l'agent, nonobstant la distinction entre minorité sans discernement [#4a]ro vs minorité à discernement [#4b]ro[97]) n'a qu'un corrélat partiel, étant plus étendu que [2]fr (minorité sans discernement) – soit 4/10 (ou : 40 %) des espèces, sans correspondant français (donc un peu plus du tiers mais bien moins que la moitié). En clair : l'<excès non imputable> (défense excessive, encore que légitime ou respectivement action excessive, en cas d'état de nécessité), l'<erreur de fait> (quand elle ne constitue pas le résultat même de la faute involontaire) le <cas fortuit> (événement que la plupart des agents ne peuvent prévoir sinon contrecarrer) et la <minorité à discernement>, compris dans l'extension du concept de <causes de non imputabilité>, en droit roumain, ne sont pas compris dans l'extension du concept correspondant, à la française (ratio de divergence extensionnelle de 40 %), et le <consentement de la victime>, compris dans l'extension du concept de <faits justificatifs>, en droit roumain, n'est pas compris dans l'extension des <faits justificatifs> à la française, ni la <force majeure>, comprise dans l'extension du concept de <faits justificatifs>, à la française, ne l'est pas, dans celle du concept correspondant roumain (ratio de divergence extensionnelle de 33 %).

L'isomorphisme structural du microsystème conceptuel des <causes de non-imputabilité> et <faits justificatifs> à la roumaine et à la française y jouerait-il aussi, ou bien le facteur déterminant est-il vraiment le seul taux de divergence (bien inférieur à 50 %) ? Ce sont là, après tout, des concepts coordonnés, directement opposés l'un à l'autre, aussi bien en droit pénal français qu'en droit pénal roumain, bien qu'en droit roumain il ne soit pas fait état du concept immédiatement superordonné (fût-il désigné par une glose à vocation primaire métalinguistique, dans un intitulé regroupant les deux espèces).

L'isomorphisme structural du microsystème est une retombée directe de l'identité de compréhension des deux concepts, en droit pénal français et respectivement en droit pénal roumain. Lui imputer le maintien de l'option d'équivalence interculturelle forte (équivalence interlinguale bidirectionnelle), au-delà des divergences extensionnelles, ce n'est qu'accorder à la compréhension du concept (à ses caractères) un statut privilégié en tant que crochet terminologique, par rapport à son extension (aux concepts subordonnés).

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95 De fait, à ce jour nous n'avons pu documenter que la traduction du roumain vers le français, dans des textes de doctrine (article scientifiques).
PROIECTUL NOULUI COD PENAL dr. Iulian POENARU consilier, şef de sector Consiliul Legislativ Poenaru, Buletin de informare legislativã nr. 2/2003, 40–43, résumé en français de l'article (43, *faits justificatifs*), texte de l'article (40, *cauzele justificative*).
Traduction en français de l'intitulé d'un article de droit indexé dans la BDI EBSCO (NIŢU, Daniel, 2014, « Imputabilitatea si cauzele de neimputabilitate în noul Cod penal », Bucharest University Annals – Law Series,. 2014 supliment, 29–54./ « L'imputabilité et les *causes de non-imputabilité*… » dans la traduction en français de l'intitulé.
http://web.a.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=10110623&AN=110610285&h=wyqnjE7qPv6mMcnkeZZfJFQBSstTQXd0buBa4HFvDAIDs0ESDQAjguPKjGoS2fOZy0v4hDRkgkOrCG6qhv1vyA%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d10110623%26AN%3d110610285 (consulté le 10 mars 2017).

96 [1]ro = [3a]fr, [2]ro = [3b]fr, **[3]ro = ∅fr**, [4a]ro = [2]fr, **[4b]ro = ∅fr**, [5]ro = [1a]fr, [6]ro = [1b]fr, **[7a]ro = ∅fr**, [7b]ro = [4]fr, **[8]ro = ∅fr**.

97 Où # note l'absence d'attestation des sous-espèces concernées dans le NCP_{ro}.

Nous présumerons pourtant que, dans le cas de ce microsystème conceptuel, le crochet terminologique participe à la fois des compréhensions manifestement convergentes, encore que relatives à des sources du droit distinctes (code/ doctrine) dans les deux langues-cultures comparées, et des espèces subordonnées communes : les extensions des concepts roumains et français ont assez d'éléments en commun pour que les espèces émargeant, dans l'une des cultures juridiques, la structure de conceptualisation en place dans le cadre de l'autre ne bloquent pas la bidirectionnalité de l'équivalence terminographique, ne parasitant pas la correspondance (parfaite) des intensions (correspondance dont l'accès est certes facilité par les **descripteurs communs** des **termes complexes** français et roumains en soi, très motivés déjà chacun, au plan intralingual[98]) :

(11) justificative$_{(ro)}$/ justificatifs$_{(fr)}$, cauzele$_{(ro)}$/ les causes$_{(fr)}$, ne-$_{(ro)}$/ non-$_{(fr)}$, imputabilitate$_{(ro)}$/ imputabilité$_{(fr)}$

2.2. Extensions fortement divergentes (sous isomorphisme structural du microsystème conceptuel) : à propos des minima sociaux

Les systèmes roumain et français de protection sociale reposent au même titre sur l'opposition entre <assurance sociale> (contributive, non soumise à des conditions de ressource et de besoin), d'une part, et <assistance sociale> (non contributive et soumise à des conditions de ressource ou de besoin), et les *aides sociales* à la roumaine occupent, à l'intérieur du *système national d'assistance sociale*, parmi les *bénéfices d'assistance sociale* (en argent ou en nature : biens) vs *services sociaux* (en nature : services[99]), plus ou moins la même place que celle occupée par les *minima sociaux*, à l'intérieur du système des *prestations sociales*, en France.

