

Université de Montréal

Criteria for the Validation
of Specialized Verb Equivalents:
Applications in Bilingual Terminography

par

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Cette thèse intitulée :

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of Specialized Verb Equivalents:
Applications in Bilingual Terminography**

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Abstract

Multilingual terminological resources do not always include valid equivalents of legal terms for two main reasons. Firstly, legal systems can differ from one language community to another and even from one country to another because each has its own history and traditions. As a result, the non-isomorphism between legal and linguistic systems may render the identification of equivalents a particularly challenging task. Secondly, by focusing primarily on the definition of equivalence, a notion widely discussed in translation but not in terminology, the literature does not offer solid and systematic methodologies for assigning terminological equivalents. As a result, there is a lack of criteria to guide both terminologists and translators in the search and validation of equivalent terms.

This problem is even more evident in the case of predicative units, such as verbs. Although some terminologists (L'Homme 1998; Lerat 2002; Lorente 2007) have worked on specialized verbs, terminological equivalence between units that belong to this part of speech would benefit from a thorough study. By proposing a novel methodology to assign the equivalents of specialized verbs, this research aims at defining validation criteria for this kind of predicative units, so as to contribute to a better understanding of the phenomenon of terminological equivalence as well as to the development of multilingual terminography in general, and to the development of legal terminography, in particular.

The study uses a Portuguese-English comparable corpus that consists of a single genre of texts, i.e. Supreme Court judgments, from which 100 Portuguese and 100 English specialized verbs were selected. The description of the verbs is based on the theory of Frame Semantics (Fillmore 1976, 1977, 1982, 1985; Fillmore and Atkins 1992), on the FrameNet methodology (Ruppenhofer et al. 2010), as well as on the methodology for compiling specialized lexical resources, such as DiCoInfo (L'Homme 2008), developed in the *Observatoire de linguistique Sens-Texte* at the *Université de Montréal*. The research reviews contributions that have adopted the same theoretical and methodological

framework to the compilation of lexical resources and proposes adaptations to the specific objectives of the project.

In contrast to the top-down approach adopted by FrameNet lexicographers, the approach described here is bottom-up, i.e. verbs are first analyzed and then grouped into frames for each language separately. Specialized verbs are said to *evoke* a semantic frame, a sort of conceptual scenario in which a number of mandatory elements (core Frame Elements) play specific roles (e.g. ARGUER, JUDGE, LAW), but specialized verbs are often accompanied by other optional information (non-core Frame Elements), such as the criteria and reasons used by the judge to reach a decision (statutes, codes, previous decisions). The information concerning the semantic frame that each verb evokes was encoded in an xml editor and about twenty contexts illustrating the specific way each specialized verb evokes a given frame were semantically and syntactically annotated. The labels attributed to each semantic frame (e.g. [Compliance], [Verdict]) were used to group together certain synonyms, antonyms as well as equivalent terms.

The research identified 165 pairs of candidate equivalents among the 200 Portuguese and English terms that were grouped together into 76 frames. 71% of the pairs of equivalents were considered full equivalents because not only do the verbs evoke the same conceptual scenario but their actantial structures, the linguistic realizations of the actants and their syntactic patterns were similar. 29% of the pairs of equivalents did not entirely meet these criteria and were considered partial equivalents. Reasons for partial equivalence are provided along with illustrative examples. Finally, the study describes the semasiological and onomasiological entry points that JuriDiCo, the bilingual lexical resource compiled during the project, offers to future users.

Keywords: terminological equivalence, specialized verbs, Portuguese and Canadian judgments, Frame Semantics, FrameNet

Résumé

Les ressources multilingues portant sur le domaine juridique n'incluent pas toujours d'équivalents valides pour deux raisons. D'abord, les systèmes juridiques peuvent différer d'une communauté linguistique à l'autre et même d'un pays à l'autre, car chacun a son histoire et ses traditions. Par conséquent, le phénomène de la non-isomorphie entre les systèmes juridiques et linguistiques rend difficile la tâche d'identification des équivalents. En deuxième lieu, en se concentrant surtout sur la définition de la notion d'équivalence, notion largement débattue en traductologie, mais non suffisamment en terminologie, la littérature ne propose pas de méthodologies solides et systématiques pour identifier les équivalents. On assiste donc à une absence de critères pouvant guider tant les terminologues que les traducteurs dans la recherche et la validation des équivalents des termes. Ce problème est encore plus évident dans le cas d'unités prédicatives comme les verbes. Bien que certains terminologues (L'Homme, 1998; Lorente et Bevilacqua 2000; Costa et Silva 2004) aient déjà travaillé sur les verbes spécialisés, l'équivalence terminologique, en ce qui concerne ce type d'unités, bénéficierait d'une étude approfondie. En proposant une méthodologie originale pour identifier les équivalents des verbes spécialisés, cette recherche consiste donc à définir des critères de validation de ce type d'unités prédicatives afin de mieux comprendre le phénomène de l'équivalence et aussi améliorer les ressources terminologiques multilingues, en général, et les ressources terminologiques multilingues couvrant le domaine juridique, en particulier.

Cette étude utilise un corpus comparable portugais-anglais contenant un seul genre de textes, à savoir les décisions des cours suprêmes, à partir duquel 100 verbes spécialisés ont été sélectionnés pour chaque langue. La description des verbes se base sur la théorie de la sémantique des cadres (Fillmore 1976, 1977, 1982, 1985; Fillmore and Atkins 1992), sur la méthodologie de FrameNet (Ruppenhofer et al. 2010), ainsi que sur la méthodologie développée à l'Observatoire de linguistique Sens-Texte pour compiler des ressources lexicales spécialisées, telles que le DiCoInfo (L'Homme 2008). La recherche examine

d'autres contributions ayant déjà utilisé ce cadre théorique et méthodologique et propose des adaptations objectives du projet. Au lieu de suivre une démarche descendante comme le font les lexicographes de FrameNet, la démarche que nous décrivons est ascendante, c'est-à-dire, pour chaque langue séparément, les verbes sont d'abord analysés puis regroupés par cadres sémantiques. Dans cette recherche, chacun des verbes « évoque » un cadre ou *frame*, une sorte de scénario conceptuel, dans lequel un certain nombre d'acteurs obligatoires (*core Frame Elements*) jouent des rôles spécifiques (le rôle de juge, le rôle d'appelant, le rôle de la loi). Mis en discours, les termes sont souvent accompagnés d'autres renseignements optionnels (*non-core Frame Elements*) comme ceux des critères utilisés par le juge pour rendre une décision (des lois, des codes, d'autres décisions antérieures). Tous les renseignements concernant les cadres sémantiques que chacun des verbes évoque ont été encodés dans un éditeur xml et une vingtaine de contextes illustrant la façon spécifique dont chacun des verbes évoque un cadre donné ont été annotés. Les étiquettes attribuées à chaque cadre sémantique (ex. [Compliance], [Verdict]) ont servi à relier certains termes synonymes, certains termes antonymes ainsi que des candidats équivalents.

