



**Shaping knowledge through  
language:  
LSP in theory and practice**

**LSP 2022**

**Book of Abstracts & Program**

23rd International Conference on Languages for Specific Purposes

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**Shaping knowledge through language:  
LSP in theory and practice (LSP 2022)  
Book of Abstracts & Program**

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## FOREWORD

The 23rd International Conference on Languages for Specific Purposes (LSP 2022) will be held EXCLUSIVELY ON SITE at NOVA University Lisbon, Portugal (CAN – Colégio Almada Negreiros, 1099 – 032 Lisboa).

Under this year's motto "Shaping knowledge through language: LSP in theory and practice", it aims to provide a meeting and sharing point to showcase the current and most recent LSP-related theoretical and methodological perspectives, oriented towards knowledge organisation in the digital age.

This conference seeks to gather not only language specialists but also experts from multiple areas and activities, whose methods of organising knowledge and their respective discourses in a specialised context introduce new research and/or applications that permeate the main challenges of the 21st century.

These challenges involve, on the one hand, resorting to the appropriate discourse according to the – previously defined and segmented – target audience and, on the other hand, also bringing citizens into the debate, offering them the means to access reliable, useful, and reusable information. The complexity increases when communication becomes multilingual, multicultural, and when the areas of knowledge are transdisciplinary.

In a multilingual, multicultural, and digital world, LSP play a crucial role as vehicles of specialised information in a wide range of communication contexts. Intended to be applied in various professional areas – communication, education, translation, among others -, LSP are not only complex in conceptual terms but they can also be terminologically unstable, which, in turn, has consequences for knowledge sharing.

The exploration of the proposed theme may follow a theoretical and/or methodological path in various fields of application, from organising and representing knowledge for linguistic purposes to specialised communication and translation. Monitoring, observation, and/or evaluation processes of the collected linguistic data will also be relevant, with the aim of creating linguistic and/or didactic resources.

On the other hand, efficiency in communication is directly dependent on the adequacy of the discourse to the target audience, who may or may not comprise specialists. This fact leads us to think and rethink the processes of popularisation and linguistic mediation: (i) what are the needs of the target audience? (ii) what methods can be used to collect and learn about the efficiency of the communication process? (iii) how does one negotiate and co-create with the audience, taking up the challenge of co-constructing knowledge? (iv) finally, how can LSP adapt to new forms of digital communication, especially taking into account the ongoing demands of digital transition?

Any of these approaches offers a wide range of opportunities for innovative research that responds to current challenges regarding knowledge sharing and, in addition, aimed at meeting the needs and expectations of citizens in general in what concerns the relevance and clarity of communication, which necessarily requires the development of new methodological practices in LSP.

This book contains the abstracts of keynotes and talks presented at the *LSP: Shaping knowledge through language: LSP in theory and practice*, Lisbon, Portugal, September 12–13, 2022.

Part I contains the abstracts of the keynote presentations. Part II lists the abstracts of the talks. And, finally, Part III includes the program of the conference.



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## Part I: Abstracts of Keynotes



## Framing LSP

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**Keywords:** LSP, Framing, Environmental Terminology.

Since LSP discourse is goal-directed and formulated with a specific purpose in mind, it is delimited by a communicative context or frame. It is this frame that gives meaning to specialized texts (and the terms that encode the knowledge in them). Using the example of environmental terminology and communication, this presentation shows how frames at the term level capture both the micro- and macro-contexts of concepts. This type of conceptual modelling, which is an integral part of terminology work, reveals the most frequent combinations and activations of terms. The large-scale knowledge structures, thus reflected, reveal how individual concepts are meaningfully related to each other.

However, frames are also present at the discourse level since they determine the configuration of a message as well as the selection of elements that compose it. Framing in communication broadly refers to the act of sense-making through the emphasis of certain aspects of a reality over others. As observed by Goffman (1974), framing an issue organizes thought, and also facilitates certain forms of identity and conduct. This is especially relevant to environmental risk communication since how a message is framed inevitably influences the mindset or perceptions of text receivers, their reaction to it, and the conclusions drawn from it.

### Biodata

Pamela Faber (<http://lexicon.ugr.es/faber>) is Professor Emeritus in Translation and Interpreting at the University of Granada. She has published more than 150 articles, chapters, and books, which have encouraged other researchers to explore specialized knowledge from a frame-based perspective. One of the results of these projects and the practical application of Frame-based Terminology (FBT) is EcoLexicon ([ecolexicon.ugr.es](http://ecolexicon.ugr.es)), a terminological knowledge base on environmental science.

## Level of explanatory ambition: a tool for analyzing attempted participant relations in popularization discourse

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Due to its relevance for the image and importance of a discipline in society, the communication of specialized knowledge across knowledge asymmetries has had a central position in LSP research over time and is still a frequent topic in recent scholarship (cf., e.g., Pontrandolfo & Piccioni, 2022). When studying communication across knowledge asymmetries, I find it relevant to work with a scalar distinction between, on the one hand, a more instruction-oriented communication type (dissemination) and, on the other hand, a more participatory communication type (popularization). Behind this distinction lies the idea of differences in the intended relation between experts and non-experts: When disseminating, the expert intends to convey enough knowledge for the non-expert to be able to use the expert knowledge for relevant tasks like decision-making. When popularizing, on the other hand, the expert intends to make the non-expert an actual part of the specialized discourse community. The main purpose of my talk will be to propose some approaches to the empirical analysis of communication across knowledge asymmetries under the heading of level of explanatory ambition (Engberg, 2020, 2022).

In my talk, I will first give some more details on the distinction, its background and importance in the discourse of a democratic society. In a second step, focus will be on the proposed distinction between dissemination and popularization. Finally, in the main third step analytical approaches to assessing the difference will be presented and exemplified on cases involving different disciplines.

### Biodata

Jan Engberg ([https://pure.au.dk/portal/da/persons/jan-engberg\(62ee980e-ae7d-4766-bb71-b5952ddf41bf\).html](https://pure.au.dk/portal/da/persons/jan-engberg(62ee980e-ae7d-4766-bb71-b5952ddf41bf).html)) is Professor of Knowledge Communication at the School of Communication and Culture, Section of German Business Communication, University of Aarhus, Denmark. His main research interests are the study of texts and genres in the academic field, cognitive aspects of domain specific discourse and the relations between specialized knowledge and text formulation as well as basic aspects of communication in domain-specific settings. His research is focused upon communication, translation and meaning in the field of law. He has published widely in the field and co-edited a number of books and special journal issues. Finally, he is co-editor of the international journals *Fachsprache* and *Hermes*.

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## La communication spécialisée: la terminologie à l'œuvre

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**Keywords:** Communication spécialisée, Terminologie.

La communication spécialisée contribue à la transmission des savoirs disciplinaires: projets, textes, discours dans les différentes phases de conception, rédaction, présentation et dissémination à tous niveaux reposent sur les conceptualisations et les différentes terminologies des domaines qui les expriment.

Comment envisager le rôle central de la terminologie dans la communication spécialisée pour l'expert et le spécialiste, pour le traducteur et l'enseignant, pour l'étudiant et l'utilisateur ? Cette conférence se propose d'illustrer l'état de la recherche autour de ces questions.

### Notice biographique

Maria Teresa Zanola est une spécialiste des études en terminologie et en communication spécialisée (<https://docenti.unicatt.it/ppd2/it/docenti/03620/mariateresazanola/profilo>). Elle dirige l'Observatoire de Terminologies et Politiques Linguistiques (OTPL) de l'Université Cattolica del Sacro Cuore de Milan, où elle est professeure de linguistique française. Elle est présidente du réseau de terminologies des langues romanes REALITER et du CEL/ELC Conseil Européen pour les Langues/European Language Council.

## Langues de spécialité et données ouvertes: outils numériques collaboratifs pour la création de ressources multimodales pour/par la communauté académique

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**Keywords:** Langues de spécialité, Données ouvertes, Ressources multimodales.

Aujourd'hui, l'accès à de grandes quantités de données sous forme numérique offre de nouveaux moyens d'accéder à la connaissance dans une grande variété de domaines spécialisés. Le volume des données de recherche produit connaît une croissance exponentielle.

Dès lors, il est devenu crucial de tirer parti de l'intelligence artificielle et de l'apprentissage automatique pour créer des ressources pour l'enseignement/apprentissage des langues de spécialité (par exemple, un moteur de recherche bilingue qui permet d'identifier des équivalents de traduction à partir de textes comparables).

L'usage innovant de ces données ouvertes passe aussi par la conception et la mise en place de méthodologies actives capables d'engager les étudiants dans le développement de contenus multimodaux (glossaires bi- ou multilingues ou représentations visuelles interactives d'un domaine de spécialité, entre autres) à partir d'outils numériques collaboratifs, qui encouragent la création de communautés d'apprentissage intra- et/ou interdisciplinaires.

### Notice biographique

Silvia Araújo est maître de conférences au Département d'Études Romanes de l'Université du Minho. Ses principaux champs de recherche sont la linguistique de corpus, les technologies appliquées à l'enseignement des langues (de spécialité) et les humanités numériques. Elle coordonne et participe à des projets de recherche portant sur le traitement automatique des langues et la traduction. Elle est membre de l'équipe de direction du Master de Traduction et Communication Multilingue et directrice du Master en Humanités Numériques.

## Part II: Abstracts of Talks



## La langue de spécialité du désarmement: l'apprentissage de la phraséoterminologie spécialisée pour les non experts

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**Keywords:** Terminologie, Désarmement, Corpus, Fiches terminologiques, Langue juridique.

L'étude ici présentée s'inscrit dans le contexte des efforts internationaux sur la voie du désarmement général et complet, et vise à explorer la phraséoterminologie des traités internationaux de désarmement régissant le régime de non-prolifération, dans une perspective bilingue italien-français. La volonté d'approfondir telle étude découle de l'opacité de la langue juridique, déjà complexe en soi, qui s'enrichit dans le cas des traités de désarmement des termes spécialisés propres à plusieurs disciplines, telles que la chimie, la biologie, le nucléaire et les armements. La conscience collective au sujet de la sécurité internationale se heurte ainsi à l'opacité de la phraséoterminologie de ces dispositions. Compte tenu de l'impact social des mesures de non-prolifération, l'objectif visé est de rendre la compréhension de ces instruments normatifs accessible pour les non-experts.

D'ailleurs, pour que l'efficacité des efforts internationaux sur la voie du désarmement soit garantie, il est indispensable que les dispositions pertinentes adoptent une terminologie partagée au sein des langues de la communauté internationale, notamment en vertu des processus de traduction des textes normatifs internationaux (Prieto Ramos, 2017). En outre, une cohérence terminologique lors de la rédaction de ces actes juridiques est davantage requise au nom de la spécificité de cette typologie textuelle : contrairement aux instruments législatifs de la jurisprudence nationale, dont la traduction répond à des fins de publicité de l'information, les traités internationaux de désarmement produisent des effets normatifs pour tous les États parties, ce qui impose de rigoureux critères de précision terminologique.

Bien que des études sur la terminologie juridique et nucléaire aient été menées (Šarčević, 1991 ; De Groot, 1987; Prieto Ramos, 2014; Bajcic, 2011; Calberg-Challot et al., 2008), l'intérêt spécifique pour la représentation linguistique et conceptuelle du désarmement reste encore marginal en dépit de sa pertinence et son impact social.