De fait, les *bénéfices d'assistance sociale* (correspondant interculturel des prestations sociales à la française) sont classés par le législateur roumain (Loi N° 292/ 2011) selon plusieurs dimensions : selon leur visée (*bénéfices d'assistance sociale pour___*), mais également selon la modalité (*allocations, aides, indemnisations, facilités*). Puisque le premier classement comporte des catégories désignées non par des termes, mais par des périphrases semi-figées assez fournies, et comme typiquement les espèces de *bénéfices d'assistance sociale pour prévenir et combattre la pauvreté et le risque d'exclusion sociale* sont des *aides sociales* selon la dimension de la modalité, ce qui est directement reflété par leurs désignations (comportant presque toutes ou bien l'hyperonyme *aide* ou bien l'hyperonyme *aide(s) sociale(s)*), en discours socio-économique (depuis les sites de vulgarisation, aux sites officiels de mairies et au site du Ministère du Travail même) on s'y réfère comme à des aides sociales (terme économique consacré en liséré de la terminologie juridique).

Les *aides sociales* à la roumaine comprennent actuellement :

1. une *aide sociale mensuelle* (*revenu minimal garanti : RMG*) – correspondant à première vue au *RSA (revenu de solidarité active)* français. Etant donné la formule de calcul (niveau de base du RMG – 100% des revenus du travail), le montant maximum du RMG de base (famille à 5 membres) – soit d'environ 527 lei (110 à 120 euros), et le ratio RMG/ Salaire minimum (net) 527/ 925 (chiffres actualisés pour janvier 2017), le RMG roumain est un complément de revenus, à la différence du RSA (socle) français (qui dépasse légèrement le smic net[100], dans le cas d'une personne seule ayant trois enfants à charge, ce qui le voue à fonctionner comme revenu forfaitaire unique des sans-emploi). Les deux concepts ne sont donc pas inter-culturellement équivalents[101].

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[98] Du fait de la relation privilégiée entre signifié compositionnel et concept désigné (voir Depecker 2002 : 1.2.11).

[99] Assistance et support pour assurer les nécessités primaires de l'individu, soins de la personne, récupération/ réhabilitation, insertion/ réinsertion sociale, etc. (Loi 292/2011, ART. 30, (1)).

[100] 1153 € en janvier 2017. Source : http://www.lemonde.fr/economie-francaise/article/2016/12/31/ce-qui-change-au-1er-janvier-2017_5055946_1656968.html (dernière consultation le 20 mars 2017).

[101] L'introduction, en janvier 2016, de la prime d'activité (en lieu et place du RSA activité) visait justement à encourager la reprise de l'emploi – puisque plus de 70% des allocataires du RSA demandaient le RSA socle, et à peine 30%, le RSA activité ! (http://www.laviedesidees.fr/Le-RSA-un-dispositif-inadapte.html consulté le 2 février 2017).

2. l'allocation pour le soutien de la famille (*alocaţia pentru susţinerea familiei*) : complément de revenu pour les ménages en état de précarité ayant un ou plusieurs enfants mineurs à charge
3. l'aide pour le chauffage du logement (*ajutorul pentru încălzirea locuinţei*)
4. une *aide d'urgence* : pour les personnes ou familles vulnérables suite à des désastres naturels, aux incendies, accidents, maladies graves, toutes autres causes d'exclusion sociale : accordés par le Gouvernement, non imposables, cumulables avec d'autres allocations ou indemnisations (le cas échéant)
5. l'aide en cas de décès (personne non assurées)
6. l'aide remboursable pour les réfugiés (6+3 mois) ➔ équivalent interculturel de l'ADA (allocation pour demandeur d'asile) à la française

Une simplification du système est envisagée à l'horizon de l'année 2017 : RMG+ aide pour le chauffage du logement + aide au soutien de la famille = *revenu minimum d'insertion* (terme officiel en prise direct sur la terminologie française).

Si les *aides sociales* à la roumaine et les *minima sociaux* français ont les mêmes définitions intensionnelles (descripteurs constitutifs du crochet terminologique mis en vedette dans le tableau 6 ci-après), il n'en va pas de même des extensions de ces concepts. Seulement 1 espèce à correspondance interculturelle maxima – évidemment, aux montants près (6fr = 2ro), 1 équivalence imparfaite (1 fr/ 1 ro) et une transcatégorisation (5fr a un correspondant interculturel au niveau du système roumain des indemnisations, non conditionnées, elles, à un seuil de pauvreté) – voir Tableau 7 plus bas. Un taux de redondance extensionnelle d'environ un tiers ou moins, contre un taux de divergence extensionnelle avoisinant les deux tiers.

Qui pis est, les **orientations** des prestations sociales concernées restent **complémentaires** à la fois en termes de leurs prototypes (RSA à vocation de revenu unique/ RMG ro, à vocation de revenu d'appoint) et de leurs bénéficiaires (allocataires) : adultes/ séniors d'abord, voire surtout, pour les *minima sociaux* français, mais jeunes/ enfants d'abord, voire surtout (3, 6, 7 dans le tableau 7), dans le cas des *aides sociales* roumaines, vu que le dispositif d'assistance pour personnes âgées est chez nous distinct (et comporte des aides sociales intégrées à la catégorie des aides d'urgence notamment, mais surtout des allocations, indemnisations et facilités).

Minima sociaux (français) [INSEE[102]]	**'Aides sociales' (roumaines)** [Loi 292/2011, art. 9 (2), art. 11]
• visée : « assurer un revenu minimal à une personne (ou à sa famille) en situation de **précarité** » • « versé[es] sous *conditions de* **ressources** » • « prestations sociales non contributives » (sans contrepartie de cotisations)	• « Bénéfices d'assistance sociale pour prévenir et combattre la **pauvreté** et le risque d'**exclusion sociale** » (art. 11) • « *seuil de* pauvreté », « quantification des **ressources** » (art. 6 hh)) • « assistance sociale non contributive » (art. 6 ee))

Tableau 6 : définitions par compréhension identiques (indices textuels du crochet terminologique en gras ou italiques)

[102] http://www.insee.fr/fr/methodes/?page=definitions/minima-sociaux.htm (dernière consultation le 13 novembre 2016)