Parmi les 200 termes portugais et anglais regroupés en 76 cadres, 165 paires de candidats équivalents ont été identifiés. 71% des paires d'équivalents sont des équivalents parfaits parce que les verbes évoquent le même scénario conceptuel, leurs structures actanciennes sont identiques, les réalisations linguistiques de chacun des actants sont équivalentes, et les patrons syntaxiques des verbes sont similaires. 29% des paires d'équivalents correspondent à des équivalents partiels parce qu'ils ne remplissent pas tous ces critères. Au moyen d'exemples, l'étude illustre tous les cas de figure observés et termine en présentant les différentes façons dont les futurs utilisateurs peuvent consulter le JuriDiCo, la ressource lexicale qui a été compilée pendant ce projet.

Mots-clés : équivalence terminologique, verbes spécialisés, jugements Canadiens et Portugais, sémantique des cadres, FrameNet

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Typographical conventions

- **Terms:** italics plus sense number, e.g. *violate*₂
- **Concepts or notions:** quotation marks, e.g. “res judicata”
- **Frame names:** word beginning with a capital letter inside square brackets, e.g. [Verdict]
- **Frame Elements names:** small capitals, e.g. JUDGE
- **Other lexical items referred to in the text:** italics, e.g. *defendant*
- **English translations of terms in other languages:** Eng. plus translation inside brackets, e.g. *acusar* (Eng. to accuse)

List of symbols and abbreviations

BLD	Black Law’s Dictionary – Free online edition
BNC	British National Corpus
CEE	Coastal Engineering Event
FE	Frame Element
ISO	International Standards Organisation
L1	Language 1 (usually, source language)
L2	Language 2 (usually, target language)
LU	Lexical Unit
NLP	Natural Language Processing
NP	Noun Phrase
OED	Oxford English Dictionary online
OLST	Observatoire de linguistique Sens-Texte
PP	Prepositional Phrase
[Q1]	Question 1
SCC	Supreme Court of Canada
SL	Source language
STJ	Supremo Tribunal de Justiça de Portugal
TL	Target language

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To my parents, Fátima and João

Gibt es eine andere Sprache, in der es für Warten und Hoffen nur ein Vokabel gibt wie esperar im Portugiesischen? Warten und Hoffen – hinter diesen zwei Worten verbirgt sich die portugiesische Einstellung zum Leben (Marco Polo-Lissabon, 5).

–**esperar** [...] **1.** v/t erwarten; fig auflautern (dat);

2. v/t warten (**por** auf ac); hoffen (**por** auf ac)

(Lang.-Twb. Port.-Dt./Dt.-Port. 2001)

(cited in Wiegand 2005: 17)

Adaptation:

Is there any other language in which *to wait* and *to hope for* correspond to one word only, such as *esperar* in Portuguese? Waiting and hoping – the Portuguese attitude towards life is hidden behind these two words (Marco Polo-Lisbon).

esperar: [...] **1.** to hope for [...];

2. to wait (for) [...];

3. to look forward to [...];

4. to suppose [...];

5. to conjecture [...];

6. to count on [...];

7. to have hope [...].

(Michaelis online 2012)

« Quem espera, sempre alcança. »

“Time brings everything to those who can wait for it.”

1. Introduction

This research studies the equivalence relationship between specialized verbs that occur in a corpus of judgments produced by Portuguese and Canadian judges. By focussing on this specific genre of texts as well as on the Portuguese-English language pair, this study aims at contributing to a better understanding of terminological equivalence at the same time that it extends on previous work that has approached specialized verbs within a single language (L'Homme 1998; Lorente 2000; Lerat 2002a; Costa and Silva 2004; Alves et al. 2005; De Vecchi and Eustachy 2008). Specifically, the study proposes a novel methodology to describe specialized verbs and to assign their equivalents based on the theoretical model of Frame Semantics (Fillmore 1976, 1977, 1982, 1985; Fillmore and Atkins 1992) and its application FrameNet (Ruppenhofer et al. 2010). The criteria for the assignment and validation of specialized verb equivalents that are presented in the research can be useful for the development of multilingual terminography, in general, for the development of legal terminography, in particular, as well as for the teaching and practice of specialized translation and terminology.

1.1. Statement of the problem

It is now a commonplace that translators have to work well and fast in a globalized world and that more and more often legal information has to be translated as a consequence of the increasing transnational cooperation. The translation of legal texts is particularly challenging because legal systems may differ from one linguistic community to another and even from one country to another because each has its own history and traditions (Gémar 2008). The creation of multilingual terminological resources, in general, and the creation of multilingual specialized lexical resources covering the specialized field of the law, in particular, raises the problem of linking lexical information from different languages because legal terminologies are said to be *anisomorphic*, i.e. the semantic scope of terms differs.

Up to the present, multilingual resources that describe legal terminology have not included all the equivalents that translators need to produce translations of legal texts. This is particularly true with regard to specialized lexical resources covering the specialized field of the law in language pairs, such as Portuguese-English-Portuguese. As de Groot and van Laer (2008) explain in their assessment of the quality of the different bilingual legal dictionaries between the languages of the Member States of the European Union European, the Portuguese-English legal dictionaries correspond to “word list dictionaries”, i.e. “those bilingual or multilingual lists of terms offering unsubstantiated translations; equivalence is assumed; no explanation as to different meanings is offered” (de Groot and van Laer 2008: 9).

What is more, terminological resources have for a very long time neglected the description of predicative units, such as verbs. Over the years, however, some authors have sought to understand the lack of interest in terms belonging to parts of speech other than nouns as well as their weak presence in terminological resources (L’Homme 1998; Lorente and Bevilacqua 2000; Costa and Silva 2004). One of the reasons why terminology has been mostly interested in nouns lies in the importance given in the Wüsterian approach to objects and their designations. Nevertheless, some researchers have argued that specialized knowledge is not limited to objects but that it also extends to actions (L’Homme 2003; De Vecchi and Estachy 2008).

In fact, verbs should be included in multilingual terminological resources, in general, and in resources covering the specialized field of law, in particular, because they pose three different but intertwined types of problem: decoding, encoding and translation. For example, although a translator may know the general meaning of the verb *absolver* (Eng. to acquit) as in *absolver o réu do crime* (Eng. to acquit the defendant of the crime), s/he may not know the meaning and the equivalent of *absolver* when it occurs as *absolver o réu da instância* (Eng. literally, the defendant is acquitted from the court). In addition, a

translator can understand the meaning of the verb *acordar* (Eng. to agree), but s/he may not be aware that in the judgments of the Supreme Court of Portugal, this verb is very frequently followed by the preposition *em* (Eng. in) and never by the usual prepositions *com* (Eng. with) and *entre* (Eng. between).

For these reasons, translation-oriented terminography should concentrate on a high “level of detail of cross-linguistic information without which it is difficult, if not impossible, to provide accurate resources for efficient communication across language boundaries” (Boas 2005: 445). Although it will be demonstrated that there are some theoretical frameworks that combine the description of the linguistic and extralinguistic characteristics of specialized verbs, it will be argued that the literature is silent when it comes to proposing sound methodologies for the search of equivalents.