Dans ce contexte, comme le souligne Bajcic (2011), la représentation de la connaissance du domaine du désarmement, scindée dans ses deux dimensions complémentaires, soit la dimension linguistique et la dimension conceptuelle (Costa et al., 2015), revêt une importance majeure aux fins de désambiguïsation des signes linguistiques, comme telle approche permet de vérifier l'équivalence entre concepts et réseaux lexicaux, quel que soit le domaine de connaissance et indépendamment des langues d'étude impliquées. D'ailleurs, comme l'indique Gruber (1993), les relations entre les

concepts se reflètent dans la terminologie au moyen de laquelle la représentation de la connaissance est produite, les deux constituant l'ontologie d'un domaine, définie comme la « spécification explicite d'une conceptualisation » (Gruber, 1993).

À cet égard, notre étude propose une nouvelle ressource terminologique librement accessible, la ressource DITTO (Disarmament International Treaties Terminology), visant à 1) la représentation de la double dimension linguistique et conceptuelle de la Terminologie de ce domaine, conformément à l'approche méthodologique mixte proposée par Costa et al. (2015) ; et à 2) la publicité des données terminologiques obtenues, en vue de leur partage et réutilisation immédiate, suivant les principes FAIR (Wilkinson et al, 2016). L'étude terminologique est lancée par la mise en forme d'un corpus spécialisé qui rassemble les traités internationaux de désarmement dans les deux langues de travail : français et italien. À partir de ce corpus, nous procéderons à l'identification 1) des concepts et de leurs relations ; ensuite, pour les deux langues, 2) des termes désignant ces concepts et des relations qui y sont liées. Successivement, dans une perspective bilingue, nous vérifierons la possibilité d'opérer une superposition entre le système conceptuel et les réseaux lexicaux déduites du corpus spécialisé créé. Finalement, les données issues de cette analyse seront structurées selon le modèle de fiche terminologique fourni par l'application Web FAIRterm (Vezzani, 2021), qui permet d'encadrer les deux dimensions de la terminologie du désarmement. Les avantages et inconvénients de cette approche seront enfin examinés.

Bien que l'avantage résultant de telle approche tienne à la représentation conceptuelle et linguistique du domaine du désarmement, telle méthodologie permet de faire face à l'hétérogénéité des termes spécialisés propres aux disciplines impliquées dans la typologie textuelle des traités de désarmement, en plus de s'avérer efficace aux fins d'apprentissage linguistique pour les non-experts. En effet, retracer les relations ontologiques entre les concepts et les termes les désignant permet d'explicitier les phénomènes linguistiques (synonymie, polysémie, méronymie ainsi qu'hyponymie) qui intéressent la phraséotermologie d'étude, en favorisant la compréhension par les non-experts et leur permettant de saisir en toute autonomie les relations conceptuelles à l'aide de la consultation de la ressource terminologique, bien qu'ils ne disposent d'aucune connaissance préalable dans ce domaine..

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## Insights on multimodal, practice-based ESP teaching and learning

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**Keywords:** Collaboration, English for Specific Purposes, Interdisciplinarity, Multimodality, Project-based learning, Technology.

Focusing on the development of multimodal, collaborative projects within the scope of English for Specific Purposes, the following paper outlines different practice-based, teaching and learning initiatives and strategies, describing their design, implementation and assessment, and reflecting on how they can enhance students' language skills and overall engagement. These initiatives, which rely heavily on the use of digital technologies, most particularly video, as well as collaboration and co-creation, include two international projects (based on the production of product and personal video pitches), an industry-academia cooperation and mentoring initiative, and peer- and team-based teaching and learning activities.

In addition to offering an alternative to lecture-driven approaches, hinging on the development of 21st century skills and the promotion of multimodal and specialized professional communication, the projects and strategies described address real-world challenges, requiring students to take part in dialogic dynamics, involving their peers and other stakeholders, thus promoting not only their agency, autonomy and accountability, but also communication skills within specific settings.

Based on documentary research, field application and observation, the description of the different teaching and learning strategies is aligned with Best Practice Research principles, offering a comprehensive outline on their 1) scope; 2) learning outcomes; 3) design and implementation; 4) key language skills; 5) material produced; 6) assessment strategies; and 7) possible affordances within the scope of ESP.

Reflecting the authors' hands-on experience and offering their personal insights on potential affordances and applicability, the paper is, therefore, expected to inform other ESP practitioners and support future research and initiatives within this scope.

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## A comparative study of the impact of the keyboard on written productions for ESL and EFL students

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**Keywords:** Domain-specific language use, Corpus-studies for LSP practice and research.

Within a classroom context where students were asked to take notes, research found that writing one's notes by hand stimulated areas in the brain that were tied to long-term memory and learning (van der Meer, 2017). Research also found that within the context of writing and edit-ing one's work, keyboarding facilitated revision and made it an inte-gral part of the writing process (Baker & Kinzer, 1998). This therefore, lead to what many researchers defined as better quality productions (Russell, 2003). What was uncertain was the indistinguishability of the two means of production within the context of assessment. That is to say, if students created the same productions when asked to type as when asked to write by hand.

The goal of this study was, therefore, to assess if there were linguistic differences in handwritten and typed productions by collecting one of each writing sample from the same participants. The study was conducted to the end of reflecting upon a didactic proposal to enable students to best succeed in their written assessments. Considering the trend towards typed productions, I wanted to examine the differences linguistically and statistically in order to evaluate the texts' features, with the intent of discovering which mode demonstrated a better mastery of written production in an assessment setting.

The methodological framework that was used to outline the research questions was Douglas Biber's 1988 and 1991 works that studied variations in written and oral productions. This framework was chosen to explore whether or not there were categorical differences in the two modes of production. The following research questions (RQs) highlighted the continuums that were used to assess the degree of similarity and dissimilarity between the two modes of production. The categories underlined in RQs below represented labels that were given to multi-layered correlations of linguistic features.

Research question 1: According to Douglas Biber's dimensions in 'Variation across Speech and Writing', (1991), is there a difference in the informational value of the typed productions versus the handwritten productions?

Research question 2: According to Douglas Biber's dimensions in 'Variation across Speech and Writing', (1991), is there a difference in the narrative concerns of the typed productions versus the handwritten productions?

Research question 3: According to Douglas Biber's dimensions in 'Variation across Speech and Writing', (1991), is there a difference in the explicit referencing of the typed productions versus the handwritten productions?

Research question 4: According to Douglas Biber's dimensions in 'Variation across Speech and Writing', (1991), is there a difference in the overt expression of persuasion of the typed productions versus the handwritten productions?

Research question 5: According to Douglas Biber's dimensions in 'Variation across Speech and Writing', (1991), is there a difference in the abstract nature of the typed productions versus the handwritten productions?

Research question 6: According to Douglas Biber's dimensions in 'Variation across Speech and Writing', (1991), is there a difference in the online informational elaboration of the typed productions versus the handwritten productions?

In addition to these six dimensions, I was also interested in investigating the lexical richness of both modes of production as well as identifying the linguistic feature with the highest difference in distribution in the typed and handwritten datasets. This information was important in further assessing, on a microscopic level, the degree of similarity and dissimilarity.

Research question 7: Is there a difference in the type-token ratio of the typed productions versus the handwritten productions?

Research question 8: Which linguistic feature demonstrated the largest difference in distribution between the typed productions and the handwritten productions?

The data used for this study was primary data, composed of a learner's corpus of handwritten and typed productions collected from university students within the context of a mock- classroom assessment. A writing sample was collected from 58 college students during their habitual two-hour English for specialised purposes course. The experiment consisted of a writing assignment designed to train them for their final assessment, which took the same evaluation format. The corpus consisted of 23,725 words: 13,915 in the typed sub dataset and 9,810 in the handwritten.

The data collection tool used for this study was the Content Service Manager, Moodle. BBEdit was used as the text editor. The Stanford Tagger was used to tag the data and the Multidimensional Analysis Tagger employed to complete the tagging and compare the data to Biber's original 1988 study. AntConc was used to perform linguistic analyses on the texts and the analytical tools used to determine the statistical significance of the similarities and dissimilarities were SPSS and R. A qualitative analysis based on the enunciative grammar, developed by Antoine Culioli and elaborated on by Jean-Claude Souesme (1992), is under way.

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## Teaching Portuguese as Foreign Language and Mathematics: a pilot project with a CLIL approach

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**Keywords:** CLIL, Scaffolding, Collaboration, Competences, Progression.

### Introduction

Within the framework of plurilingualism and mobility policies (Beacco et al. 2009), one of the teaching approaches that promotes the interaction between language learning and the development of specialised knowledge is Content and Language Integrated Learning (CLIL). CLIL “is a dual-focused educational approach in which an additional language is used for the learning and teaching of content and language with the objective of promoting both content and language mastery to predefined levels” (Marsh et al. 2010:11). In Higher Education, CLIL facilitates the proficient specialized academic use of a foreign language and combines learning content, focusing on apprehending both at the same time (Morgado et al. 2017).

This presentation focuses on a pilot study on CLIL Portuguese as a Foreign Language (PFL) and Mathematics, at the foundation programme of a Portuguese university through the design of a CLIL learning module. The presentation will focus on some self-reflective questions that were raised, namely: What should the students learn? How can they progress in subject-specific literacy and knowledge? How can the teacher create cognitive challenges in a specific area such as Mathematics for a group of students with low proficiency in PFL? Reflections and discussions are presented.

### Methodology

The main goal was to design and pilot a CLIL introductory module for PFL and Mathematics that would motivate learners to make connections between the two subjects.

At an initial stage, both teachers mapped students' needs and difficulties in Mathematics. This was the foundation for planning the CLIL module and integrating reinforcement and scaffolding strategies into the module design. The needs analysis was

carried out among 8 students enrolled in the SUPERNOVA Foundation Programme attending two courses in the Spring semester 2021/22: PFL at A1 proficiency level (QEER), and Mathematics (taught in English).

After that, the teachers collaboratively designed a unit of study (module) on a particular topic (Module 1 – PFL/Propositional Logic), which was piloted in class by both teachers in an action-research process, as described hereafter:

The first stage of module design included: (1) Design of activities and sequences of tasks; (2) Focus on diverse scaffolding techniques: (a) planned and spontaneous task sequences to support the just-in-time gradual development of PFL and the academic language of Logic; (b) development of the PFL academic language needed to describe, explain, and create meaning; (c) preparing a small glossary in paper; (d) promoting the organisation of Logic concepts; (e) providing grammatical and vocabulary support; (f) highlighting words that give instruction; (g) providing multimodal examples; (h) seeking feedback from students' individual and group performance.

The second stage included the piloting of the module during two face-to-face classes (4 hours) of the subject teacher, with an additional hour of self-study with collaborative work in the PFL class, where both teachers were present: the PFL and the Mathematics (practical course) teacher.

The third stage included adjustments to the module, such as providing more examples, asking questions about the first session, reviewing the written assessment worksheets.

Finally, both teachers worked on evaluation through oral feedback on the module piloted through individual and collective formative self-assessment worksheets.

### Needs analysis results

Among the problems detected in Mathematics, there were differences in student academic knowledge that were dictated by the country of origin of the students and weaknesses to overcome included algebraic operations of fractions, operations of exponents, roots and polynomials, pythagorean theorem in right triangles, first- and second-degree equations/inequations.

Thus, the learning objectives and expected outcomes for CLIL PFL and Mathematics were designed to cover four content areas: specialised content (on Propositional Logic), academic language skills, cognitive functions, and cultural aspects.

### Module design

CLIL module design was carried out based on students' prior knowledge about the topic (propositional logic) and by promoting abstract thinking through understanding academic knowledge, while engaging in activities that took students from concrete to abstract thinking.

Simultaneously, students were prompted to understand instructions and to use language to describe and/or create communicative situations and problem-solving activities, like describing a picture in Portuguese with logic propositions and after that translate it to logic operations and symbols.

CLIL lesson planning included scaffolding strategies through language, follow-up, and reinforcement activities to develop competences in the foreign language and consolidate Mathematics competencies needed for the transition to the next educational level.