MINIMA SOCIAUX (fr)	« AIDES SOCIALES » (ro)
1. Revenu de solidarité active (RSA) 2. Allocation aux adultes handicapés (AHA) 3. Allocation supplémentaire d'invalidité : invalidité générale réduisant la capacité de travail ou de gain des 2/3 4. Allocation temporaire d'attente (ATA) : anciens détenus, salariés expatriés au chômage, victimes d'accidents ou de maladies professionnelles ; apatrides ***5. ADA (allocation pour demandeur d'asile)*** 6. Allocation de solidarité spécifique (ASS) : chômage de longue durée 7. Allocation équivalent retraite (AER) séniors en chômage avant l'âge de la retraite (+60 ans) ***8. Allocation de Solidarité aux Personnes Agées (ASPA) : retraités à faibles ressources*** 9. Allocation veuvage (AV)	***1. Revenu minimum garanti (RMG)*** 2. Allocation pour le soutien de la famille 3. Aide pour le chauffage du logement 4. Aides d'urgence : désastres naturels, aux incendies, accidents, maladies graves, traitement à l'étranger, décès… ***5. Aide remboursable pour les réfugiés (6+3 mois)*** 6. Bourses sociales 7. Aides en nature (aliments, compléments alimentaires, fournitures et autres matériels scolaires pour les enfants défavorisés) ***8. Bénéfices d'assistance sociale pour personnes âgées pour prévenir la pauvreté et le risque d'exclusion sociale*** [Loi 292/ 2011, art. 94, (2) a)]

Tableau 7 : extensions fortement divergentes

Quelle solution de transfert, alors ? Peut-on traduire *minima sociaux* par *ajutoare sociale* (texte cible traitant toujours de réalités françaises, pas d'adaptation donc) ? Peut-on proposer *ajutoare sociale* comme hétéronyme interlingual systématique (équivalent terminologique) de *minima sociaux* ?

Nous pensons qu'un taux aussi important de divergence extensionnelle doit en pratique barrer l'équivalence terminologique forte (bidirectionnelle), le terminologue visant alors à identifier un équivalent interlingual suffisamment transparent (motivé), qui rende justice à la compréhension du concept-source, mais qui n'active pas, en mémoire, l'extension du concept correspondant, en culture cible, tout en connotant pour le moins un certain degré de ressemblance (« air de famille ») avec celui-ci.

En clair, *prestaţii de asistenţă socială minimale* (voire : *prestaţii minimale de asistenţă socială* – pour faciliter l'accord) serait un tel équivalent unidirectionnel (fr-ro) du terme français de *minima sociaux* (désignation de réalités françaises, pour public roumain), suffisamment distinct à la fois du terme roumain de *ajutoare sociale* et de son synonyme périphrastique *beneficii de asistenţă socială pentru prevenirea şi combaterea sărăciei şi riscului de excluziune socială*, pour ne pas évoquer l'extension du concept que ces derniers désignent, mais assez transparent (motivé) en référence aux caractères {[+revenu minimal], [+plafond (condition de ressources)], [-cotisation], [bénéficiaire : personne en situation de précarité]} que partagent <minima sociaux> français et <'aides sociales'> roumaines ; tout en connotant un plafond quand même raisonnable. Il faut, à cet égard, éviter la forme roumaine minime du fait de ses connotations négatives, en miroir par rapport aux données du français :

(12) *accorder un minimum de prestations* (quand même) vs *garantir des prestations* (seulement) *minimales*

(13) *temperaturi minime, minime de temperatură* ('températures les plus basses qui soient' : orientation négative, vers quantité infime, moindre degré)/ *standarde minimale* ('standards minimaux' : pas négligeables)

Corrélativement, *aides sociales* minimales rend bien l'intension du concept source roumain (en régime de terme complexe motivé), sans évoquer spécifiquement l'extension du concept français de *minima sociaux*, mais tout en connotant, à la faveur des descripteurs *social* et *minimal*, un certain degré de parenté avec celui-ci.

Dans les deux cas de figure (sous équivalence unidirectionnelle), le degré d'équivalence sera sensiblement amélioré à la fois par rapport au calque (*aides sociales* dénoterait un concept plus général que le terme source roumain, et *minime sociale* serait parfaitement inintelligible pour les roumanophones, du fait de l'usage massif de l'adjectif et du nom *minimă*, e dans le vocabulaire de la météo, en particulier au pluriel), et par rapport à l'équivalence interculturelle de type adaptation (abusive, vu la divergence, très marquée, en extension, même en tant que stratégie de traduction – d'autant plus, comme option terminographique).

À défaut de soutien extensionnel suffisant, le crochet terminologique purement intensionnel restera trop ténu pour permettre l'équivalence terminologique forte, bidirectionnelle – et interculturelle, plutôt que seulement interlinguale.

Les énumérations, ça compte, en effet !

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Visiting and Revisiting in Medical Terminology: A Successful C+D Dictionary – a Philological Tool Specialized in Oncology and Diabetology for Medical Translations and Retroversion from Romanian into English. A Case Study

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I. *A Successful C+D Dictionary Presentation and domain structure*

Romania is a country with 19.94 million inhabitants, the country is the seventh most populous member state of the European Union. It is also the country where Nicolae Constantin Paulescu (30 October 1869 (O.S.) – 17 July 1931), a Romanian physiologist, professor of medicine, most famous for discovering insulin, published his articles between 24 April to 23 June 1921 and worked on *pancreine* (a pancreatic extract containing insulin).

According to the National Program for Diabetes[103] in 2014 in Romania there were 50 000 newly diagnosed diabetic persons, there are also 703 719 diabetic persons treated, there are 198 192 self-monitored diabetic persons from which 3061 diabetic children (type I) and 195 131 diabetic adults and there were 76 persons treated with insulin pumps. According to the National Program for Oncology[104]the number of persons with oncological problems in 2014 was of 3677 persons, but there were no published data about the persons with diabetes and oncological problems.

[103] http://www.cnas.ro/page/programul-national-de-diabet-zaharat.html
[104] http://www.cnas.ro/page/programul-national-de-oncologie.html

Figure 1: Diabetes in Romania in 2014 (source: http://fadr.ro/diabetul-in-romania/)

A Successful C+D Dictionary is a project which aims at designing a terminological dictionary in oncology and diabetology for both the general public and the patients with disability having the knowledge of these issues from the inside, for the specialists in areas such as forensics medicine and pathology, for lawyers and prosecutors specialized in detecting malpractice and defending the patient’s rights, and for medical specialists, oncologists and diabetologists for better collaboration in solving various cases.