1.2. Objectives of the research

The most important objective of the research is the definition of criteria for validating the equivalents of specialized verbs. In order to do so, the research proposes a methodology for describing specialized verbs that occur in a comparable corpus of Portuguese and English judgments as well as a methodology for assigning their equivalents. The findings of the study should bring about criteria for justifying why a specialized verb in one language is a more or less suitable equivalent of a specialized verb in a different language. Another specific objective of the research is to test the applicability of the theoretical model of Frame Semantics (Fillmore 1976, 1977, 1982, 1985; Fillmore and Atkins 1992) and of the FrameNet methodology (Ruppenhofer et al. 2010) to the aforementioned objectives as well as to the elaboration of multilingual lexical resources that describe legal terminology.

By knowing what causes a specialized verb in one language to be a more or less suitable equivalent of a specialized verb in another language, the research aims to better

understand the phenomenon of terminological equivalence and to contribute to the elaboration of multilingual terminological resources, in general, and to the elaboration of multilingual resources covering the subject field of law, in particular. Finally, the findings of the research should be useful for the teaching of specialized translation and terminology, for translators, terminologists and technical writers as well as for anyone interested in the multilingual aspects of terminology.

1.3. Structure of the thesis

In this first chapter we have outlined the challenges that the creation of multilingual specialized resources covering the subject field of law raise and identified the need to elaborate a methodology to assign the equivalents of specialized verbs that occur in legal texts. The various aspects of the thesis are developed in the following five chapters.

Chapter 2, “The state of the art”, reviews the literature on the topics of legal language, equivalence and specialized verbs. It starts by describing the main characteristics of legal language, in general, and of judgments as a legal genre, in particular. Here, the hypothesis is formulated that knowledge about judgments as a legal genre may be helpful for: the design of specialized corpora, the selection of candidate terms, the interpretation of terminological data, and the assignment of equivalents. Then, the chapter compares how the phenomenon of equivalence has been approached from the viewpoint of lexicography and from the viewpoint of terminology, namely by providing definitions and typologies of equivalence along with illustrative examples. The hypothesis is formulated that the feature according to which the relationship of equivalence should be established needs to be equated as an external entity or *frames* and that the extralinguistic (participants in the frames) as well as the linguistic (syntagmatic context of the terms) description of the terms should provide enough information to understand why a given term in one language is an equivalent of a term in another language. Finally, the chapter reviews the various

theoretical frameworks that have been applied to the description of specialized verbs and discusses the few contributions on the assignment of specialized verb equivalents. It will be argued that a unified, theoretical and methodological framework for the description of specialized verbs and for the assignment of their equivalents is still necessary.

Chapter 3, “Theoretical framework”, outlines the main principles of Frame Semantics (Fillmore 1976, 1977, 1982, 1985; Fillmore and Atkins 1992), it describes its most important application to English, i.e. FrameNet (Ruppenhofer et al. 2010), and it reviews the applications of Frame Semantics to terminology (e.g. Dolbey et al. 2006; Faber et al. 2006; Schmidt 2009). It will be argued that Frame Semantics and the FrameNet methodology seem particularly well suited to: the study of specialized verbs, because verbs are “frame-evoking” or “frame-bearing” words *par excellence*; the elaboration of terminological resources, because they offer the possibility of combining the analysis of the linguistic and extralinguistic properties of terms; and the management of the multilinguality aspect of terminology, because frames are considered to be language independent to a fair degree.

Chapter 4, “Methodology”, draws considerations on the corpus design as well as on the comparability of the Portuguese and Canadian texts. It then provides details on the bottom-up methodology of the research that consists in the following steps: extraction of candidate terms from the corpus; validation of the candidate terms; description of the terms; identification of the frames that group the terms together; data encoding; semantic and syntactic annotation of the contexts in which the terms occur; validation of the data; and assignment of equivalents.

Chapter 5, “Results”, describes and discusses the findings of the research concerning the three units of analysis: the selected terms, the frames that were identified and the equivalents that were assigned. It also presents the lexical resource called *JuriDiCo*

that was compiled, namely the semasiological and onomasiological entry points that it offers to future users.

Finally, in chapter 6 we review the theoretical and methodological aspects developed throughout the research and draw conclusions on how they can contribute to the state of the art. We also suggest a number of future research avenues following the work of the thesis.

2. The state of the art

In order to identify the equivalents of specialized verbs that occur in the Supreme Court judgments of Portugal and Canada, it is necessary to examine beforehand: 1) the main characteristics of legal discourse, in general, and of judgments, in particular; 2) the phenomenon and the typologies of equivalence as well as the methodologies for searching equivalents; 3) the theoretical and methodological approaches that have been applied to the description of specialized verbs; and, 4) the theoretical and methodological approaches that have been developed for identifying the equivalents of specialized verbs.

This chapter is organized as follows. Section 2.1 describes the specificities of legal language emphasizing its discursive dimension. One of the ways in which legal language has been approached consists in identifying the genres of discourse that constitute the broad subject field of law. Central attention will be given to judgments as a text genre because the corpus used in the research is composed of judgments produced by the Supreme Court of Canada and by the *Supremo Tribunal de Justiça de Portugal* and, therefore, it aims to be representative of the language of judges. Section 2.2 deals with the phenomenon of equivalence seen from two different viewpoints: lexicography and terminology. Here, definitions and typologies of equivalence are provided along with illustrative examples. It will be argued that the literature is silent when it comes to proposing sound methodologies for searching equivalents. Section 2.3 reviews different theoretical frameworks used to describe specialized verbs. Special focus is given to approaches that have studied verbs occurring in legal texts. Finally, section 2.4 discusses the few contributions on the assignment of specialized verb equivalents and justifies the necessity of the current research.

2.1. Legal language

Legal language has interested many scholars stemming from research communities as varied as Translation Studies, Discourse Analysis, Languages for Special Purposes, Terminology, Jurilinguistics, and even Artificial Intelligence. Some researchers are particularly interested in the lexical component of legal language, or terminology, whereas others concentrate on its discursive dimension. Some others consider it important to take into account both the lexical and discursive dimensions of legal language as if they were two sides of the same coin. For instance, for Cornu (2005) legal language is composed of both a “vocabulaire juridique” (the group of terms that receive one or several meanings from the law) and a “discours juridique” defined as “la mise en oeuvre de la langue, par la parole, au service du droit” (Cornu 2005: 207).

Other researchers are more interested in the difficulties that the co-existence of different languages and legal systems in the same territory create at the same time they advocate the scientific study of legal language. Gémar (2011) explains that, in the bilingual and bijural Canadian system, translation has contributed to the understanding of the interplay between language and culture, this giving rise to Jurilinguistics. This discipline emerged with the publication of *Langage du droit : Essais de Jurilinguistique* (1982) directed by Jean-Claude Gémar and it has since been a fruitful framework of study with many contributions following on its footsteps in Canada and outside it: *Jurilinguistique: entre langues et droits. Jurilinguistics: Between Law and Language* (Gémar and Kasirer 2005), *Langue et droit : terminologie et traduction* (Gréciano and Humbley 2011), just to name a few.

As this research aims to describe the legal terminology used by a specific community of experts, i.e. Canadian and Portuguese judges, like Cornu (2005) we find it relevant to view legal language as a double-sided entity. The terminological dimension of it will be dealt in Chapters 4 and 5, in which we describe part of the

terminology of Canadian and Portuguese judgments. As for its discursive dimension, the following sections account for general and specific characteristics of what is called *legal language* (section 2.1.1) and argue for the notion of “genre” as a necessary tool to the understanding of legal discourse and ultimately to the interpretation of terminology (section 2.1.2).