The PFL A1 CLIL syllabus included and articulated the following thematic and cultural topics, integrated with linguistic contents: Personal identification and presentation; Family and social life; Leisure and hobbies; House and household objects; Services and society; Education, study, and professional life; Portuguese daily habits. For Mathematics, the syllabus included topics such as Properties and Operations with Real Numbers; Introduction to Set Theory and Logic; Topological Notions; Polynomials; Sequences and Functions.

All materials were designed at Beginner level (A1 CEFR) of PFL and used multimodal activities to create dynamic learning experiences. The methodology was task- and project-based in collaborative group work, combined with planned activities where the teacher emerged as a mediator, providing scaffolding and tasks for learner development and the construction of knowledge.

### Preliminary conclusions and challenges

From the feedback obtained in class and in the final online evaluation, we concluded that the students felt motivated with the warm-up task of describing a video to integrate the Logic values and principles, as well as with the problem-solving activity. The use of digital and multimodal resources engaged and motivated the students to use language to describe, explain, analyse, and discuss with the teacher and with the other learners, and to provide examples in the activities with focus on interactive communication and collaborative work.

The constraints included difficulty to find the adequate moment to pilot the module due to the students' level in PFL.

Finally, we believe that more implementation scenarios will allow for more comparative data. Furthermore, activities must be adjusted according to student feedback, and more modules with CLIL scaffolding strategies that allow a progression in language and content is crucial in this learning context, especially if focusing on problem-solving activities.

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## What makes a business context? Expressing disagreement in business vs. private English as a lingua franca interaction

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**Keywords:** English as a business *lingua franca*, Disagreements, Conflict talk, Context.

Kankaanranta and Salminen (2018: 314) outline that business professionals expect from successful business interactions the following qualities: 1) a shared understanding of the business, its objectives, processes and requirements; 2) a business mindset whereby participants get things done effectively while maintaining rapport; and 3) a win-win mentality where participants help each other out to reach their respective business goals. However, business professionals must also be able to express disagreement while making sure the business relationship continues without friction. This may be a challenge particularly in intercultural settings where participants may have varying levels of language proficiency and differing understandings of politeness.

In most international business interactions, English dominates as the global business lingua franca (Ehrenreich 2010). English as a business lingua franca (henceforth BELF) is not, however, governed by native English standards but rather by effectiveness and efficiency (Louhiala-Salminen et al. 2005). It can be defined as “the use of English as the medium of communication among speakers of different first languages in an emergent, variable and hybrid manner that is appropriate to the demands and (multilingual) resources of the specific business context” (Komori-Glatz 2018: 52). This paper will explore the use of English in conflict interactions in different lingua franca contexts in order to investigate how the “business context” influences the pragmatic strategies and specific ways in which the participants choose to use to express disagreement.

Disagreements have been described in talk-in-interaction research as dispreferred actions: participants commonly tend to hedge them with some kinds of prefaces, such as “yeah but” (Pomerantz 1975). Some kind of mitigation of disagreement may therefore be expected in any types of interactions. Business negotiations are commonly portrayed as high-stakes interactions where parties try to find a “mutually acceptable solution to a complex conflict” (Lewicki et al. 2011: 3). If a negotiation goes awry, the continuation of the business relationship may be at stake. Various textbooks therefore suggest polite ways in which negotiators should mitigate disagreement, such as “I’m sorry, but we’d like to” or “I don’t quite agree with that point because” (see Bjarge 2012). These kinds of exaggeratedly polite expressions have been found

to correspond to actual business interactions poorly; both in native English interactions (Williams 1988) as well as in BELF interactions (Bjørge 2012). Like native English speakers, business negotiators in BELF contexts will more commonly use simpler forms such as (turn-initial) “but”, “yes/yeah but”, “but”+counterargument, “no”, “I don’t think”, and “but”-initiated questions (Bjørge 2012) or produce an unmitigated, direct disagreement, for example a high-pitched “no no no” (Pullin 2013). Effectiveness in expressing the conflicting stance thus seems to be preferred over politeness in BELF interaction. At the same time, as Pullin (2013) shows, the participants still manage to maintain comity through facework following a direct disagreement, such as thanking and praising.

Although often presented otherwise, conflicts in private contexts may equally well be described as high-stakes interactions. For example, prolonged disagreements between married couples may end up resulting in a divorce. On the other hand, bickering on mundane topics is perhaps less detrimental for marriages than it would be for business relationships. Nevertheless, in family conflicts, as in business interactions, mutually acceptable solutions need to be found to conflicts. Pietikäinen (2018) finds that intercultural couples who use English as their *lingua franca*, use silence as a means to avoid blame, resist a change of footing initiated by humor, and to express sustained disagreement, offence-taking or unsuccessful persuasion. Although silence thus is found to be used to express (and delay the expression of) disagreement, less is known about other ways in which disagreement is expressed in private *lingua franca* contexts.

In order to explore what makes business interactions distinct when it comes to expressing disagreement in *lingua franca* communication, this paper will analyze conflict sequences drawn from little over 24 hours of naturally occurring everyday interactions between married couples and compare them to the findings of Bjørge (2012) and Pullin (2013) from BELF. It is hypothesized that participants in both contexts will display both direct and mitigated disagreements, but particularly the disagreement preface “yeah but” (Pomerantz 1975) is expected to be dominant in couples’ conflict talk. Similarity in these findings would indicate that speakers who use English as a *lingua franca* do not vary their disagreement practices much across the different contexts. This kind of a finding would indicate a necessity to discuss the relevance of highlighting the “B” in BELF (see Kankaanranta and Salminen 2018) when it comes to the expression of disagreements.

The paper finishes with a discussion on the application of the findings to training future business professionals. It is argued that in training materials and textbooks aimed at teaching students and practitioners to express disagreement in English business negotiations, focus should be paid on whether and to what degree the examples given correspond to actual English use in international business contexts. Some practical examples will be given.

## Co-constructing Specialized Knowledge in French Sign Language: a First Approach based on the Field of Architecture

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**Keywords:** Sign language, Corpus studies, Terminology implantation and dissemination, Lexical creation process, Experts.

As a whole, terminology in sign language is still relatively underdeveloped, but as more and more Deaf students access higher education and vocational training, there is a growing need for specialized signs in a large number of fields (Roald 2000, Roald 2002). New specialized signs often emerge through the work of sign language interpreters but then face implantation issues. Studies have been conducted on the strategies adopted by interpreters to find ways to face this lack of specific terminology in educational contexts (Pointurier-Pournin 2014, D'Auria 2019, Paris 2007), but the strategies adopted merely fill the gap during the training of the student, and are not validated or disseminated beyond the training context.

Repositories of terminology in sign language equivalent to terminological data banks for spoken languages are still rather scarce, and the few existing projects (e.g. science, technology, engineering, and mathematics (STEM) glossaries in various countries such as Ireland (1), the United States (2), the United Kingdom (3), France (4); glossaries for linguistics in French (5)) are not necessarily identified by the end users (i.e. Deaf students and interpreters) and not always reused by interpreters when they are interpreting.

The study of terminology-related issues in sign language is quite a new field of research in general, and even if glossaries (cited above) are now available in a variety of countries all over the world, there are few research papers on the actual creation process of these databases. To our knowledge, apart from Meara et al. (2016) that focuses on the development of geography and geology terminology in British Sign Language, there are very few studies that focus on the various participants involved, and none focuses on the results, i.e. the implantation of the created lexicon. Studies relating to the treatment of terminological issues by spoken language interpreters, such as JIang (2013), are of little help or provide only a few hints (Liang Ching 2017), given that the very notion of lexicon for sign language is still being debated. Its definition has evolved recently in France, as Sennikova & Garcia (2013) stated that it could be the result of the “iconicisation” process detailed by Cuxac & Pizzuto (2010), and

not only the standardized lexicon where one sign corresponds to one word (in our case, to one term).

This paper aims to investigate the collaborative process of terminology building in sign language, by analyzing the roles played by the various participants involved in the process as well as by looking at the different stages of the process itself from the very beginning (a missing sign in a specific field) to the end (the actual use of the newly-created sign).

To that end, we have carried out a case study on the process of the creation of new signs in French Sign Language in the field of architecture.

Our study originates in a 5-year higher education program in a French engineering school (INSA de Toulouse), where the enrollment of a Deaf student led to the compilation of a specific glossary in French Sign Language for civil engineering with the help of Sign Language interpreters and teachers. While the Deaf student was involved both as the end user and as a language expert, the interpreters were involved to interpret meetings but also as linguistic and cultural experts, and finally the teachers acted as experts of the field of civil engineering (Domede, 2017). The student has now graduated to become an architect, holding the same kind of meetings within a professional framework, not an educational one any more, to create new lexicon in this field. It is this particular context which we focus on in our study. The people involved this time are, on the one hand, the Deaf architect who is both a domain expert and language expert, and, on the other hand, interpreters who act as metalinguistic and language experts.

Our study of the creation process is based on a multimodal corpus, consisting of two different sets of videos: some recorded during a workshop whose main purpose was to create the lexicon, and some recorded during a construction site meeting where the previously created lexicon was reused. The actors involved in the process are two interpreters and the Deaf expert who attended the workshop: starting from a French term with no short relevant corresponding sign, or from a sign proposed earlier for a specific French term, they discuss the various definitions based on the context, in order to define a specific sign for this term in a given context.

Based on the data collected, four aspects of the creation process are investigated in our study. (i) We first delve into the process itself, where it starts from– a French term, a sign suggested earlier, a definition of a new concept, etc. and where it finally gets at. (ii) We then look at the interactions among the participants– do they focus more on linguistic parameters to think about the sign, or on semantic aspects, or maybe on aesthetic aspects? To what extent does each participant contribute to the co-construction process? (iii) We explore the negotiation process that leads to the validation of a specialized sign– is there an agreement, a compromise, an order, and who has the final say? (iv) Finally, we focus on the implantation process– how do the specialized signs that have been agreed on during the first workshop get reused during the construction site meeting?

Our presentation will outline the first findings in each of the four areas and provide new insights into the issue of the co-construction of terminology in a still understudied language, French Sign Language.

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## The translator's role in supporting asymmetric communication between experts and lay persons

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**Keywords:** Asymmetric communication, Communication optimization, Expert-to-lay communication, Translator competences.

In the age of machine translation, translation service providers are looking to expand their services to aspects that a machine cannot master properly (i.a. Korhonen 2021, Pym & Torres-Simón 2021:50-52). In the past, scholars have noted that translators possess adequate competences to work also as technical writers (Schubert 2007:102-103, Risku 2016:131-132.). Gouadec (2007:120) calls them 'translator-cum-technical writer'. Technical writers are professionals for whom facilitating communication in situations of asymmetric distribution of knowledge, i.e. between experts and laypersons, is a constitutive task (Schubert 2007:73). Other researchers (i.a. Spinzi 2021, Jemielity & Katan 2021) described the work of the 'translator plus', a translator that actively participates in the text (re)drafting, revision and cultural adaptation phase, thus notably influencing the final result, including the source text (ST).

Many translators do not consider a close cooperation with authors and notable interventions in the ST within their remit (cf. Risku 2016:133). In our contribution, we will discuss and illustrate a more pro-active translator's role, based on a real project within the domain of occupational health and safety (OHS). The ST was an e-learning module for the compulsory training of middle managers in an Italian research centre. It had been drafted in Italian by a domain expert and needed translation into German and English. Before beginning to translate, the translator discussed the ST with the expert and implemented several changes with the aim of optimising expert-to-lay communication. The type of work described here cannot be considered a typical instance of intralingual translation, such as rewriting a text drafted for experts for non-experts. First, the expert drafted the ST with exactly their lay readership in mind. Second, changes beyond the purely linguistic level – where a 'language expert' like the translator may be given free hand by the domain expert – needed sound motivation.