1.1 Quality and credibility of the medical documents

Most often the legal system has to follow, check and understand the meaning of the medical documents in order to detect and judge the malpractice cases. The patient and the doctor are the direct witnesses of the facts described in the medical documents.

While the patient never writes about the medical document when this is produced, the doctor is responsible for the medical documents. The description of the medical case must be made in an adequate addressed medical vocabulary, not only for the patient, but also for the forensic doctor, lawyer, attorney and magistrate. The problem is that there are no unitary criteria for evaluating the quality of medical description from the point of view of the patient, lawyer (attorney or magistrate) and forensic doctor. In the following table, there is a suggestion about the difference in evaluation of the medical case described in medical documents.

Evaluation:	Patient	Forensic Doctor	Lawyer(s) Attorney Magistrate
0– The description fails to address the criterion or cannot be assessed due to missing or incomplete information.			
1– Poor. The criterion is inadequately addressed, or there are serious inherent weaknesses.			
2– Fair. The description broadly addresses the criterion, but there are significant weaknesses.			
3– Good. The description addresses the criterion well, but a number of shortcomings are present.			
4– Very good. The description addresses the criterion very well, but a small number of shortcomings are present.			
5– Excellent. The description successfully addresses all relevant aspects of the criterion. Any shortcomings are minor			

Figure 2: The difference in evaluation of the medical case described in medical documents

Translations from medical language into the standard language and also into the legal language is a necessity in these cases. *A Successful C+D Dictionary*, a terminological dictionary in oncology and diabetology is also a necessity because terminologists, as medical specialized translators are not yet involved in the legal process.

1.2 Quality and appropriateness of the medical documents and of the two way transfer of knowledge

A. Between the doctor and the patient

Essential for the delivery of high-quality health care in the diagnosis and treatment of disease is the doctor-patient relationship, which forms one of the foundations of medical ethics. A patient must have confidence in the competence of their physician and must feel that they can confide in him or her. Patients receive the best care when they work in partnership with doctors to cure the disease. The doctor has to be truthful in informing the patient of their health and to be direct in asking for the patient’s consent before giving treatment. As a patient gives informed consent to treatment, that person also is given an opportunity to choose among the treatment options according to their own treatment goals and wishes. There are cases in which the authoritarian control of the physician, in a position of omniscience and omnipotence, pushes the patient to accept the treatment plan presented, without minimal understanding from the patient’s part of the treatment’ consequences and without the possibility to inform or to be inform correctly during the treatment. *A Successful C+D Dictionary* could be very helpful in this respect.

B. Between the doctor and the lawyer(s)

In a medical malpractice case, the physician may be viewed as superior to the patient and to the lawyer(s) simply because the physician has the credentials and knowledge and is most often the one that is on home ground. There is no direct punishment for breaking the Hippocratic Oath in modern time in case of omissions from the medical documents. The number of medical terms created by the doctor in order to describe the patient’s health issue is also a problem. If the doctor omits a term, this omission affects patient’s life. The patient provides an oral version of the medical case but his/her description and even his/her suffering is useless if there is no medical description in medical terms, written by a doctor. The patient never writes medical documents and although informed, his/her writings have no legal significance. The patient (or the legal caregiver or tutor) is supposed to sign for agreement, but it is hard to examine the quality of the informed consent post factum due to the emergent health problem. The patient's lawyer and the doctor's lawyer are present to comment and understand the medical document post factum without having a terminologist in their team in order to translate correctly from medical language into the standard and legal language. *A Successful C+D Dictionary* could be also very helpful in this respect.

II. Methodology of Terminology

A. Preparation of the Texts: a Historical Approach

Figure 3: INCUNABULA -- ISIDORUS HISPALENSIS (d.636). Ethymologiae. De summo bono. Venice: Bonetus Locatellus for Octavius Scotus. 11 December 1493.

In antiquity, the etymological encyclopedia "*Etymologiae*" was compiled by Isidore de Seville (560–636) who summarized and organized the knowledge he considered worth keeping from a mosaic of hundreds of classical profane and sacred sources regarding rhetoric, dialectic, grammar, mathematics, geometry, music, medicine, astronomy, law, god, angels and saints, languages, people, kingdoms, armies, cities, titles, beasts and birds, geography. This book has the structure of a tree or of a modern ordered data base (TRII) and St. Isidore de Seville is considered the patron of the Internet.

Arabs were the great translators of many Greek medical texts into Arabic and then into Hebrew and synthesizers of medical texts. Chaucer, in '*Canterbury Tales'* (c.1387) wrote about a medieval doctor: "A Doctor too emerged as we proceeded./ No one alive could talk as well as he did/ On points of medicine and of surgery/ For, being grounded in astronomy/ He watched his patient's favourable star/ And, by his Natural Magic, knew what are/ The lucky hours and planetary degrees/ For making charms and effigies./ The cause of every malady you'd got/ He knew, and whether dry, cold, moist or hot;/ He knew their seat, their humour and condition./ He was a perfect practicing physician./ All his apothecaries in a tribe/ Were ready with the drugs he would prescribe/ And each made money from the other's guile/ (They had been friendly for a goodish while)/ He was well-versed in Aesculpaius too/And what Hippocrates and Rufus knew/ And Disocorides now dead and gone,/Galen and Rhazes, Hali, Serapion./ In blood-red garments, slashed with buish-grey/And lined with taffeta, he rode his way;/ Yet he was rather close as to expenses/ And kept the gold he won in pestilences." In Macbeth, Shakespeare refers to a practitioner of medicine as a "doctor of physic": e.g.

"DOCTOR. Therein the patient/Must minister to himself.

MACBETH. Throw physic to the dogs, I'll none of it."

Surgery performed as a last resort was known to be successful in cases of breast cancer, fistula, hemorrhoids, gangrene, and cataracts, as well as tuberculosis of the lymph glands in the neck (scrofula)[105].