2.1.1. Characteristics

Legal language or legal discourse is often said to display a set of specificities that make it different from other specialized discourses such as medicine and computing. Law has an intimate relationship with language as well as with socio-cultural traditions.

2.1.1.1. Law and language

The relationship between law and language is considered *sui generis* because law needs language in a specific way: language is the means of expressing and making the law. This means that legal texts are at the same time law’s main resource and object, i.e. “language is the medium, process and product in the various arenas of the law” (Maley 1994: 11). Consequently, the linguistic and pragmatic mechanisms that generate the imperatives or effects of legal texts contribute both to expressing the conceptual universe of the domain and to expressing the legal operations necessary to the accomplishment of specific legal dispositions. Language as the medium, process and product of law explains, for instance, why legal writings of both practitioners and academics have an influence on any legal doctrine (Heutger 2004).

Legal language is also considered vague as it cannot predict all scenarios of human behaviour that the law attempts to regulate. It, therefore, needs to be reinterpreted and redefined by lawmakers, judges and scholars not only for specific cases but also for keeping up with social evolution (Kasirer 1994; Mellinkoff 1983).

Legal language is considered normative as it is related to norm creation. Law creates norms in different ways such as by means of legislation, judgments and legal acts. The instruments of norm creation can vary from one legal system to another as well as from one country to another. Laws are written not only to convey knowledge but also to guide human behaviour in society. This does not mean that legal language is the only specialized language that is normative and prescriptive (Harvey 2002), but most experts tend to agree that legal discourse typically exhibits this characteristic.

Legal language is considered performative insofar as legal effects are obtained by the use of speech acts (Cao 2007: 15). Legal experts call this performative function “constitutive” (Garzone 2000: 4). Language can create legal relations where none existed before, e.g. wedding ceremonies. Verbs play an important role in this respect.

Finally, legal language is considered “polysemous” (Šarčević 1991) because it is composed of a large set of seemingly non-specialized terms, i.e. units that have come to be used in everyday language, but that have a specialized meaning in legal texts due to the legal effects that they create or simply because they occupy a certain place in the conceptual system. The polysemy of legal language may be related to the vagueness that characterizes it. Lorente et al. (2008: 1) explain that:

El discurso jurídico es objeto de interés para la lingüística textual y la traducción, debido a que se suele caracterizar como un discurso estilísticamente opaco, codificado por y para expertos juristas, mientras que al mismo tiempo está dirigido a hablantes no expertos. [...] Uno de los aspectos más interesantes del discurso jurídico, desde el punto de vista lingüístico, es la proximidad de sus recursos léxicos respecto del léxico general de la lengua. Palabras comunes como *demanda*, *denuncia*, *pena*, *reglamento*, adquieren en el discurso jurídico un significado y un valor pragmático estrictos por los efectos o consecuencias legales que pueden tener. Puede parecer paradójico, pero es precisamente a través de este léxico tan cercano al léxico común, inserido en estructuras complejas y fijadas en el uso, que el discurso jurídico consigue esa opacidad estilística a las nos referíamos.

Translation:

Legal discourse is interesting for text linguistics and translation because it is often characterized as a stylistically opaque discourse that is codified for and by legal experts at the same time that it targets non-expert speakers. [...] From the linguistic point of view, one of the most interesting aspects of legal discourse is the proximity of the lexicon to the general lexicon of the language. Common words like *claim*, *complaint*, *sentence*, *regulation*, acquire in legal discourse a specific meaning as well as a pragmatic value due to the legal effects or consequences that they can have. It may seem paradoxical, but it is precisely by means of this closeness to the common lexicon together with the use of fixed and complex structures that legal discourse obtains the stylistic opacity to which we referred.

Gémar (1991) gives an interesting example of the seemingly banality of certain terms that appear in legal texts: the English term *information* when put in the context of the article 785 of the *Criminal Code of Canada* does not mean a “piece of information” but “denunciation”.

2.1.1.2. Law and culture

If law has an intimate relationship with language, this means that the “legal language” used in one linguistic community may differ from the “legal language” used in a different one. Legal language is, therefore, said to be *culture-bound*. Even though the abstract concept of law may be universal, legal language itself is not universal because different countries can have different legal systems with different institutions, procedures, etc., due to their varying legal histories. As Šarčević puts it: “Each country has its own legal language representing the social reality of its specific legal order” (1985: 127).

Taking Gémar’s example (2008: 329), although one easily understands the meaning of the terms *Rule of Law* and *État de droit*, these terms refer to different national traditions and therefore need to be understood in the light of the culture in which they are used. The French term necessarily means something different depending

on whether one is referring to France in the context of the *V^e République* (1958) or to the monarchical Belgium. In the same way, the English term refers to a principle applied differently in Great Britain, which unlike many other countries does not have a single core constitutional document, or in the United States of America, a country based on the oldest written constitution (1787).

For Gémard (2008: 328), the cultural and notional asymmetry of the subject field of law and the resulting culture-bound terminologies can be more or less visible depending on the genre of texts:

Le texte juridique porte une charge culturelle plus ou moins lourde selon que l'on aura affaire à une production du législateur (constitution, charte, loi), du juge (décision de justice), de l'homme de la loi (acte juridique en général, contrat en particulier) ou de l'auteur de doctrine (traité de droit, article savant).

In fact, law is unusual in being system-bound because even if many different countries use the same language to convey and make law, legal discourse and legal drafting may vary considerably from country to country. For instance, German is used in Germany, Austria, Luxemburg, Italy and Belgium as the language of law, but in each one of these countries legal language differs as far as terminology as well as legal texts are concerned (Sandrini 2004). However, as Harvey (2002) rightly points out, law is not unique in this respect because religion and political science, which are historically related to law, are inseparable from the notion of systems as well.

2.1.1.3. (Un)translatability

Given the specificities of legal language discussed so far, it is not surprising that the possibility of translating legal texts and terms has been heatedly questioned. The debate on the (un)translatability of law relates to one more general question that has been debated philosophically over the centuries: is translation (in general) theoretically

possible? The question of translatability (or untranslatability) has been traditionally approached from two different points of views: the universalist view and the monadist or relativist view. According to de Pedro (1999), supporters of the former approach (e.g. Chomsky) claim that the existence of linguistic universals ensures translatability, whereas those who endorse the latter (e.g. Leibniz, Humboldt, Schlegel and Schleiermacher) maintain that each linguistic community interprets reality in its own particular way and that this jeopardizes translatability. Like the untranslatability debate in general, in law, too, this issue has been addressed from two points of view. Poirier (2005: 553) explains that:

Appliquée au droit, cette notion signifie que les concepts de deux systèmes juridiques différents ne peuvent être comparés entre eux parce qu'ils appartiennent à des cultures différentes et que pour cette raison ils ne peuvent pas être traduits d'une culture à l'autre.