From a theoretical point of view, the activities performed by the translator pertain to the domain of 'optimisation of [specialised] communication', defined by Schubert (2009:109) as the "deliberate intervention with the aim of achieving some kind of improvement in the communicative act or in the means of communication". The relevant dimensions are specialised content, language, technical medium and work procedures (Schubert 2007:248).

Changes in ST content were deemed necessary by the translator either when information was too detailed, complex or of relative relevance for the target group or when future needs for clarification could be prevented. For example, a paragraph on the complicated calculations that determine the insurance premium payable by the employer for each employee was considered irrelevant for middle managers. They never see these numbers and primarily need to ensure that their staff applies health and safety rules to avoid accidents and workplace illnesses. However, they must know how and how many risk profiles to assign to each of their staff. They require information on how to estimate the percentages for each risk profile. While this was well explained for full-time staff by the expert authoring the ST, information on how to deal with part-time staff was missing. This was added by the translator to prevent further enquiries by the target audience.

Most work concerned the linguistic dimension, which comprises the word, sentence and text level (Maaß 2020:42). The translator replaced synonyms in the ST aiming at terminological consistency but at the same time also at facilitating translation within a CAT-tool with reference to a domain-specific terminology database. The use of abbreviations in text was limited to cases that can be considered familiar to the target readership, after an initial reference to the full form (e.g. after two years of pandemic, most should know the initialism PPE for 'personal protective equipment'). Syntactic complexity is one of the features that impacts on text comprehension (Antos et al. 2011:644, Cortelazzo 2021:16-23, Lutz 2015: 287-296, Bredel & Maaß 2016:118, Ebert & Fisiak 2018:53-55). Therefore, long and convoluted sentences produced by the expert were shortened and rewritten. However, since all members of the target group possess an academic degree, syntactic simplification was not excessively pushed. A notable challenge consisted in rewriting a text drafted in the generic masculine by a domain expert – following the example of the Italian reference text, the Consolidated Law on Safety at Work no. 81/2008 – to obtain a gender-inclusive text according to organisational recommendations.

The technical medium relates to file formats as well as the typographic appearance and structure of the document. The translator, based on their competence in communication, sometimes suggested to replace specific text segments with workflow graphics or tables, for example, to better structure and visualise information. These changes are still pending. However, more straightforward changes to paragraph structure also pertain to this aspect of communication optimisation.

Finally, the dimension of work procedures concerns the organisation of work and cooperation around text production, in our case, the interaction between domain and language expert. Using track changes and comments to allow the expert to see, understand and – if necessary – reject the proposed changes in the ST proved an essential way to build trust and foster cooperation.

This type of collaboration with the ST author is more time-consuming and challenging for a translator but also more rewarding from a professional (and financial) point of view. On the one hand, we have the translators' knowledge of the target readers as well as their ability to adapt texts to different readerships (Pym 2003:489). On the other hand, there is the generally scarce ability of domain experts in address-

ing non-experts (cf. Askehave & Zethsen 2002:28), calling for support by writing professionals. In our contribution we argue that two key competences enabled the translator to proficiently support asymmetric communication between experts and laypersons: a) sound domain competence due to prior experience with translation and terminology work in OHS, which allowed them to address also the content dimension and discuss proficiently with the expert; b) familiarity with the target audience, hence the ability to adopt their perspective and anticipate their (level of) previous knowledge (Bromme & Jucks 2014: 5-7). With this we hope to contribute to research on professional translation and on the role of the translator in supporting asymmetric communication.

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## “How do we replace concrete?” Building sector professionals addressing knowledge asymmetries about climate-wise housing

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**Keywords:** LSP, Specialized knowledge, Climate change.

Climate change is a major concern for all sectors of contemporary societies. For example, housing and construction stand for 30-40 % of GHG emissions and energy use (Nielsen & Farrelly 2019), which is why there is an urgent need to promote sustainable housing. Like many other sectors, housing and construction is complex; with many material, technological and human aspects to be taken into consideration. Consequently, so far there is no shared understanding of what constitutes so called climate-wise housing (see e.g. Lovell 2004), which is why building sector professionals' opinions and advice are in high demand for example in professional magazines.

Advice giving is a thoroughly researched topic (see e.g. Limberg & Locher 2012) on academic settings, education, training, and medical settings, particularly online (see e.g. Salmela 2021, Lindholm 2019), but less so on building and construction sectors. Advice is connected with assumed knowledge asymmetries; in situations where communicators have (presumed) expertise, they assert this expertise, and simultaneously imply insufficient knowledge or competence by others (see e.g. DeCapua & Dunham 1993: 519). This is the case in professional magazines, often read by both professionals, to keep themselves updated of the latest developments in their field, but also by non-professionals and political decision-makers who need information about the field in question to support their decisions. In each case, the communicative context decides whether readers interpret the text as information, opinion or advice, and whether they accept the expertise asserted. The latter again can be considered important for engaging readers to promote climate wise housing (see Whitmarsh et al. 2013).

This paper contributes to the text-based studies of Languages for Specific Purposes (LSP) by focusing on how building sector experts as “individual knowers” mediate socially constructed specialized knowledge (see Engberg 2022) to different stakeholders about issues of climate-wise housing in a professional magazine. The data consists of 30 digital journalistic articles concerning questions of sustainable housing published in the Finnish professional magazine *Rakennuslehti* in 2010-2020. The magazine offers news and information about the construction and real estate industry, and its target group consists of architects, engineers, builders and decision-makers in the construction industry (*Rakennuslehti* 2022). The texts studied, published under the

main heading “Point of view”, have been written either by the editors and journalists of the magazine or by invited experts. The texts represent a hybrid genre that combines the characteristics of editorials, columns, and opinion articles. The data is a part of a larger dataset collected in the multidisciplinary project Decarbon-home (2022), which studies, promotes and develops participatory solutions to the challenges of housing and residential segregation in the context of climate change. The methods of the study comprise content analysis based coding, discourse analysis and pragmatics (see DeCapua & Dunham 2007; Kouper 2010).

The analysis focuses on three research questions: (1) what types of (assumed) knowledge asymmetries can be interpreted in the texts, (2) which target groups for advice can be recognized, and (3) which strategies of advice-giving are connected with the found types of knowledge asymmetries and target-addressees? The preliminary results of the study witness of the complex interdisciplinary character of the building sector. Our findings indicate that the building sector professionals seek to fill knowledge symmetries in technical, legal (especially concerning regulations), political and economic/financial matters. They offer advice to architects and planners, builders, politicians as well as decision-makers, but the addressee often remains implicit. The strategies of advice-giving seem to vary according to their degree of directness (see e.g. Kouper 2010; Coen 2020), but this is likely more of a rhetoric feature than about underestimating their authority as experts. In the conference presentation, we will discuss the findings in more detail and elaborate on the concept of advice giving and the conditions under which messages may be interpreted as such in the context of professional magazines.

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## Enacting innovative ESP teaching and learning through COIL

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**Keywords:** Collaborative Online International Learning, Internationalisation of the Curriculum, Innovation, ESP, Teaching and Learning.

Largely due to the globalisation of English as lingua franca, proficiency in English for Specific Purposes (ESP) has become increasingly important to guarantee effective communication dynamics, especially in the scope of business internationalisation. Hence, the challenges posed to ESP teachers are manifold and encompass the need to interact with different stakeholders to design innovative pedagogical strategies, as well as to embed internationalisation dynamics into the curriculum. Moreover, the development of intercultural communication, collaboration and digital competences, among others included in DigComp 2.2: The Digital Competence Framework for Citizens – with new examples of knowledge, skills and attitudes (Vuorikari, Kluzer, & Punie, 2022), and in LifeComp: The European Framework for Personal, Social and Learning to Learn Key Competence (Sala, Punie, Garkov, & Cabrera, 2020) should also be a given special attention.

Having this in mind, in academic year 2021/2022, a project of Collaborative Online International Learning (COIL) was developed, involving Águeda School of Technology and Management of the University of Aveiro (ESTGA-UA, Portugal) and University Centre Christus (UniChristus, Brazil). The design of this project was based on a needs analysis carried out with several professionals in the area of Quality Management, and its main pedagogic goal was to develop a means to consult systematized information on the different Quality Models, to be used by students and by the business community of the two countries involved (Portugal and Brazil). The contribution of courses involved were assumed as complementary, i.e.: the Brazilian students (enrolled in the course of Scientific Methodology of the Bachelor in Administration) focused on the methodological design in terms of the search, selection and treatment of data, and the Portuguese students (enrolled in the courses of Quality Models and of English Applied to Quality of the Bachelor in Quality Management) contributed with the analysis and systematisation of the collected data, as well as the presentation of the processed information in English. Throughout the project, students had the opportunity to validate the specific terminology used to describe the Quality Models with different experts, in the fields of ESP and Quality Management.

Given the challenges that collaborating within culturally and geographically different teams in online environment present, this work aims at describing the design

of the pedagogical strategy, including the defined technology-enhanced tasks and outputs, as well as the interaction and feedback dynamics. Besides, some insights on the students' perceptions regarding their own development of transversal competences and the weaknesses and strengths this type of international collaboration will also be presented based on their answers to a final evaluation questionnaire.

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## Translation in legal settings: Exploring the possibilities of jurilinguistics in Pakistani Context

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**Keywords:** Jurilinguistics, Legal settings, Translation, Parallel Corpus, Bilingual environment, Process theory.

Jurilinguistics is a new field which creates a synergy among law, language and translation. This field of study is established as a discipline with multiple studies conducted on legal translation particularly in Canada and later in France. Gémar and Kasirer (2005) in their paper define jurilinguistics as “the application of a linguistic treatment to all forms of legal texts.” (Juan Jiménez-Salcedo, 2017, p. 1). This interdisciplinary study is also grounded within jurilinguistics by bringing law, language and translation together in a string. This study takes a move from process and product of translation to ‘practice’ by establishing it in the researcher’s personal experience of translating legal documents. The project of ‘Urdu Translation of the Punjab Code’ is an experimental ground for establishing new insights in jurilinguistics.

The Punjab Code has been taken as a data set containing parallel corpus of English and its Urdu translation as end-product. This corpus is helpful in exploring and describing the translation practice. The Punjab Code comprises Acts, Ordinances, Orders, Rules and Regulations of pre-partition as well as post-partition times. These legislative documents are translated into Urdu after the order of the Supreme Court, Pakistan to make them accessible to a lay person in 2016.

This study addresses three concerns, one being the extension to jurilinguistics, secondly, it adds practice to Descriptive Translation Studies instead of paying exclusive attention to process and product separately. Process theory in translation is nonetheless the compile of (materials, competence and meaning). Thirdly, it explores that how these materials, competence and meaning help in simplifying the legislative documents which is a prerogative to Plain Language Movement in Pakistan.

Plain Language Movement is running globally to make legal documents simple enough to be accessible for the common man, moreover this movement is complementary to jurilinguistics. Started in the UK, this movement made its way to the United States more firmly and the legislators signed Plain Writing Act of 2010. This Act creates an impact across the world and makes people more alert to bring refinement in legal language by making it more inclusive rather than exclusive only to the legal experts. In Pakistan, the impact of the movement is gradual, starts from plain English in legal documents to Urdu translations of the legislative bank in Punjab.