In Romania, as in all Europe various providers of medical practice with various titles were well known until the XIXth century: laech, physicker, leech, barber, chirurgeon/chiurgeon, surgeon, chymist/chemist/alchemist, pharmacist, wise woman, geriffa, witch, clergy, friars & monastics, wife or mother. If in Medieval Europe the surgeon's social status improved greatly as their expertise was needed on the battlefield, in modern era due to the large number of patients with diabetes and oncological problems, the surgeons follow the pattern deciding whether or not the patient should be "actively in a war going on", understanding human body as a set of systems functioning in interdependence. Because the terminology in these cases is very rich *A Successful C+D Dictionary* could be also very helpful in this respect.

In the XXI century some countries have specific legislation on various terminologies areas. For example, in France, there is a committee in each ministry for creating terminology lists of terms of reference and proposing French equivalents for foreign words.

In all the other countries, without a specific legislation on medical terminology areas, terminologists should be actors in legal cases of medical malpractice in order to research and define medical terms used in the medical documents, to use a medical terminology management system to create, update, or streamline definitions, and add other metadata such as parts of speech, grammatical information, and context sentences, to use sound terminological principles, establish relationships between synonyms and other related concepts, to import new terminology into the database and export existing terminology into various forms of output including glossaries and bilingual medical dictionaries, to demonstrate practical knowledge and experience of terminology database management systems or translation environments such as for instance Multiterm, OmegaT, Synchroterm, TermBase, TermStar, MemoQ, AlignFactory, DéjàVu, LogiTerm, MultiTrans, SDL, Terminotix or Multicorpora.

Without the terminologist and the medical terms, there are legal situations in which the 'elephant test' refers to situations in which an idea or thing is difficult to be described, but you know it when you see it. The Indian story of the group of blind men who touch the elephant, feeling different parts of it and finally they are in complete disagreement is a parable present in Bahá'i, Buddhist, Hindu, Jain, Sufi traditions and became well known through the poem of John Godfrey Saxe in which the elephant resembles "a wall, a spear, a snake, a tree, a fan and a rope". The metaphor implies that what we observe is not nature in itself, but nature exposed to our method of questioning. In malpractice cases, the patient appears as an unreliable narrator whose credibility has been seriously compromised by his suffering. This is why in legal cases of medical malpractice the knowledge of medical terminology is very important and *A Successful C+D Dictionary* could be also very helpful in this respect.

III. Methodology of terminology

Preparation of the Texts (Breast Cancer: a Case Study): the Choice of Words

The parable of the blind men describing the elephant is also relevant to a case of breast cancer malpractice where all the medical terms are "oncological blinded" or "limited", because everyone has to remember that what the doctors observe after mastectomy is not nature in itself, but nature exposed to their oncological method, the only way of questioning. If in ancient times a surgical malpractice led to a malpractice series and the patient died not because of the disease but because of the treatments, nowadays in Romania a breast carcinoma in situ T2A N0 M0 can benefit from the treatment experience

[105] http://www.bbc.co.uk/schools/gcsebitesize/history/shp/middleages/medievalsurgery rev3.shtml

which is described in the protocols[106]. Concerning the translation of the US English medical language into Romanian standard language all the medical terms are loanwords. A loanword is distinguished from a calque (loan translation), which is a word or phrase whose meaning or idiom is adopted from another language by translation into existing words or word-forming roots of the recipient language. Examples of loanwords in Romanian oncological medical language: *lumpectomy, quadrantectomy, total mastectomy, preventive mastectomy, partial mastectomy, radical mastectomy, modified radical mastectomy*. The problem with loanwords in case of surgical interventions is that Romanian medical dictionaries are not updated. The need for cultural equivalents and domestication strategy is not developed in this linguistic respect. As a result, the cultural infirmities (as the total absence of a specific representation from a certain language's lexical landscape and the total absence of the cultural dimension of it) block the cultural transfer. The corpus of the medical words is made by the doctors and never explained explicitly to the patient as if they were included in a glossary. In this respect the knowledge of medical terminology is very important and *A Successful C+D Dictionary* could be also very helpful.

Most confusions in legal part of malpractice start from the fact that in the Romanian language there are some loan compound words which contain the same constituent as base and Romanian medical dictionaries till 2016 contain explanations only for that base term. (for example: *mastectomie parțială, mastectomie simplă sau totală, mastectomie radicală modificată, mastectomie radicală*). There are also terms related to the new imaging methods of investigation explained by no Romanian dictionary: *Pet-Ct* (from English Positron emission tomography–computed tomography (better known as PET-CT or PET/CT), *telegamma terapie* (or *telegamaterapie* from English Telegamma teraphy), *stadializare TNM* (from English the TNM classification), *pen pentru insulină* (from English insulin pen, used to inject insulin for the treatment of diabetes). Regarding the importation of foreign words and loan words, in the following table there are illustrative examples of medical terms:

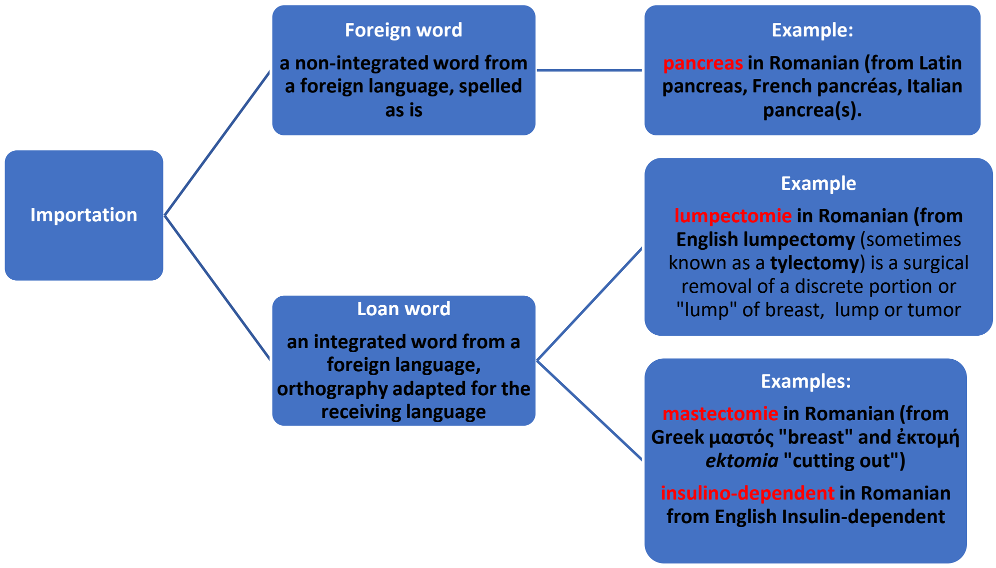

Figure 4: Word importation in Romanian medical language

Recent medical Anglicism in the Romanian language

After the fall of the communist regime (1989), when Romania reopened to the West, the influence of English on the medical Romanian language rose to an unprecedented level, especially after 2000. Medical English nouns are adapted to Romanian genders by means of such determiners whose form is