At one end of the pole are those scholars who assert that law is incommensurable. Supporters of this position include scholars like David (1974) and Sacco (1991). In general, the main argument put forth is that law cannot be translated because it is consubstantial with language and therefore one of the most culturally impregnated domains. As a result, legal concepts alien to or non-existent in the target system are untranslatable. Criticisms of this point of view sustain that even terms such as *law*, *direito* and *droit* refer to different traditions depending on the reader being English, Portuguese or Québécois but are nevertheless translatable. Therefore, at the other end of the pole, many scholars consider that legal translation is feasible and highly productive because it is a socio-cultural need (Mounin 1965; Harvey 2002). Supporters of this position also argue that even though legal translation is not an easy task, it can take place by means of a continuum of equivalence (Cao 2007: 32). Contrary to the universalist approach of the translatability debate in general, which maintains that languages share universals, untranslatability is viewed here as an abstract concept that serves to highlight the degree of complexity of legal translation.

The (un)translatability debate of law is relevant for legal translation as well as for terminology, because the anisomorphism of legal languages raises challenges when it comes to finding equivalents of system-bound terms. One example of this is the polemics around the translation of the Portuguese legal term *arguido*, which was even given an entry in Wikipedia because of the “Maddie case” that started in 2007. The story of the 3-year-old Madeleine McCann, who disappeared in May 2007 while on holiday with her parents and twin siblings in the south of Portugal, was known worldwide due to its huge media coverage. The investigation into her disappearance involved the co-operation of the British and Portuguese police and demonstrated the differing methodologies employed by each, with regard to such aspects as the amount of information released to the public and the legal status of those involved in the case. As the police investigation progressed, Maddie’s parents, Kate and Gerry McCann, were granted the *arguido* status. British people following the case of their compatriots did not know what *arguido* meant.

Portuguese Criminal Law makes a distinction between *arguido* and *suspeito* (suspect). An *arguido* is someone who is being treated by the police as more than a witness but has not necessarily been arrested or charged. They can choose to enter this status of their own volition or by being nominated by the police. In contrast, a *suspeito* is someone who is thought of as having committed or participated in a crime or who is about to commit or participate in a crime and they cannot enter this status voluntarily (Antunes 2004). British Criminal Procedure does not make the same distinction due to its different criminal system. As a result, reporters writing on this case faced the problem of explaining what an *arguido* was because there is no perfect English equivalent for it. The equivalents proposed were *suspect* and *formal suspect*. We consider *formal suspect* closer to *arguido* than *suspect* which is the equivalent of *suspeito*. When the *arguido* has already been charged, then the equivalent is *defendant*. We will refer back to this in section 2.2.3.

2.1.2. Genres

According to G emar (2008) legal texts have three characteristics that make them different from other kinds of texts: norms, legal terminology and genre-bound style of writing. Since the previous section addressed the most important characteristics of legal language, it is now necessary to concentrate on the discursive side of legal language and review the notion of “genre” which has been considered relevant for corpus-building and terminology interpretation. The genre approach alongside with the sublanguage approach (Hoffmann 1985) can offer a perspective and a description apparatus to account for domain-specific communication. As Engberg (2010) explains, instead of looking at the subject of the text when defining the sublanguage, the point of departure in the genre analysis approach is primarily the situation and function of the text.

2.1.2.1. Definition of genre

The notion of “genre” has been discussed in a wide range of areas, including folklore studies (Propp 1969), literary theory (Bakhtin 1986; Fowler 1982), the sociology of language (Bergmann and Luckmann 1995; Guenther and Knoblauch 1995), applied linguistics (Adam 1999; Biber 1988; Biber 1993), discourse analysis (Bhatia 1993; Maingueneau 1998; Rastier 1989; Swales 1990), just to name a few. In the literature of applied linguistics and discourse analysis, the terms *genre*, *discourse type* and *text type*¹ have sometimes been used interchangeably, this reflecting different theoretical perspectives as well as the development of the research in this area. For instance, Anglo-Saxon scholars did not usually differentiate between *genre* and *text type* until the work of Biber (1988).

¹ German-speaking scholars have used an even wider range of terms: *Textsorte*, *Gattung*, *Texttyp*, *Textform* and *Fachtextsorte* (cf. Gl aser 1990).

For Biber (1988, 1993), *genre* (e.g. guidebooks, poems, business letters, newspaper articles) refers to texts that are similar according to situational or external criteria and are defined on the basis of systematic non-linguistic criteria (e.g. intended audience, purpose, context), whereas *text type* refers to texts that are similar with respect to their linguistic form (e.g. argumentative texts, descriptive texts), irrespective of genre categories, and may be defined on the basis of cognitive categories or linguistic criteria (e.g. patterns in the use of verb tenses, lexical patterns, modals).

The French tradition has been dissonant with regard to this distinction. Rastier, who differentiates between *text* and *discourse*, argues that these two are linked by means of the notion of “genre” and that “text type” refers to the textual functions most common within a “discourse genre” (Rastier 1989: 40). In contrast, Adam (1999), who does not draw a clear line between text and discourse, argues that *genre* refers to a type of socio-discursive practice and that the term *text type* is simply not appropriate because “l’unité « texte » est trop complexe et trop hétérogène pour présenter des régularités linguistiquement observables et codifiables” (Adam 1999: 82).

As for Costa (2005), text and discourse are interdependent entities, i.e. there is no text without discourse and discourse is usually instantiated by means of text (either orally or in written form). According to the author, *text* implies the notion of “discourse” articulated by a given individual in a specific point in time and place. From this perspective, it can be inferred that one of the specificities of specialized discourse consists in it being used by experts in a socioprofessional and temporal context. This way, legal, commercial and medical discourses are examples of types of specialized discourse in that they refer to instructionalized and situational communication between experts of specific domains.

Genre studies are consensual in describing genre as the empirical category necessary for the production and reception of texts by discourse communities (of both subject field experts and lay people) that draw upon genre knowledge to perform effectively. It is an empirical category because members of a given discourse community possess what Gläser (1990) calls *Textsortenkompetenz* (genre competence), and, therefore, are able to identify and differentiate between several genres.

Interestingly, Paltridge (1997) views genres as frames (in the Fillmorean sense) because, he argues, anyone with a working knowledge of the appropriate conventions can tell whether a given text is a recipe, a novel or a judgment. This assumption is corroborated by the creator of the Frame Semantics theory when he writes that (Fillmore 1982: 117):

Knowing that a text is, say, an obituary, a proposal of marriage, a business contract, or a folktale, provides knowledge about how to interpret particular passages in it, how to expect the text to develop, and how to know when it is finished. It is frequently the case that such expectations combine with the actual material of the text to lead to the text's correct interpretation. And once again this is accomplished by having in mind an abstract structure of expectations which brings with it roles, purposes, natural and conventionalized sequences of event types, and all the rest of the apparatus that we wish to associate with the notion of 'frame'.

Genres are necessarily based on social conventions and on historical evolution. As products of dynamic societies, genres need to be contextualized in both time and place because they can change along with society. Genres are cultural products because genre conventions can vary from one society to another. Nevertheless, instantiations of genres are said to share similarities in the communicative function (or “communicative event” to use Swales (1990) terminology), in the macrostructure and in the discursive mode of developing the macrostructure. In this research, it will be shown that texts of the same genre written by communities of experts working within two different national

and legal systems reveal similarities and differences in the way the genre frame is instantiated (cf. Chapter 4).