Being part of the project of Urdu translation of Punjab laws, the author witnesses all peculiarities and sensibilities of practicing translation. This research investigates the core theory of jurilinguistics which claims translation to be communicative me-

diation in a bijurial or bilingual legislative settings. Canada is one of the bijurial environments where co-drafting has become normalized which gives birth to jurilinguistics as a discipline. This tradition makes its way to various post-colonial states including Pakistan. In Pakistan, co-drafting is not a common practice but the recently coined tradition of writing plain and resultantly translating laws into Urdu has opened new vistas to legal drafters, linguists, translators and researchers.

Legalese is not exclusive to the regime of linguistic analyses, rather more linguistically viewed angles would contribute in making laws easily accessible to common man through its plain language. Plain Language Movement in jurilinguistics is not specific to only plain English but plain translated texts as well. Plain translation as a practice is to be viewed within new technology laden settings having much to deliver on materials and objects used for translating. Meaning making processes and competence are not out of context during translating in plain/simple language. Simplification of translated texts is one of the criteria to assess the plainness and simplification of texts. The purpose of this study is to explore complementary theories; practice theory in translation and plainness/simplification of the material.

The interdisciplinarity of this research demands an exhaustive and extensive literature review of the concerned disciplines which becomes essentially workable for designing a conceptual framework. Three-tier model of practice within Practice theory (2020) and Laviosa's (2002) proposals for simplification provide a background to the study but the framework needs to be conceptually driven. The very recent currency of practice in translation theory, the nascent discipline of jurilinguistics and the contexts of legal studies make it necessary to build conceptual framework through already built literature. Translation studies have already prided itself as absorber of various disciplines. On the other hand, Jurilinguistics has started contributing to the translation practices. Jurilinguistics aim to preserve 'spirit of laws' either in a bijurial environment or the way to establish bilingual and multilingual settings in legal environment. Jurilinguistics raises the foundation of any legal society by bringing into context the importance of translation of laws into the language of the common man. Hsieh (2018) takes jurilinguistics as the synergy of law and language with special reference to translation. It has been making many efforts in theorizing language of law and translation because most problems arise from legal translation (p. 21).

In my presentation, I will be focusing more upon the bijurial settings in Pakistani context and will also highlight the contribution of Plain Language Movement in making the law accessible to lay person. The analysis will focus on changes in the target text that make it more of a plain text which is accessible to the laypersons.

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## Interactive communication for specific purposes using virtual reality

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**Keywords:** Humanized communication, Interactivity, Virtual reality

Com@Rehab, a project which, in 2020, won the Santander/NOVA Collaborative Research Award, focuses on overcoming the challenges of patient interaction with technology, as well as on responding to the need for simple, clear, motivating, and effective communication between patients and therapists.

To bridge the communication gaps experienced by the various agents involved in rehabilitation contexts, Com@Rehab proposes a communication module developed by linguists and terminologists, within a Virtual Reality (VR) solution, and where health literacy plays a key role. This project was developed within the scope of motor rehabilitation of post-COVID patients and aims, therefore, to contribute with a Communication Module for Interactive Rehabilitation underpinning a VR-based serious game with several difficulty levels.

We focus our research on the development of the verbal and non-verbal communication skills of those involved, using linguistics and literacy strategies to support patients in the understanding and execution of rehabilitation exercises. Moreover, by resorting to VR, we aim to enhance patient empowerment and self-care. The rehabilitation methodology is interactive and centred in humanised communication, with the user being actively involved in various stages of the process.

The innovation lies in the contribution of linguistics to structure the interactive component and increase the effectiveness of communication during the VR game. The communicative components related to the activity of washing the upper torso were worked on and adapted, together with the therapists. The chosen Activity of Daily Living, part of the Personal Hygiene category, was bathing, in this case in a shower



cabin, where the patient reproduces the movements for washing this area of the body. We explore verbal and non-verbal aspects, movement instructions, motivational messages and voice instructions, icons, emojis, as well as a character with an avatar function.

This linguistic module contributes to enhance the patients' interactivity with technology, making the process of joining the game easier and more intuitive for the users. The communication module will soon be tested by a group of non-patients and, later, by a group of users defined as the project's target audience.

The interactivity enabled by the technology aims at improving human-human and human-machine communication, thus making the management of therapeutic activities for patients more effective. The goal is also to improve the agility of motor skills, thereby fostering the patients' well-being. This aspect is central to their autonomy and empowerment in the therapeutic process.

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## Clearer or more ambiguous? Metaphors in simplified texts for emergencies through translation

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**Keywords:** Translation Studies, Crisis Communication, Linguistic Simplification, Metaphors, Figurative Language.

Managing emergencies from natural disasters such as floods, earthquakes and tornadoes is an increasingly international effort requiring mediation across languages and cultures as disaster-hit areas may have populations and visitors of different nationalities while international relief operations are frequently organized. In these circumstances, successful communication where one or more languages and cultures are involved depends on information and training during the preparedness and planning phases which may need to be reinforced through effective mediation. This is claimed to be better achieved through clear, simple messages. Particularly, metaphors can be considered as one of the possible stylistic choices which can help in achieving semantic simplification in communication by focusing on the emotional connection with an audience. However, within communication, the effectiveness of metaphorical language is a matter of debate and there are conflicting views on whether metaphors are a useful communication device. The study of metaphors has increasingly acquired a great deal of attention in different areas (Djemen & Semino, 2016). As outlined by Lakoff and Johnson (1980) in their seminal work, metaphor is ubiquitous in everyday language and central to human thought. We find manifestations of it in colloquial discourse, newspaper, academic and political discourse. On the one hand, metaphors have traditionally been considered an exercise in style since they might introduce ambiguities which compromise their effectiveness (Goatly 1997). For example, Golden (2010) showed that metaphors used in school textbooks might make the overall content more difficult to process. On the other hand, metaphor has recently been regarded as a communicative resource by which the expressiveness of a message is enhanced through the most economical means available (Charteris-Black, 2004; Kovcses, 2020). Metaphors make abstract and complex concepts understandable through concrete descriptions (Semino, 2008).

Research on communication in the context of natural disasters is interdisciplinary, as it draws on investigations on emergency management communication (Haddow and Haddow 2014), plain language (e.g. Cutts 2013, Hansen-Schirra and Maaß 2020), text complexity (Castello 2008), science popularization (Garzone 2006, Gotti 2011) and scientific translation (Montgomery 2000, Byrne 2012, Olohan and Salama-Carr 2011,

Olohan 2016). Particularly, it largely focuses on translating and interpreting in humanitarian crises (Federici ed. 2016) or deal with general translation policies of emergency management organizations (O'Brien et al. 2018). However, there is a relatively small body of literature that is concerned with the use of and translation of figurative language in crisis communication. Rhetorical strategies of emergency agencies in their intercultural, multilingual communication with varying disaster-affected communities can be explored with reference to gatekeeping to monitor content, plain language to aid comprehension and the use of iconic examples to affect audience attitudes (Musacchio and Panizzon 2017). Translations for adults are often seen as an aid to people with limited access to the main national language and as a guide to more detailed material in the main national language. As they need to be maximally communicative, translations for children need to have the status of original texts. In this sense, metaphors play a decisive role in influencing people's choices: the exposure to metaphor affects people's opinions on how to cope with problems (Thibodeau & Boroditsky 2011; 2013). The use of certain metaphors fosters structurally-consistent inferences induced by frame-consistent knowledge structures (Thibodeau, Hendricks & Boroditsky 2017). This paper focuses on Italian texts and their respective translations for foreigner citizens helping them to handle the COVID-19 emergency. The corpus consists of brochures and leaflets published online by different organizations which work to provide informative material in different languages and in simplified form on the new SARS-CoV-2 coronavirus and on the COVID-19 epidemic in Italy. The Italian National Institute of Health, the Immigration Department of the Italian Government, many Italian local authorities, schools and public libraries refer to their work to provide information in different languages. Brochures or leaflets are a hybrid genre as they mix communication strategies found in popular science and marketing in a very broad sense. Reflecting trends in Translation Studies, this paper sets off from current analyses of what are clear, effective texts based on qualitative assessments and quantitative measures of readability, lexical density and lexical variation to explore other determinants of effective communication during emergencies, with special reference to the use of metaphorical language. We analyze how metaphorical language is used in the source Italian texts and in their simplified versions and translations. Textual data are triangulated with O'Brien et al.'s 4-a Standards framework – availability, accessibility, acceptability and adaptability – to test how and to what extent emergency management organizations approach their obligations to provide information to prepare for and handle disasters among people belonging to culturally and linguistically diverse groups. Particularly, our aim is to understand whether the metaphorical expressions, if present in the source text, have been maintained or removed in the simplified versions and in translations in an attempt at maximally effective communication.

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## Pictographic representations of medical knowledge: an intersemiotic accessible translation approach

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**Keywords:** Medical communication, Pictographic representation.

Textual genres for medical communication, such as comics, graphic novels and illustrated materials have contributed to the recent patient-centred approach to healthcare, where patients are targeted as end-users of medical information, as they have become empowered receptors demanding understandable patient-friendly texts. Many patient-intended texts (patient information leaflets, summaries for patients, etc.) are the result of an intralingual translation process of specialised texts aimed at making medical knowledge accessible to nonexperts by means of a series of determinologization techniques (definition, rephrasing, synonymy, exemplification, analogy, hypernymy, etc.) (Campos Andrés 2013). Apart from these mostly linguistic techniques, visual elements enable graphic determinologization; in other words, an intersemiotic translation approach to encourage the patient-friendliness of medical texts by making domain-specific terminology comprehensible (Prieto-Velasco 2021).

In medical texts, images promote understanding of medical concepts by patients (Prieto-Velasco and Montalt-Resurreció 2018). Therefore, pictograms can also be regarded as a means of graphic determinologization in accessible easy-to-read texts. Pictograms may be intended either for signalling purposes (airports, hospitals, schools) or to communicate with people with comprehension difficulties (Jiménez Hurtado and Medina Reguera 2022). The role of pictograms in understanding domain-specific concepts is being explored in the research projects VISUALECT (Pictograms and Visual Elements to Understand Heritage: Intersemiotic Translation into Easy-to-Read) and INCLUMED (Inclusive access and dissemination of scientific knowledge through medical comics: new text genres for patient empowerment) from the perspective of cognitive accessibility.

Before being used for communication, easy-to-read texts, including pictograms, need to be validated by people with intellectual disabilities who have been trained to mainly assess perception: whether they are fully understood and can be easily seen (UNE 153101: 2018 EX). Nevertheless, communicative efficacy lies both in perception and representation, although pictogram validators do not seem to focus closely on the representation of specialised concepts as a relevant validation criterion (UNE-ISO 9186 1-2: 2022).

In this paper, we pay attention to the pictographic representation of medical concepts and study the characteristics of the pictograms contained in the ARASAAC library of symbols for augmentative and alternative communication. First, we extract some of the most salient medical concepts within the Medical Web Corpus (34 million words) and analyse their semantic patterns following the methodological premises of

Frame-based terminology (Faber 2012) for the conceptual organization of specialised domains. Secondly, we identify core relations to other concepts belonging to the medical domain using the Word Sketch and Concordance modules in Sketch Engine. Third, we analyse how pictograms depict such relations and manage to convey meaning in association with the referent.

Finally, a checklist is proposed to enrich validation criteria on the side of representation and assess the representativeness and patient-friendliness of pictographic representations of complex medical concepts. It is our assertion that experts should also take part in the validation of pictograms depicting specialized concepts.

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## Terminology awareness as a facilitator for knowledge acquisition in higher education

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**Keywords:** Terminology awareness, Knowledge acquisition, Parallel language use, Higher education.

If we assume that language is a means for shaping knowledge, the degree of terminology awareness in higher education teaching will eventually influence students' learning outcomes. The terminology used in a course is an important piece for learning new knowledge and unfortunate language choices may therefore create barriers to learning. In my presentation I will discuss this challenge using the situation in Norwegian higher education as an illustration (Author 2020).