[106] see Protocolul Comisiei Multidisciplinare pentru Decizie Terapeutică (CDT) în Cancerul de Sân Institutul Oncologic „Prof. Dr. Ion Chiricuţă”, www.tratament-oncologic.ro/tipuri-de-tratament/tratament-pentru

suggestive of the gender of the English noun. Here are some examples: Romanian *acest Pet-CT* (in English this Pet-CT demonstrative adjective, singular, masculine), *acest pen* (in English this pen, demonstrative adjective, singular, masculine). Their gradual adaptation to Romanian is governed by formal and semantic criteria. Many of the borrowed English words are used unmodified, without any change in their structure. For example: *acest slide, acest MRI, acest CT*. There are also examples of partial substitution in medical terminology of loan words:

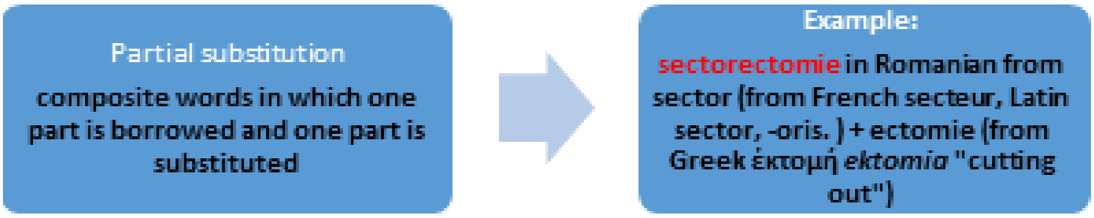

Figure 5: Word importation and partial substitution

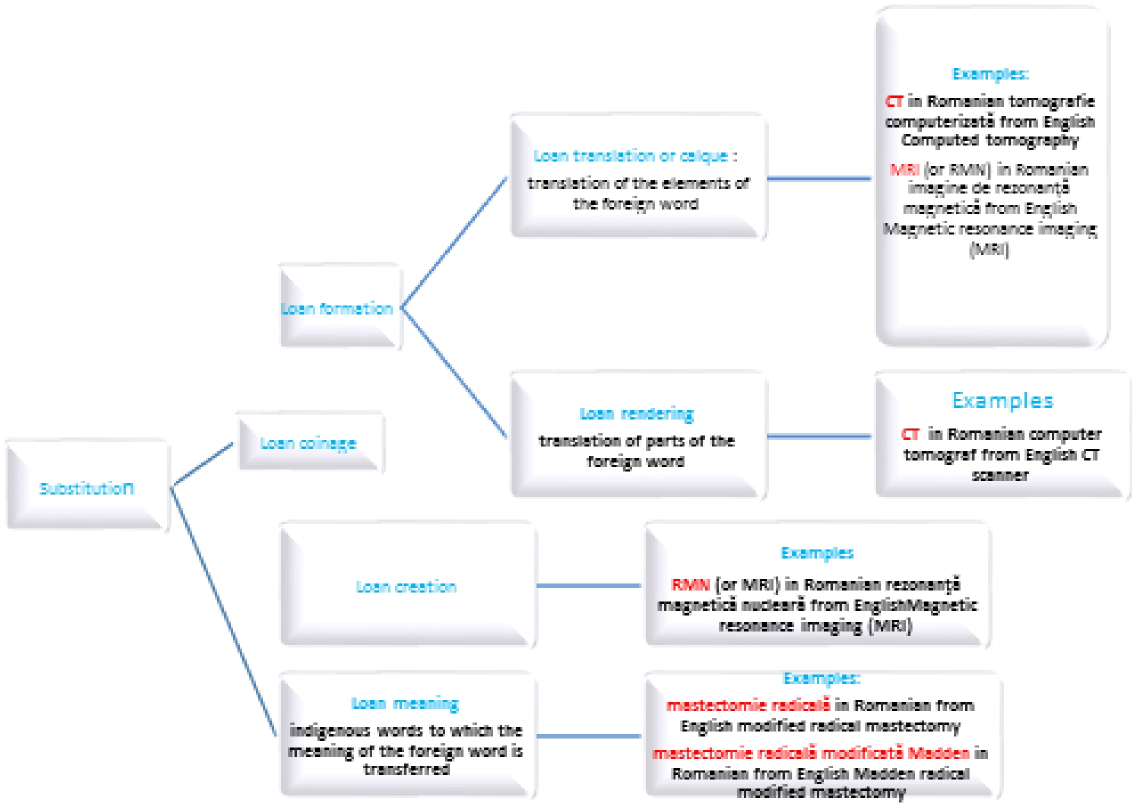

Figure 6: Word substitution and loan words

As for legal cases, the 'elephant test' refers to situations in which a type of surgical intervention is hard to describe, but instantly recognizable when spotted. The term is often used in legal cases when there is an issue which may be open to interpretation. The medical imaging has played a special role in the past ten years in Romania in this regard, because performant devices were bought in order to visualize and study the inner oncological problems of the patients. "I know it when I see it" is the moral of the parable which implies that one's subjective experience can be true, but that such experience is limited by the failure to account for the other truths or a totality of truth. This is the relativism or the opaqueness and inexpressible nature of truth due to the deficit of information or to the inaccessibility of information.