Genres are also usually attributed labels (e.g. judgment, contract, deed) that are recognized by at least some of the members of a given community if not all. Established members of a community will have a greater knowledge and understanding of the genres used in it than new members, outsiders or apprentices (Alcaraz and Hugues 2002; Bhatia 1993; Gläser 1990). For instance, in the academic context, Master's students will have more difficulties in writing scientific articles than post-doctoral researchers because the former typically dispose of less experience to produce this kind of text genre.

2.1.2.2. Legal genres

“Est juridique tout discours qui a pour objet la création ou la réalisation du droit” (Cornu 1990: 21). This point of view is also shared by Engberg (1993) who points out that newspaper articles on legal topics are not legal texts. However, unlike Cornu (1990), Engberg (1993) provides a tripartite classification of legal texts (Figure 1) in which texts that do not directly create law are considered as being part of legal discourse (i.e. descriptive texts).

For Engberg (1993) and for Trosborg (1995) too, legal discourse is identifiable against pragmatic criteria such as the legal institutions responsible for the production of texts, the experts involved in it and the communicative function of texts. Although Engberg's typology (1993) of legal texts is based here on the notion of “text types” and not on “genre”, he mentions that sources and theories of law may constitute criteria for distinguishing legal genres that are grouped together into text types.

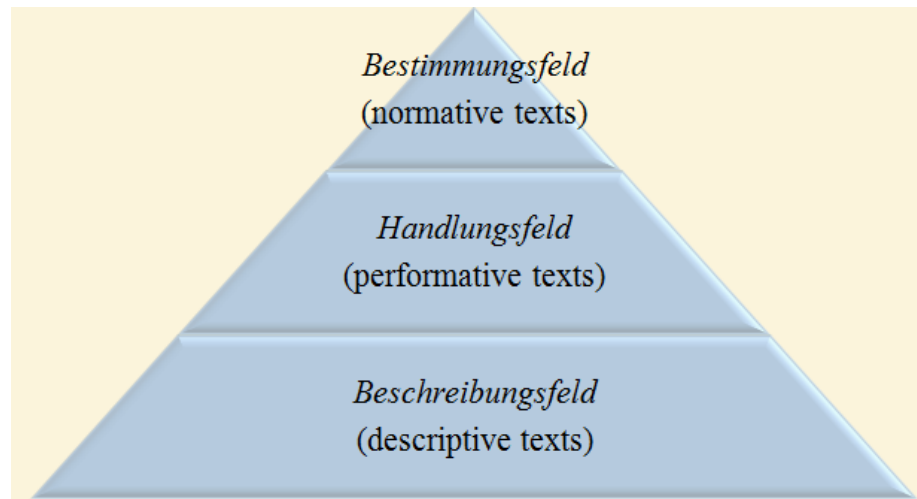


Figure 1. Typology of legal texts based on Engberg (1993)

In contrast, Trosborg (1995) presents a taxonomy of legal language that illustrates how different communicative situations of texts give rise to different discourse and text genres (Figure 2).

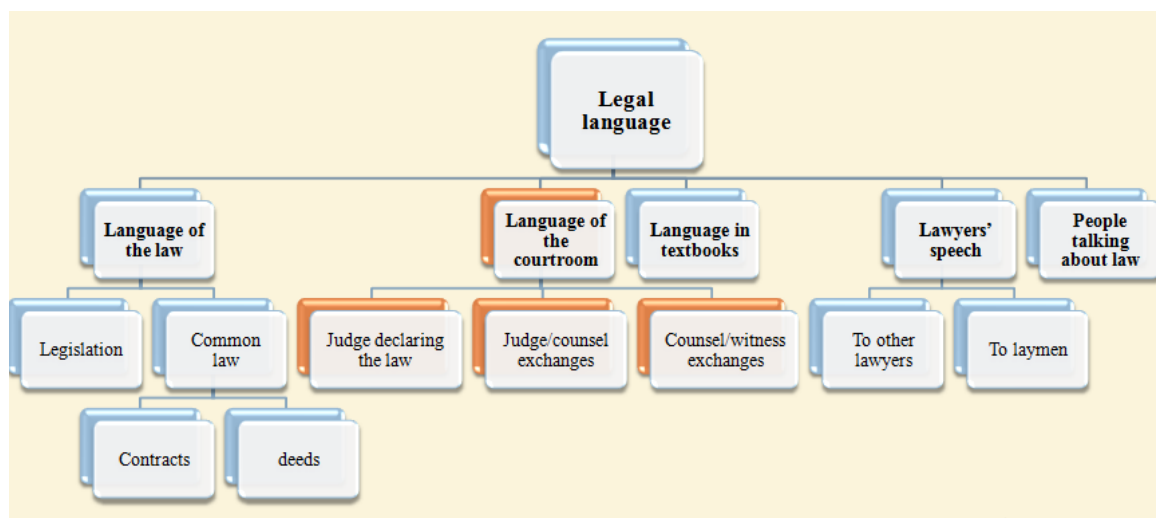


Figure 2. Taxonomy of legal language developed by Trosborg (1995)

The author argues that the language of the law is to be distinguished from other types of legal language, as, for example, the language used in the courtroom, the language of legal textbooks, the language used to talk about the law in a formal as well as in an informal setting. According to this hypothesis, legislation, contracts and deeds are text genres that fit in a category other than the category to which judgments belong. Reasons for the differences between these kinds of texts reside in the socio-pragmatic aspects underlying the notion of genre. For instance, legislative texts (acts, statutes, bills) have higher regulative functions than deeds. Doctrinal texts (legal textbooks) have no regulative function, but rather an informative one. Judicial texts (judgments, orders, decisions) have verdictive functions (e.g. *to acquit*, *to convict*) which consist in “the delivering of a finding, official or unofficial, upon evidence or reasons as to value or fact, so far as these are distinguishable” (Austin, 1962: 152 (cited by Trosborg 1995)).

More recently, legal discourse has been classified by taking into account the legal and linguistic system in which it is produced. Orts Llopis (2009) proposes the following classification of legal genres in the Common Law (Figure 3). According to the author, there are three types of written legal discourse that are related to the conceptual organization of the subject field of law: discourse on public law, discourse on private law and the discourse of doctrine and jurisprudence. Some text genres are typical of a given type of discourse and may only be produced in that context for pragmatic reasons related to the conceptualization of the subject field. For example, wills are a private legal instrument that cannot be enacted as statutes can. They can thus be said to be separate legal genres.

This kind of classification of legal genres is interesting because it is based on the legal system in which they are produced and, as a result, it allows one to identify differences in legal genres typologies across nations. The same author also presents a classification of legal genres used in Civil Law Spain and identifies differences between

the two typologies. For example, public law in Spain is not divided into “unenacted” and “enacted” law. Legal genres used in this type of discourse are: *códigos* (Eng. statutes), *leyes parlamentarias* (Eng. enactments), *legislación delegada* (Eng. delegated legislation) and *jurisprudencia o sentencias* (Eng. judgments).