With the increased use of English in Norwegian higher education teaching, it is challenging for Norwegian students to acquire new concepts via a language that is not their mother tongue and in turn to express their knowledge in Norwegian, which for instance is the task at hand when they sit for their exams. Although Norwegian students have a relatively solid knowledge of English from upper secondary school, especially the bachelor students' ability to discuss their knowledge in Norwegian is hampered if the subject field in question is not mediated by means of Norwegian through neither textbooks nor lectures (Author 2019). This is in line with previous findings by Hellekjær (2005), who concludes that Norwegian students in higher education struggle due to insufficient language proficiency. I will give some examples from the study of language use in bachelor-level exams (Author 2019) to illustrate the challenge the students are facing.

The Norwegian Agency for International Cooperation and Quality Enhancement in Higher Education (HK-Dir, formerly known as DIKU) has in a recent report (Diku 2021) recommended that special language and terminology theory and methods are included in university pedagogy programmes aimed at university lecturers. This report, together with recent legislation and national language policies, calls for an enhanced terminology awareness in Norwegian higher education.

The findings from the study of language use in bachelor-level exams (Author 2019), indicate that a focus on parallel language, that is learning both English and mother tongue terminology, should be a natural part of courses in higher education and linked to the level of knowledge, skills and general competences outlined in the learning outcomes of the various courses and study programmes.

The findings also indicate that a good place to start may be the role terminology plays in the knowledge acquisition process, and how this awareness could be raised in university pedagogy programmes. In line with Dahlberg (1978), I will argue that

the acquisition of scientific concepts is something that requires a higher level of cognition than what is needed for general concepts of our everyday life. The conception of specialist concepts, and in particular scientific concepts, requires a more comprehensive understanding than what may be achieved through mere perception. This view is supported in theories on knowledge transfer and acquisition (Mellin-Olsen 1993). Furthermore, studies into how students construct knowledge during their university years indicate that they initially are passive acceptors of factual, clear-cut knowledge (Perry 1968; in El-Faragy 2009).

This will typically be the situation in the students' first years at university. According to Perry's scheme of intellectual development, the students do not become active producers of their own knowledge until later in their studies. Thus, at a basic university level (bachelor), teaching should focus on mediating the aggregated, collective understanding of a subject field and its concepts. The acquisition process will naturally be more challenging if the accommodation of knowledge must take place via a foreign language only. Providing parallel terminology in both English and the mother tongue language, on the other hand, will provide a useful bridge for the students' cognition.

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## How to integrate feminine agentives in terminological databases: a methodological reflection

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**Keywords:** Gender-neutral language, Terminology database, Lemmatization, Feminine agentives, Gender-equal terminology.

In the last years, the discussion on feminine nouns of professions, jobs, charges, and roles has gained attention once again, both in the media and in academia. For instance, in 2020 the German language dictionary Duden triggered a public debate by changing ca. 12,000 entries referring to professions and jobs. Each profession/job now has two entries with two separate definitions: one for the masculine form (e.g. Lehrer), and one for the feminine form (e.g. Lehrerin). In Spain, in the same year, the Real Academia Española (RAE 2020) conducted an analysis on the language of the Spanish Constitution, on feminine profession nouns and on the use of the generic masculine. In Italy as well, several scientific and non-scientific publications have covered this topic recently (Cavagnoli & Dragotto 2020, 2021; Fusco 2012; Gheno 2019). In lexicography, scientific analyses on the representation of feminine nouns in dictionaries date back to the 1970s, while in terminology there has not been a major debate so far. In 2012, Bengoechea and Cabellos (2012) published a glossary on women’s professions and job titles challenging classical rules of lexicography and terminology science for the first time. Their glossary aimed at giving visibility to existing differences between men and women by treating them equally also graphically and by applying guidelines on language sexism in the lexicographical task. They also proposed feminine nouns even if not yet documented. Later on, Bengoechea (2017) analyzed how IATE, the European Union’s interinstitutional terminology database, dealt with feminine agentives, i.e. “linguistic forms that indicate an agent, like job titles, etc.” (Bengoechea 2017:200). She concluded that very few measures had been taken to implement non-sexist language in private or public terminology databases.

Following up on Bengoechea’s work, between 2020 and 2021, we studied how some terminology resources represent feminine terms: IATE, TERMDAT, LinguaPC, TERMCAT, Euskalterm, FAOTERM, Termium Plus, and Le Grand dictionnaire terminologique (GDT). We can mostly confirm Bengoechea’s results. Most of these terminology resources treat this topic marginally; only a few have developed a strategy to try and represent both masculine and feminine agentives systematically and equally. On a few termbases (LinguaPC, TERMDAT, and TERMCAT), we carried out a deeper analysis on selected terms, that is, types of agentives we had identified also in bistro,

our Information system for legal terminology. Our aim was to explore ways to represent and integrate feminine agentives into our resource. In particular, we considered the following aspects:

a) Lemmatization of feminine agentives: The core of terminology science is the concept, which, as such, is not related to gender (see, for instance, the analysis carried out by TERM-CAT 2015:4). In order to add gender-related information to a terminology database with the aim to give visibility to feminine agentives, the database's structure needs rethinking. Several configurations may fulfill this purpose. Feminine agentives may be recorded in a separate entry, following the semasiological approach. The feminine agentive may also fit in the same entry as the masculine. This can be done either 1) by recording the feminine form as a synonym of the masculine, even though feminine and masculine agentives cannot be considered synonyms in a narrow sense. Or 2) by recording the feminine agentive together with the masculine agentive in a single field, as if they were a single item of information, even though such approach violates the principles of data elementarity and term autonomy (ISO 26162-1:2019, Drewer & Schmitz 2017: 126, 131).

b) Types of agentives and degree of syntagmatic complexity: A preliminary enquiry on national and international gender-equality and plain language guidelines (e.g. Bianciardi & Parisi 2017, Giorcelli et al. 2015, Robustelli 2012, Europäisches Parlament 2008, Schweizerische Bundeskanzlei 2009) led us to define six main categories of agentives: professions, jobs, job titles, educational qualifications, functions, and roles. In our dataset, over 6,000 masculine terms in German and Italian fall under these categories. We also identified some residual categories, such as neutral forms, collective nouns, epicenes, and false friends, that is, terms including agentives that actually do not refer to a person (e.g. *bolletta a madre e figlia*). After this first classification, we then categorized our dataset according to the degree of syntagmatic complexity, ranging from simple and complex terms (e.g. *difensore* and *difensore civico* respectively), over complex terms where the agentives is an object (e.g. *Anhörung durch den Haftrichter*), to generic masculine being part of document names (e.g. *Akte des Verteidigers*) or of names of institutions (e.g. *Agenzia esecutiva per la salute e i consumatori*), to mention but a few.

c) Symmetrical representation of sexes (see Begonchea 2017:216): equal representation of feminine and masculine forms, for instance given by similar graphic evidence.

Finally, we identified five different lemmatization models that are either currently used in terminology databases or were elaborated by us. After presenting them, we will discuss both their advantages and disadvantages in terms of compliance with the terminology principles (e.g. term autonomy, data elementarity), level of lemmatization according to syntagmatic complexity (e.g. recording feminine agentives only when they occur as simple terms or as complex terms or also when they are part of complex terms), redundancy, readability, clarity of the terminological data/entry, and sustainability of terminological work. In addition to that, further aspects such as definition writing and contexts—especially in relation to feminine agentives that are not yet widely used—will also be considered.

Taking into account the aforementioned issues, in this paper, we will illustrate our ongoing analysis, focusing in particular on the lemmatization models, while contributing to discussions and reflections on gender equality in terminology science and practice.

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## “A Word is a Word” – Citizen Linguistics at the Boundaries of Terminology and Lexicography

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**Keywords:** Language Resource Development, Dictionaries, Language Varieties, Citizen Science.

Terminology and lexicography share many commonalities and therefore lend themselves to be studied jointly. This was also the idea of members of the public participating in a citizen linguistics project addressing lexicography. Although the project was intended as a lexicography project only, aimed at collecting lexemes in different language varieties of the same language, the members of the public actually also engaged in terminology work.

The citizen linguistics project Wortgut was aimed at engaging members of the public in lexicographic research.

Volunteers were asked to contribute to an online ‘dictionary’ that should reflect the different language varieties of the German language used and spoken in Austria on the standard-non-standard spectrum. The participants were provided with a basic introduction to lexicography and guidelines on how to enter data in the online ‘dictionary’ according to lexicographical principles. While the participants had to follow strict guidelines on how to enter their data in the online web form(s), they were entirely free to choose the domains their lexemes covered. The only instruction given regarding language varieties was, that they may collect “dialect, youth language, standard language”. Specialized language, i.e. terminology was not purposefully included in the beginning of the project but was addressed upon several participants’ requests.

The lexicographical collections created by the citizen scientists contained elements of the wide range of the different varieties of the German language used in Austria, such as regional dialects, youth language and even emojis.

Volunteers were asked to create lexicographical entries according to different levels of detail depending on the level of expertise they already had. Since the ‘online dictionary’ primarily addressed non-experts in lexicography, the researchers had to strike a balance between a tool that adheres to lexicographical principles and standards and a tool that could be easily understood and used by non-experts. Therefore, different web forms were provided to the users according to their previous knowledge and experience. Depending on the level of difficulty chosen by the user, they could enter less or more data. While the simplest form only contained the lemma and some

general descriptive fields, such as the language variety or region, the more sophisticated form also allowed for the entry of the phonetic notation with the International Phonetic Alphabet (IPA) and the etymology.

Furthermore, participants also concentrated on lexemes in dialect. Here, the expectations of the participants and the researchers diverged since some participants wanted to use a standardized ‘alphabet’ for distinct dialectal speech sounds, but the researchers were rather interested in the ways how participants write dialect. Therefore, the participants were instructed to write dialect with the available ‘alphabet’ as good as they can, and as they also would in online communication or chat messaging systems.

An application of the Wortgut tool that was not intended by the researchers was that the participants started to use it as a terminology tool. As the project was part of a competition, where school classes on the one hand and adult persons on the other could contribute and win a prize, several schools took part. The schoolteachers coordinated the pupils’ contributions to the Wortgut tool and guided the students in the selection of lexemes to be entered. The majority of the participating teachers were teaching German as a school subject and focused on lexemes used in general language. Here, the school students made different collections for topics such as school, shopping or leisure time. However, there were also some teachers that wanted to use the tool to create subject-specific ‘dictionaries’ in their classes. In this regard, it came in handy that the Wortgut tool was designed in a flexible way that allowed the free definition of “subject areas”. However, the guidelines and instructions as well as the web form(s) that participants had to complete for each lexicographical entry were targeted at general lexicography only. Nevertheless, the participants used the existing fields in the web form in creative ways to conduct systematic terminology work.

The project focused on German language used in Austria. However, language changes constantly and is influenced by other languages. Here, differences between generations became apparent. While adults rather concentrated on the collection of lexemes in dialect, including also obsolete ones or those that are no longer frequently used, adolescents entered data on youth language and multimedia communication. Especially in urban areas, the influence of other languages was also reflected in the lexicographical entries entered by the adolescents. While the majority of the adolescents did not specify the provenance of these lexemes (or just mentioned “non-English foreign words”), some even entered the etymology of this ‘foreign-language word’. On the one hand, this demonstrates that English and therefore Anglicisms still play an important role in youth language. On the other hand, it also demonstrates that youth language is characterized by the influence of a variety of contact languages. Furthermore, evidence of translanguaging could be found in the “example sentence” field.