In other words, for a patient to sign up for a special surgical intervention it is necessary to be informed. As for the legal part of the problem of malpractice, it is important to remember that laws like sausages, cease to inspire respect in proportion if we know how they are made. Most of the medical scripts are to be read by all the other doctors and by the patient, if there is education involved in this respect. The legal version of the same "elephant" or the unrecognized surgical intervention are the medical scripts that lack some information about the faulty treatment and the patient's "unreliable" story confirmed by the traces left on the his/her own body after the unrecognized surgical intervention. The mission of the legal part is to discover the real face of the elephant or the unrecognized surgical intervention and its consequences. The corpus of the medical words is made by the doctors and never explained explicitly to the patient. If there is a missing medical term in a medical document, this does not mean that the medical problem is absent and the patient could not be treated properly. The patient gets the code Y84: medical case unrecognized because the brain is not able to describe what the eyes have never seen. This is a case of Paul Nougé's and René Magritte's theory of the object confused ("object bouleversé").

The forensic doctor as an expert offers a short explanation without vocabulary adapted to his readers. The lucky mission of the patient is to survive and to find treatment for a condition that was not previously medically described in any specialized bibliography. If the patient is lucky and the knowledge of medical terminology is very important to the legal defenders, they might succeed. *A Successful C+D Dictionary* could be also very helpful for them to prove their respect for this life fact.

In order to define the two way transfer of knowledge regarding the medical act between the doctor and the patient, in view of their future development and past experience it is important to understand the words describing:

- How will the patient gain new benefits concerning the medical status improvement during the medical act?
- How will the patient transfer the previously acquired knowledge regarding the medical act from the doctor to all the other patients/ lawyers?
- How will the new skills and knowledge acquired by the doctor regarding the medical act in the patient's case be transferred back to the all the other patients?

Even in this respect the knowledge of medical terminology is very important and *A Successful C+D Dictionary* could be also very helpful.

The entry terms: Writing definitions

Most often, medical dictionaries are outdated since the time of publication. That is why in some UE countries there are special commissions of terminologists in the Ministry of Health. They are terminologists, linguists specialized in a certain field of medicine in order to harmonize the understanding between the patient, the doctor and the legal defenders (Zurrida et all, 2011). In a malpractice case, the following table shows the limits of communication without a validated terminological medical dictionary:

Patient's Version	Health Professional Version	Legal Version
Is this a mastectomy? **(this image is of a medical case never recognized by the doctors and with different names according to the interpretation; the image is reproduced with the patient's agreement)** 	• The corpus of the medical words is made by the doctors and never explained explicitly to the patient. • If there is a missing medical term, this does not mean that the medical problem is absent, but the patient could not be treated properly. • The patient gets the code Y84: medical case unrecognized. • The forensic doctor as an expert offers a short explanation without vocabulary adapted to his readers.	• RO medical dictionaries are not updated according to the need for cultural equivalents and domestication strategy; • As a result, the cultural infirmities (as the total absence of a specific representation from a certain language's lexical landscape and the total absence of the cultural dimension of it) block the cultural transfer

Figure 7: The limits of medical communication in medical malpractice

Bilingual lexicons for diabetes and oncology for patients and not onlyThe cultural intertraffic is not a process in which information is transferred integrally; on the contrary, there is a degree of tolerance, there is entropy. We consider that Galisson (1984a, 1984b) is perfectly right when he speaks about linguistic and cultural infirmities that block the cultural transfer.

In conclusion

In medical terminology, the word root is not usually capable of standing alone as a complete word within a sentence. This is different from most word roots in modern standard Romanian. The medical word root is taken from a different source language, so it will remain meaningless as a stand-alone term in a Romanian sentence. A suffix or prefix must be added to make a usable medical term. Cordonnier (1995) pleads for the decentering of translation and the immersion into the source language culture via a policy of annexation. The author equates the theory of translation to a theory of alienation in which the source language culture should be seen as manifesting high degree of exotropia. He rejects any hierarchy of cultures and introduces the phrase *rapport et apport des cultures* (Cordonnier, 1995) to designate a mutually beneficial relationship. The strategy adopted for medical translation depends heavily on their role in the source text (key elements or peripheral ones) and on the likelihood of their undergoing a process of intercultural evolution. In order to adapt Romanian medical language to the Unified Medical Language System, a compendium of vocabularies in biomedical sciences created in 1986 by US national Library of Medicine, intended to be used by archives of medical informatics, it is important to translate and understand the meaning of thesaurus and the ontology of biomedical concepts. This kind of language must be terminologically understood and in this respect translation is necessary. In a medical terminological, dictionary definitions should be simple and easy to understand, probably even by the general public, useful clinically or in related areas where the definition will be used, be measurable, reflecting the current scientific knowledge in which scholastic interpretation takes the place of observation.

As for the doctors, authors of malpractice unrecognized, there is also a joke about six blind elephants, which were discussing what men were like. After arguing they decided to find one and determine what it was like by direct experience. The first blind elephant felt the man and declared, ‘Men are flat.’ After the other blind elephants felt the man, they agreed.

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SESSION 8:
DECLARATION

Une bonne connaissance des règles de la traduction peut-elle limiter les transferts terminologiques ?

Marie-Josée de Saint-Robert

Nations unies/United Nations

L'objet de cette présentation est de montrer, à partir de termes récemment relevés dans les médias, en quoi le changement de statut de la langue anglaise en France, où de langue étrangère elle semble en voie de devenir langue seconde, n'est pas la seule raison qui explique la tendance à employer des termes anglais quand des équivalents français existent. Le détournement de la règle du "tout en français" s'explique aussi par la méconnaissance qu'ont les locuteurs du français des règles de base en matière de traduction, trop souvent victimes qu'ils sont du mimétisme qui voudrait que la forme dans la langue source s'impose dans la langue cible. La généralisation de l'enseignement des règles de la traduction ne devrait-elle pas faire partie de la politique linguistique d'un pays susceptible de devenir bilingue et soucieux de limiter les transferts terminologiques d'une langue plus répandue à une autre?