WRITTEN LEGAL DISCOURSE

PUBLIC LAW:

a) UNENACTED LAW

- LAW REPORTS (JUDGEMENTS)
- SUBPOENAS, SUMMONS, INJUNCTIONS

b) ENACTED LAW

- ENACTMENTS, STATUTES
- DELEGATED LEGISLATION

PRIVATE LAW: LEGAL INSTRUMENTS

- WILLS, DEEDS, UNDERWRITINGS
- PRIVATE AGREEMENTS: POWERS OF ATTORNEY, DIVORCE AGREEMENTS
- CONTRACTS

- LEASES
- SALES CONTRACTS
- INTERNATIONAL SALES CONTRACTS:

- EXPORT DOCUMENTS: Bills of Lading, Letter of Credit, Charter Parties
- INSURANCE POLICIES: INSTITUTE CARGO CLAUSES
- ARBITRATION CLAUSES

DOCTRINE AND JURISPRUDENCE: TEXTBOOKS, CASEBOOKS, ARTICLES, MANUALS

Figure 3. Legal genres in Common Law (Orts Llopis 2009)

2.1.2.3. Judgments

Judgments are one among many legal genres. If one considers Engberg’s classification, judgments are both normative and performative texts (Figure 1). If one considers Trosborg’s classification (Figure 2) judgments can be said to correspond to the broad category of “the language of the courtroom” and more specifically to “judges declaring law”. If one considers Orts Llopis classification (2009), Common Law and Civil Law

judgments belong to the branch of public law which is, however, organized differently in the two legal systems.

Judgments are the final decision in a legal dispute which determines “winners and losers” (Songer 2008: 78). They are written not only for the benefit of the parties involved in the case, but also for the benefit of legal profession, for the benefit of other judges and for the benefit of appellate Courts. In some jurisdictions (e.g. Canada), judgments may set a precedent which is always binding on lower courts. In all cases, they are written by judges working in tribunals or courts. For this reason, judgments as a legal genre are intimately related to the role of courts and, by implication, to the role of judges which is that of providing arbitration of particular disputes. According to the Canadian expert Gall (2004: 209):

[t]he role of our courts is to provide a fair and just resolution of the various problems and conflicts that are brought before them. The attainment of justice, through the instrumentality of fair and impartial proceedings, defines the essential nature of the function of our system of courts in Canada. [...] Essentially, that process is an exercise in the search for truth. Upon the discovery of the truth, through an application of our rules of procedure and rules of evidence, the courts then exercise a decision-making jurisdiction, after which the appropriate disposition is made. [...] our system of judicial decision-making is based on the assumption that the search for truth is best conducted in the context of an adversarial system.

In contrast, in Portugal, the judicial decision-making system is based on the assumption that the search for truth is best conducted in the context of an inquisitorial system. While in the adversarial system, two or more opposing parties gather evidence and present the evidence as well as their arguments to a judge or jury, in the inquisitorial system the judge is responsible for supervising the gathering of the evidence necessary to resolve the case by steering the search for evidence and questioning the witnesses, including the respondent or defendant.

In Canada as in Portugal, disputes that are resolved before the courts can deal with a multitude of areas of human concern reflected in the many specialized areas of law. Judges are given jurisdiction over certain areas of the law that depend on the organization of the nation's system of courts and law. For example, criminal law suits tend to be resolved in specialized courts or court divisions. Figure 4 illustrates the progression of a law suit according to the Brazilian Criminal Proceedings which are similar to the Portuguese Criminal Proceedings (Figure 4).

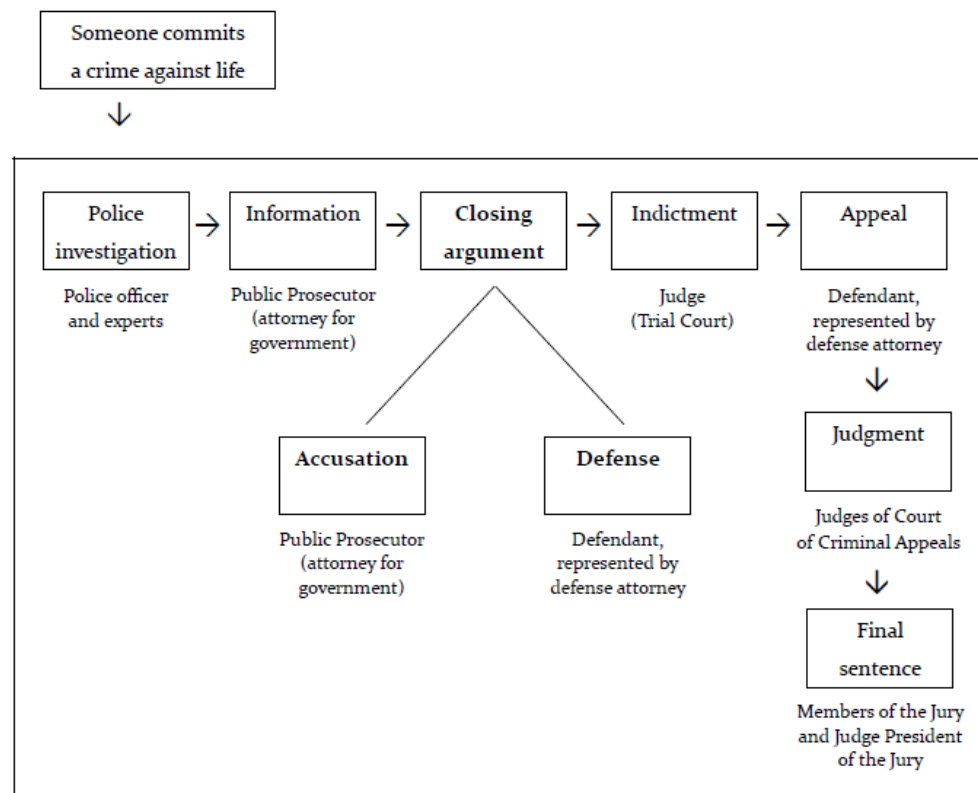


Figure 4. Progression of a law suit according to the Brazilian Criminal Proceedings (Fuzer and Barros 2009)

Initiating a law suit is often the last resort when two parties fail to come to an agreement, or when one party feels wronged by the other. Fuzer and Barros (2009)

explain that after the police investigation (in which the author of the crime is charged) the parties should present all their considerations, report the facts in detail, and describe what happened from the opening of the police inquiry to the moment of the closing argument. The basic function of the closing argument is to request the defendant's conviction or acquittal and/or the reduction of the sentence. The parties should construct their thesis (of accusation and defence) according to the types of crimes defined by the Penal Code, because penalties will be applied according to this classification. The judge decides which request from the parties is more valid, taking into account their arguments. When the parties are not satisfied with the outcome of the judge's decision they can appeal to Courts of Criminal Appeal.

Studies on judgments have focused on several of the aspects that characterize this legal genre. Bhatia (1993) and Maley (1985) have concentrated on the macrostructure of judgments, on the realization of its communicative purposes through language, and on their intertextual characteristics. In particular, Bhatia (1989) has argued that this kind of information can be useful for teaching English for Academic Purposes. The author (1993: 118) explains that legal cases display a four-move structure, which corresponds to its conventionalized internal structure and fulfils communicative purposes. In move one, the case is identified. In move two, the facts of the case are identified. In move three, the case is argued by stating the history of the case, by presenting the arguments, and by deriving *ratio decidendi* (the principle of law that the judge wished to set down for application to future cases of a similar description). Finally, move four corresponds to the final decision.