To conclude, the participants in the citizen linguistics project did not differentiate between (general and specialized) lexicography and terminology. Although the Wortgut tool was designed as an ‘online dictionary’ that should be filled by members of the public with lexemes from the general language, it was used for a wide range of (initially unexpected) lexicographic and terminological purposes by the participants.

## Annual Reports – A Communicative Challenge of Corporate Communication

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**Keywords:** Corporate genres, Linguistic knowledge, Text analysis, Financial communication, Intercultural communication in economics.

Business and engineering students are often confronted with a variety of genres during their study. Especially business and corporate communications are two crucial fields in language programmes – both in English and German for specific purposes – since they communicate business practice and can therefore provide insights into later professional routine of graduates. However, when investigating corporate publications, students repeatedly report difficulties understanding complex genres such as annual reports. These are multifaceted, comprising a range of different subgenres. This paper, therefore, addresses the comprehensibility of such reports in general and discusses didactic approaches to include the genre into the teaching process of special languages (German and English).

In Germany, DAX listed companies are required to publish their financial results on a quarterly and yearly basis. Through their particular structure and focus, annual reports reflect on a group's new strategies, goals as well as brand innovations. Moreover, these reports establish and implement communication in and about the company's financial situation, market shares, and goals for both shareholders and financial as well as governmental control authorities. These (governmental) institutions are also responsible for evaluating and minimising risk for stakeholders. As a result, the launch of reports can either be debated heatedly, overlooked or celebrated, especially when content is leaked prior to release, as could be seen recently in the case of BioNTech regarding their development of the COVID-19 vaccine.

This paper introduces an adaptable teaching scenario for English and German for Specific Purposes, focusing on annual reports to mirror corporate business activities. The study is based on teaching experience in two groups of students – one business, the other engineering students.

In a first step, students with advanced language skills were asked to opt for a listed company in their specific field, e.g. Tesco, Scottish Power. Then they also searched for distinguished press articles in either English or German, e.g. from Wall Street Journal, Financial Times, Handelsblatt or Zeit, discussing the company's annual report.

In a second step, students formed research groups, analysed the contents along a list of parameters and textual features of the chosen report in order to then compare it with annual reports of German companies in similar branches (like E-ON or BioNTech) from a contrastive perspective.

In a final step, the dimension of intercultural communication was considered. Students reviewed their selected documents regarding the research questions to highlight corporate and national culture construction and authors' underlying intercultural concepts or competencies.

As the literature indicates, annual reports carry extraordinarily complex or partly controversial content. Therefore, it is essential to investigate annual reports on a linguistic level by answering the following methodological questions:

1) What can be said about the macrostructure of the text and its intertextuality? Are there particular economic discourses in which the document has been created? Is there a unique layout of the text and statistics reflecting the corporate culture?

2) What about the microstructure? Can students find linguistic idiosyncrasies, especially on the semantic and pragmatic levels, that need further evaluation? Is a particular type of storytelling/narration applied to catch the recipient's attention? Can corpus linguistic tools such as AntConc open up more descriptive features, for example, on a morphological level?

This investigation and classroom application of the findings provides insights and potential transfer options for teaching in the field of both business English and German. Once the students have discussed the complexity of this genre, it allows for further evaluation of business content. According to their level of language and the underlying business knowledge, students should be able to open up spaces of understanding and beyond. Consequently, they will be able to produce texts of that kind on their own in their future jobs.

With an approach towards best practice, the findings presented in this talk will enable students to understand the complex genre of annual reports in the framework of English for Specific Purposes and Business German. The results point out the didactic potential these documents have in language training to increase students' linguistic awareness and subject expertise. With a growing globalised market, students need to be prepared to encounter these texts, diminishing the phenomenon of feeling unprepared for real-world jobs. Business and engineering students require analytical skills to understand these texts and to draw the appropriate conclusions for their business communication. As the challenges for internationalised business communication are constantly growing, annual reports are an enormously beneficial genre for training linguistic awareness. Also, they are valuable to avoid 'greenwashing' or miscommunication regarding the semantic frame of 'sustainability'.



## Assessing term implantation in a minority language using Quirion's standard research protocol

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**Keywords:** Terminology, Terminometrics, Term Implantation.

This paper describes a research project to evaluate the implantation of information technology terminology in the Irish language. The methodology used is based on the standard research protocol for measuring terminology usage as outlined by Quirion (2003). Quirion's model has been influential and has been utilised to a greater or lesser degree in a number of terminometric studies (Bilgen 2016, Fathi 2017, Karabacak 2009, Quirion and Lanthier 2006, Zsombok 2021). These studies have all focused on widely-used languages, however, whereas Irish is very much a minority language. Due to the dominant position of the English language within Ireland, Irish is not widely used in most technical domains which may have implications for the effectiveness of Quirion's model in such a context, and in particular the compilation of an adequate corpus of LSP texts in which to measure the use of the chosen terms. With the exception of the work of Ní Ghearáin (2011), which focuses more on individual attitudes to terminology and awareness of terms rather than terminometrics, very little research has been carried out on term implantation in the case of Irish.

The first stage of the project involved selecting a domain to study. The IT domain was chosen due to the existence of a large volume of standardized technical terminology developed and published by an Coiste Téarmaíochta (the national terminology committee for Irish) over the years and the fact that a substantial, yet still relatively small, number of specialized texts are available for the domain.

The second stage was the selection of the terms to be measured for implantation. A glossary of IT terms entitled 1,000 Téarma Ríomhaireachta (Uí Bhraonáin ed., 2000), published by FIONTAR, Dublin City University in collaboration with an Coiste Téarmaíochta) was chosen as it was a widely available reference text at the turn of the century and the entries were subsequently incorporated into the National Terminology Database on its launch in 2006. It also fitted the time frame indicated by Quirion (2003, 44) who suggests carrying out terminology implantation research 15-20 years after a standardization project has taken place. The Irish terms in the glossary were appraised and polysemous terms which would be expected to create a great deal of noise in a corpus search were filtered out (e.g. aicearra / shortcut). Also filtered out were proper nouns, adjectives, verbs, adverbs and long-established terms found in LGP dictionaries referring to concepts that predated the period in question (e.g. aimplitheoir/amplifier). Synonymous terms for the relevant concepts will be added to the search list along with the English equivalents.

The third stage of the process involves the creation of a monolingual corpus of ‘institutional communications in the subject area concerned by the study’ (Ibid., 37). Quirion specifies that the corpus should include material from four categories of ‘institution’: administration, economy, education and media. In the context of more widely-used languages it would be necessary to choose samples from each category but in the case of Irish the volume of texts available is estimated to be so limited that it is envisaged that all relevant and available material can be included. The corpus-building stage is currently in progress and the nature, volume and proportion of material compiled for each ‘institution’ will be outlined in the final paper.

The final stage of the process involves searching for the standard terms in the corpus as well as for any competing Irish synonyms or English equivalents. Each standard term will then be assigned an ‘implantation coefficient’ (Ibid., 32) based on the frequency in which it occurs in the corpus in relation to competing designations. When this calculation has been carried out for each concept in the collection it will be possible to assess the overall success of the standardization project. Terms which have a high implantation coefficient and can thus be assumed to have implanted successfully will be compared to those which have a lower score with the aim of understanding the factors at play in the implantation process.

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## Translanguaging: Challenges and Opportunities for EMI Context in Pakistan Tertiary Level Education

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**Keywords:** Anxiety, Teachers Roles, Scaffolding, Higher Education, EMI, Translanguaging, Sociocultural Theory, Affective Filter Hypothesis, Motivation.

Unlike the western world, where the English language has just been cultivated after a deliberate decision to internationalise higher education, Pakistan inherited it long ago under British colonial rule. Although, Pakistan is a multilingual country with more than 62 indigenous languages, colonialism and globalisation induced English as a preferred second language for social and educational structures (Khan, 2013). In the context of English-Medium Instruction (EMI) education, researchers agree on the practicality of translanguaging pedagogical practices, the existing translanguaging and learning practices to empower students' linguistic repertoire (Ramos, 2018; Li, 2018) in Pakistani universities have not received much attention. Drawing on the selected constructs from the Sociocultural Theory and Affective Filter hypothesis, this study aims to investigate the challenges public and private university students face in EMI classrooms, and how teachers developed and incorporated different translanguaging strategies to address those challenges. The preliminary data analysis of 140 questionnaires reveals that due to a lack of awareness of translanguaging pedagogy, the issues such as difficult vocabulary; lack of explanation of scientific terms and concepts, and low linguistic competence enslaved students to adopt rote-learning techniques to pass through the examination. The classroom observation analysis shows a minimum use of translanguaging strategies such as meaning-translation and teacher-peer scaffolding by EMI teachers. The teacher-centred classrooms lack inclusive scaffolding techniques that ultimately created favouritism, anxiety, stress and fear impeding spontaneous student-teacher classroom interaction. Additionally, the interview analysis highlights participants' agreement on the need for training to implement translanguaging pedagogical strategies effectively while assisting students to overcome their communication apprehension in the EMI classroom. By highlighting such variations, the suggestions to create a classroom ecology to legitimise students' voices; teachers' training on developing transformative translanguaging pedagogy; and introducing a support system for EMI teachers to adopt different roles will be presented. The findings may have implications for designing pedagogical strategies to cater translanguaging classrooms with successful EMI implementation internationally.

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## Ensino de línguas para fins específicos e formação de professores em Portugal: que futuro?

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**Palavras-chave:** Línguas para fins específicos (LFE), Ensino e aprendizagem de línguas estrangeiras, Formação de docentes.

O interesse motivado pelo ensino e aprendizagem das línguas para fins específicos (LFE) numa dupla faceta: didática e linguística, surge essencialmente como resposta às necessidades profissionais de um público adulto. No caso do inglês, a oferta de cursos em vários domínios de especialidade tem sido acompanhada pela publicação de uma vasta gama de materiais, sobretudo desde os anos 1960 (Nagy 2014) até à data, que assim tem consolidado o ensino e aprendizagem do inglês para fins específicos e fortalecido o seu valor enquanto língua franca e língua de ciência.

Será, porém, que outras línguas, como o português e o francês língua estrangeira/não materna, gozarão do mesmo prestígio? Para responder a esta questão, cingir-nos-emos ao ensino destas línguas em Portugal, detendo-nos sobre 4 eixos principais:

1. oferta de cursos de LFE
  - a. no ensino básico e secundário
  - b. no ensino superior
2. formação pedagógica e linguística de docentes
  - a. formação inicial
  - b. formação contínua
3. LFE em documentos orientadores
  - a. documentos europeus
  - b. documentos nacionais
4. materiais disponíveis no mercado português
  - a. língua portuguesa
  - b. língua francesa

A diversidade linguística não é uma nova realidade nas escolas portuguesas, cujas políticas linguísticas se têm vindo a refletir na criação de uma série de instrumentos de apoio ao ensino de português língua não materna. Por outro lado, em decorrência

das políticas de internacionalização do ensino superior, o número de estudantes internacionais a frequentar universidades portuguesas tem crescido de forma exponencial (Sá et al. 2021), verificando-se uma grande procura por cursos de português língua estrangeira (PLE) geral/corrente em detrimento da LFE, não obstante estes estudantes serem oriundos de diferentes áreas de saber.

Neste contexto, a oferta de cursos de português para fins específicos (PFE) é diminuta, resultando na escassez de manuais ao dispor de docentes e aprendentes interessados no ensino e aprendizagem de português em vários domínios de especialidade. Regista-se um número de publicações ligeiramente superior no domínio da Economia e Finanças, em alinhamento com o acentuado número de estudantes internacionais a integrar cursos de Ciências Económicas em Portugal, concentrando-se estas publicações sobretudo nos níveis de proficiências mais baixos (A1/A2, QECR 2001, 2020). Semelhante tendência seguem os currículos dos cursos de formação de professores de PLE, nos quais a LFE e o PFE se encontram ausentes. Esta realidade espelha-se ainda nos referenciais de ensino de línguas para o PLE, para o qual contribui o tímido reconhecimento da LFE nos documentos orientadores europeus (Duarte Martins, 2020).