Brussels Declaration for International Cooperation on Terminology

The representatives of national and international terminology associations, networks and documentation centres,

considering that terminology is omnipresent in all human activity,

aware that terminology is a key means for conveying information in specialised communication, but that it also plays a central role in asserting and promoting cultural and linguistic diversity,

acknowledging the need to make professionals and decision-makers aware of the outstanding value of terminology as a tool for communication and the transfer of knowledge,

underscoring the necessity for terminology professionals to integrate the concerns and needs of users in their methods of work,

recognizing the need for cooperation among all actors and stakeholders at the global level and, in particular, to share terminology resources in a coordinated way,

concerned to strengthen terminology development and dissemination infrastructures,

call upon States and governments, intergovernmental bodies and international organizations, and bodies involved in language policies to:

- support the creation of terminology infrastructures in major economic groupings, such as Europe and the future FTAA (Free Trade Area of the Americas) and support other existing terminology infrastructures;
- encourage the establishment of terminology polices in the context of training and information programmes, and so on;
- promote the introduction of methods of cooperation that take into account the lessons of what has already been achieved and of existing initiatives and projects;
- foster initiatives to raise the awareness of industry and public authorities as regards participation in terminology work;
- promote the establishment of specific funding programmes for terminology work and, above all, for the development and updating of terminologies;
- encourage national standards institutes to take an active part in regulatory bodies (for instance, the International Standardization Organization's Technical Committee 37 "Terminology and other language resources"), bodies which harmonize terminology questions at the global level, and those which regulate the Internet to ensure that all specific cultural and linguistic characteristics are present on it;
- promote initiatives for the appropriate use of terminology, in particular at all levels of education and specialization, both academic and non-academic;
- render compulsory the discipline of terminology and language for specific purposes in all translation curricula and encourage its introduction in all disciplines, in particular those of a scientific and technical nature;
- encourage dialogue among countries with the same language but with different linguistic norms so as to harmonize the creation of new words and terminology standardization, taking into account the different varieties of the language, by applying the principles of locality without forgetting the need for mutual understanding;
- encourage multilingualism both as regards education and in administrative and public use;
- promote the dissemination and accessibility free of charge of terminologies, above all those contained in official documents of governments and international institutions;

- study the current use and role of terminology in the various kinds of strategic and political measures of governments and institutions;
- given the growing number of emerging countries which are endeavouring to implement language policies, ensure the training of their experts in the principles and methods of terminology in the context of sustainable development and provide, as far as is possible, support for experts from these countries to enable them to take an active part in international terminology activities.

Done at Brussels on 15th June 2002

La déclaration de Bruxelles pour une coopération terminologique internationale

Les représentants des associations nationales et internationales, des réseaux ainsi que des centres de documentation en terminologie,

considérant que la terminologie est omniprésente dans toute activité humaine,

conscients que la terminologie est un moyen privilégié pour véhiculer de l'information dans la communication spécialisée, mais qu'elle joue également un rôle primordial dans l'affirmation et la promotion de la diversité culturelle et linguistique,

reconnaissant le besoin de faire prendre conscience aux professionnels et aux décideurs de la valeur éminente de la terminologie en tant qu'outil de communication et de transfert des connaissances,

soulignant la nécessité pour les professionnels de la terminologie d'intégrer dans leurs méthodes de travail les préoccupations, les besoins et les attentes des utilisateurs,

reconnaissant le besoin de coopération entre tous les acteurs et toutes les parties prenantes au niveau mondial, et en particulier le besoin de partager d'une manière coordonnée les ressources terminologiques,

soucieux de renforcer les infrastructures d'élaboration et de diffusion de la terminologie,

appellent les Etats et gouvernements, les organismes intergouvernementaux et les organisations internationales, ainsi que les entités impliquées dans les politiques linguistiques à :

- soutenir la création d'infrastructures de terminologie dans les grands ensembles économiques, tels que l'Europe et la future ZLEA (Zone de libre-échange des Amériques) et soutenir les autres infrastructures terminologiques existantes ;
- encourager la mise en place de politiques terminologiques dans le cadre des programmes de formation, d'information, etc. ;
- favoriser la mise en place des méthodes de coopération qui tiennent compte des résultats des acquis, des initiatives et des projets existants ;
- favoriser les initiatives de sensibilisation des industries et des administrations à la participation au travail terminologique ;
- promouvoir la mise en place des programmes de financement particulier pour le travail terminologique, et surtout pour le développement et la mise à jour des terminologies ;
- encourager les agences nationales de normalisation à participer activement aux instances qui régulent et harmonisent au niveau mondial (par exemple, le CT 37 de l'ISO « Terminologie et autres ressources linguistiques ») les questions terminologiques et celles qui régulent l'Internet afin que toute les
- spécificités culturelles et linguistiques y soient présentes ;
- promouvoir les initiatives tendant à l'usage approprié de la terminologie, surtout á tous les niveaux d'enseignement et de spécialisation, universitaire et non-universitaire ;
- rendre obligatoire la discipline de la terminologie et des langues de spécialité dans tous les cursus de traduction et favoriser son introduction dans toutes les disciplines, en particulier celles à caractère scientifique et technique ;
- favoriser le dialogue entre pays d'une même langue ayant des normes linguistiques différentes afin d'harmoniser la création néologique et la normalisation terminologique, en

tenant compte des différentes variétés d'une même langue, en appliquant les principes de la localisation sans oublier la nécessité de l'intercompréhension ;

- favoriser le multilinguisme tant au niveau de l'enseignement que de l'usage administratif et public ;
- promouvoir la diffusion et l'accessibilité à titre gratuit des terminologies, surtout de celles contenues dans les documents officiels des gouvernements et des institutions internationales ;
- étudier l'usage réel et le rôle de la terminologie dans les différents types mesures stratégiques et politiques des gouvernements et des institutions ;
- assurer, compte tenu du nombre grandissant des pays émergeants qui entreprennent la mise en œuvre de politiques linguistiques, la formation de leurs experts aux principes et méthodes de la terminologie dans le contexte du développement durable et assurer autant que possible un soutien aux experts de ces pays afin de leur permettre de participer activement aux activités terminologiques internationales.

Fait à Bruxelles, le 15 juin 2002

Authors/Auteurs

European Association for Terminology

VIII EAFT Terminology Summit

VIII Sommet de Terminologie AET

Schuman Chamber, Luxembourg, 14-15 November 2016