Quanto à língua francesa, o cenário é semelhante. Há alguns anos, existe um novo interesse pela aprendizagem da língua francesa em Portugal, mas quase sempre na sua vertente de língua corrente/geral. A oferta de cursos de francês para fins específicos (FFE) em várias estruturas de ensino é reduzida e não desperta muita curiosidade por parte dos aprendentes. Por outro lado, os docentes, muitas vezes sem formação específica na área de especialidade e/ou pedagógica no ensino da LFE, acabam por não investir neste tipo de docência, apesar de já existirem bastante recursos de apoio, na maior parte publicados em França (cf. Plataforma LISÉO – France Éducation International).

Neste sentido, a falta de investimento no ensino de PFE/FFE em Portugal resulta na pouca visibilidade das LFE, encontrando-se estas pouco representadas nos referenciais para ensino de línguas estrangeiras. Além disso, não existem manuais suficientes dedicados ao ensino de PFE/FFE dada a pouca confiança evidenciada pelas editoras portuguesas na publicação de materiais para fins específicos.

Não sendo especialistas da área, os professores de LFE não terão recebido formação adequada considerando os currículos dos cursos de formação em PLE/FLE oferecidos pelas universidades portuguesas. Em contrapartida, os docentes veem-se confrontados com a necessidade de ensinar diferentes domínios de saber ou ser responsáveis por cursos de LFE dirigidos a aprendentes de qualquer área de saber, não encontrando apoio quer nos guias orientadores para o ensino de línguas, quer nos materiais existentes no mercado.

Perante tal panorama, apesar da reconhecida importância das LFE, motivada, entre outros, por reformas curriculares e programáticas recentes (cf. Aprendizagens Essenciais – Cursos profissionais, ANQEP 2020), muito há a ser feito em Portugal, em todos os níveis de ensino. Uma maior consciencialização para a relevância das LFE nas vidas académicas e profissionais dos aprendentes resultaria no aumento da oferta de cursos (Carras et al., 2008), numa reflexão mais fina sobre os conteúdos programáticos (Mourlhon-Dallies, 2008) e, conseqüentemente, num maior investimento na elabora-

ção e publicação de manuais, resultante do aumento da procura por este tipo de materiais didáticos, mas também numa maior aposta na formação inicial e contínua dos docentes relativamente ao ensino e aprendizagem das LFE.

Os principais objetivos desta comunicação são: 1) tecer uma descrição da situação do ensino e aprendizagem das LFE em Portugal, tendo como base as línguas portuguesa e francesa, na base dos eixos acima referidos; 2) delinear algumas propostas que possam sustentar uma reflexão mais aprofundada sobre as LFE em Portugal, numa perspetiva de promoção do multilinguismo em oposição à crescente “macdonaldização” (Renard, 2000) da comunicação profissional.

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## The dynamics of turn-taking in deliberations of monetary policy

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**Keywords:** Spoken Interaction, Corpus Linguistics, Discourse, Turn-Taking, Interaction, Monetary Policy, Economics.

Within applied linguistics, there is relatively little empirical research devoted to the study of spoken language, compared to written genres such as e-mails, books and documents. Meetings have been explored to some degree (Andersen, 2012; Kangasharju & Nikko, 2009; Svennevig & Djordjilovic, 2015; Vaughan, 2008; Wodak, 2000). In our presentation, we aim to complement this research by focusing on domain-specific language use in a branch of economics, namely monetary policy. We take a corpus-based and discourse-analytic approach to meeting discussions and explore the dynamics of turn-taking within this spoken genre.

The United States' Federal Open Market Committee (FOMC) plays a central role in US monetary policy. It makes key decisions about interest rates and the growth of the United States money supply and oversees the nation's open market operations, which include the selling and buying of government bonds and other securities. Its deliberations are held during eight regularly scheduled meetings per year. The detailed records of these meetings are published as transcripts, 'lightly editing the speakers' original words, where necessary, to facilitate the reader's understanding' (FOMC website). For the purposes of this paper and subsequent research, we have compiled the records from 2002-2016 into a corpus of approx. 6.9 million words and made this available in the Sketch Engine.

We first briefly describe the corpus, problematising its authenticity as spoken data and account for adaptation of the metadata and CQL-based search patterns that facilitate the effective study of turn-taking in the Sketch Engine. Next, we explore the dynamics of turn-taking in the corpus as a whole. The concordance and frequency functions of the research infrastructure provides a good way of charting recurrent patterns in the sequential organisation of this type of discourse. The inspection of the corpus data shows that the turn-taking is constrained in ways that are characteristic of the meeting genre. The Fed's Chair acts as meeting chair, parts of the meeting are relatively interactive, while other parts are monologic, involving the reading of pre-scripted text. This dynamic has clear implications for the use of devices to signal turn transition and acceptance of turn.

Transitions between speakers is regulated through various explicit and less explicit means. Although the chairperson has a particular role in this, the attendees also contribute to the regulation. Turn-regulating mechanisms comprise utterance-final,



sometimes formulaic, expressions such as Thank you, Mr. Chairman; That concludes my prepared remarks; I am very happy to take questions, but also a wide range of more specific turn-yielding sequences, e.g. David and I will be happy to answer any questions, etc. Moreover, turn-transitions tend to co-occur with certain speech acts pertaining to the interactional setting, such as thanking, addressing a designated speaker, expressing agreement, asking for clarification, ensuring co-participation from others, etc. As can be expected, these vary according to their placement in the stretch of discourse that constitutes an agenda item or a meeting. In a mainly bottom-up fashion, we explore this rich corpus resource with a view to documenting items used to manage the interaction in this formalised and highly specified communicative setting.

### Corpora/data sources

FOMC: [https://www.federalreserve.gov/monetarypolicy/fomc\\_historical\\_year.htm](https://www.federalreserve.gov/monetarypolicy/fomc_historical_year.htm)

Sketch Engine: <https://app.sketchengine.eu/>

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## Part III: Program



## PROGRAM

### Monday, 12<sup>th</sup> of September

09:00 – 09:30	Opening Session
	09:30 – 10:30 KEYNOTE SPEAKER: <b>Pamela Faber</b>   University of Granada <i>Framing LSP</i>
<b>10:30</b>	<b>SESSION 1 – President: Sara Carvalho</b>
	10:30 – 10:50 <i>La langue de spécialité du désarmement: L'apprentissage de la phraséotermologie spécialisée pour les non experts</i> Sara Silecchia, Federica Vezzani, Giorgio Maria Di Nunzio
	10:50 – 11:10 <i>Insights on multimodal, practice-based ESP teaching and learning</i> Sandra Vasconcelos, Ana Balula
11:10 – 11:30	Coffee break
<b>11:30</b>	<b>SESSION 2 – President: Christina Dechamps</b>
	11:30 – 11:50 <i>A comparative study of the impact of the keyboard on written productions for ESL and EFL students</i> Atheena Johnson
	11:50 – 12:10 <i>Teaching Portuguese as Foreign Language and Mathematics: a pilot project with a CLIL approach</i> Olga Heitor, Gonçalo Araújo, Margarida Morgado, Susana Correia
	12:10 – 12:30 <i>What makes a business context? Expressing disagreement in business vs. private English as a lingua franca interaction</i> Kaisa Pietikäinen
12:30 – 14:00	Lunch

14:00 – 15:00 KEYNOTE SPEAKER: **Jan Engberg** | University of Aarhus

*Level of explanatory ambition: a tool for analyzing attempted participant relations in popularization discourse*

**15:00**

**SESSION 3 – President: Susana Correia**

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15:00 – 15:20 *Co-constructing Specialized Knowledge in French Sign Language: a First Approach based on the Field of Architecture*

Jeremie Segouat, Amelie Josselin-Leray, Maeva Ranvier

15:20 – 15:40 *The translator's role in supporting asymmetric communication between experts and laypersons*

Elena Chiocchetti

15:40 – 16:00 *"How do we replace concrete?" Building sector professionals addressing knowledge asymmetries about climate-wise housing*

Merja Koskela, Liisa Kääntä, Eveliina Salmela, Henna Syrjälä

16:00 – 16:30

*Coffee break*

**16:30**

**SESSION 4 – President Raquel Amaro**

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16:30 – 16:50

16:30 – 16:50 *Enacting innovative ESP teaching and learning through COIL*

Ana Balula, Sandra Vasconcelos

16:50 – 17:10 *Translation in legal settings: Exploring the possibilities of jurilinguistics in Pakistani Context*

Amna Anwar

17:10 – 17:30 *Interactive communication for specific purposes using virtual reality*

Sara Carvalho, Raquel Silva, Rute Costa, Micaela Fonseca, Cláudia Quaresma, Ana Rita Londral, Miguel Fernández, Carolina Silva

17:30 – 17:50 *Comunicação interativa para fins específicos com recurso à realidade virtual*

Sara Carvalho, Raquel Silva, Rute Costa, Micaela Fonseca, Cláudia Quaresma, Ana Rita Londral, Miguel Fernández, Carolina Silva

## Tuesday, 13<sup>th</sup> of September

09:30 – 10:30 KEYNOTE SPEAKER: **Maria Teresa Zanola**  
| Università Cattolica del Sacro Cuore de Milan

*La communication spécialisée: la terminologie à l'œuvre*

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### 10:30 **SESSION 5 – President: Manuel Célio Conceição**

10:30 – 10:50 *Clearer or more ambiguous? Metaphors in simplified texts for emergencies through translation*

Dario Del Fante, Maria Teresa Musacchio

10:50 – 11:10 *Pictographic representations of medical knowledge: an intersemiotic accessible translation approach*

Juan Antonio Prieto Velasco

11:10 – 11:30 *Coffee break*

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### 11:30 **SESSION 6 – President: Ana Salgado**

11:30 – 11:50 *Terminology awareness as a facilitator for knowledge acquisition in higher education*

Marita Kristiansen

11:50 – 12:10 *How to integrate feminine agentives in terminological databases: a methodological reflection*

Natascia Ralli, Flavia De Camillis

12:10 – 12:30 *“A Word is a Word” – Citizen Linguistics at the Boundaries of Terminology and Lexicography*

Barbara Heinisch

12:30 – 14:00 *Lunch*

14:00 – 15:00 KEYNOTE SPEAKER: **Sílvia Araújo** | Universidade do Minho

*Langues de spécialité et données ouvertes: outils numériques collaboratifs pour la création de ressources multimodales pour/par la communauté académique*

**15:00**

**SESSION 7 – President: Margarida Ramos**

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15:00 – 15:20 *Annual Reports – A Communicative Challenge of Corporate Communication*

Michaela Rusch

15:20 – 15:40 *Assessing term implantation in a minority language using Quirion's standard research protocol*

Gearóid Ó Cleircín, Jamie Murphy

15:40 – 16:00 *Translanguaging: Challenges and opportunities for EMI context in Pakistan Tertiary Level Education*

Saima Muhammad

16:00 – 16:30

*Coffee break*

**16:30**

**SESSION 8 – President: Bruno Almeida**

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16:30 – 16:50 *Ensino de línguas para fins específicos e formação de professores em Portugal: que futuro?*

Susana Duarte Martins, Christina Dechamps

16:50 – 17:10 *The dynamics of turn-taking in deliberations of monetary policy*

Gisle Andersen, Christian Langerfeld

17:10 – 17:30

Closing session



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