Judgments have also been studied from a bilingual/binational point of view. For instance, Engberg (1997) compared the linguistic and textual conventions of Danish and German judgments, namely by investigating the speech acts performed within the genre so as to point to differences in the use of these devices in German and Danish

judgments. He argues that knowledge about textual conventions is fundamental in the search of appropriate translation equivalents.

Recently, Vesterager (2010) compared Danish and Spanish judgments in terms of their move structure and rhetorical strategies so as to better understand the challenges that the translation of judgments pose to translators. She reached the conclusion that Danish and Spanish texts display many similarities (Vesterager 2010: 221):

[...] they share the same purposes of the analysed moves and use some of the same rhetorical strategies to comply with these purposes. For instance both languages use legal terminology to help place the judgment in its proper context, and their choice of verbs and grammatical tense supports the purpose of the moves. Moreover, in order to be able to express something of general validity, both languages prefer the impersonal writing style. Furthermore, in Danish as well as in Spanish the conclusion of the judgment is traditionally initiated by a standard formula, doubtless with the purpose of ensuring the legal effect of the document.

However, the comparison of Danish and Spanish judgments also revealed a few differences in the move structure. Danish judgments include larger parts of the co-text (information about the text) whereas the Spanish judgments only include the conclusion reached by the previous court instance (move one). Spanish judgments include more information in move four (e.g. information on appeal opportunities, payment of the counsel's fee and confirmation of the judgment) than Danish judgments. The main differences between the texts are related to syntax (e.g. sentence length and syntactic complexity measured by degree of subordination) and to the lexicon (mainly legal terminology and lexical variation). According to the author, the translation of Spanish judgments into Danish is challenging due to these differences.

In contrast with Engberg (1993) and Vesterager (2010), who compare judgments produced within the same legal system (Civil Law), in this research we propose to compare judgments produced within two different legal systems, i.e. Portuguese

judgments (Civil Law) and Canadian judgments (Common Law). To the best of our knowledge, no such comparative study has been carried out so far. Chapter 4 includes a section on the analysis of these legal texts as well as a comparison of both and Chapter 5 describes the most relevant verbs in the texts, the scenarios in which they participate as well as their equivalents.

2.1.2.4. Genres, corpus design and terminology interpretation

Although genre has always been a consideration in the organisation of general corpora and an important issue in corpus design, it was not until recently that terminologists started reflecting on genre as a criterion for the design of specialized corpora (Aussenac-Gilles and Condamines 2007; Condamines 2008; Costa 2001, 2004, 2005; Meyer and Mackintosh 1996; Rogers 2000).

Aussenac-Gilles and Condamines (2007: 140) state that: “La prise en compte de la notion de genre permet de constituer des catégories de textes censés avoir les mêmes caractéristiques extralinguistiques et les mêmes régularités linguistiques.” The idea is that the notion of “genre” can be useful for terminologists who use corpora to describe terminological data. The delimitation of the subject field of which the corpus should be representative so as to establish the boundaries of the terminology that one aims to describe is a task that has to be completed at an early stage of the terminologist’s work. One way of doing this is by taking genres as a means of characterization of the various aspects of specialized discourse.

Rogers (2000) argues that genre, as a concept which has a classificatory role, is an important means of structuring corpora in order to facilitate the interpretation of terminological data. From this point of view, it can be inferred that corpora should be first constituted according to extralinguistic criteria (genres) and only then can their linguistic features (terminology) be observed and interpreted. This is in line with

Mainueneau (2004) for whom building a corpus is a “sociological task” carried out before its linguistic analysis can begin.

Thus, we can formulate the hypothesis that knowledge about judgments as a legal genre with a specific function, sender, receiver, institutional context, macrostructure or move structure and mode of developing it may be helpful for this research in many ways. Firstly, if building a corpus is indeed a “sociological task”, we can acquire extralinguistic knowledge on the specialized corpus. Extralinguistic knowledge is important for legal terminography due to the characteristics of legal language mentioned earlier on in this chapter (e.g. conceptual anisomorphism, vagueness). For instance, we may want to select texts that are comparable in terms of their conceptual systems because we learn that conceptual systems typically differ from one legal system to another. What is more, each legal genre typically presupposes a specific conceptualization. Therefore, genre knowledge, by assuming that texts that belong to the same genre share certain extralinguistic similarities, could allow us to comfortably delimit the branch of law as well the kind of specialized communication we wish to cover so as to constitute a representative and comparable corpus which is essential for the goals of the research.

Secondly, extralinguistic characteristics of genres could be of assistance in the methodology we use in this research (Chapter 4). For instance, we learn that the parties involved in a law suit have to present arguments in their defense and that judges, too, have to provide argumentation for their decisions. We learn that this corresponds to one of the mandatory moves of judgments. Then, we may consider argumentation as particularly relevant in the specialized corpus. This piece of information related to what mandatorily and frequently happens inside the judgment scenario can help us make better informed decisions on the verbs we wish to choose from a list of candidate terms,

i.e. we may want to select argumentation verbs. Thus, we make the hypothesis that genre knowledge may guide us in the task of term selection (Chapter 4).

Thirdly, the same kind of information mentioned above may also be useful for describing the selected verbs by means of semantic frames (Fillmore 1976, 1977, 1982, 1985; Fillmore and Atkins 1992). If we understand that argumentation is a mandatory frame in the judgments and that both the parties and the judges have to provide for it, the frame Argumentation could be described accordingly: an ARGUER (the parties and the judges) has to provide ARGUMENTS to justify their position in a given moment of the judgment scenario.

Finally, we can also hypothesize that genre knowledge may be helpful for assigning equivalents and explaining the higher or lower equivalence degree between terms in that it presupposes that the instantiations of a given genre may reveal similarities and differences in its characteristics. Therefore, partial equivalence can be explained by examining such differences.

2.2. Equivalence

This sub-chapter investigates the theoretical grounds of equivalence in lexicography and in terminology as well as the methodologies of equivalent selection proposed in these two disciplines. More specifically, the sub-chapter discusses the nature and the types of equivalence formulated in the literature (e.g. semantic equivalence, functional equivalence, terminological equivalence); it explains equivalence problems (e.g. anisomorphism, culture-dependant terminology); it presents classifications of equivalence degrees (e.g. full equivalence, partial equivalence, zero equivalence); finally, it surveys methods and practices of establishing equivalence in lexicography and in classic descriptive terminology (e.g. how do lexicographers and terminographers

find equivalents in a systematic way?). Since one objective of the research is to understand the phenomenon of equivalence so as to develop a methodology for the selection of equivalents of specialized verbs, we do not focus on the matter concerning the presentation of equivalents in dictionaries. This topic is, nevertheless, among the future research perspectives.

Throughout this sub-chapter, it will be argued that theoretical grounds of equivalence are more developed in lexicography than in terminology, that they differ sometimes quite radically, and that considerations on the methodologies put forth by lexicographers and terminologists to identify and choose equivalents are not fully satisfactory. By the end of the sub-chapter we will have provided arguments to the effect that a methodological approach to the establishment of terminological equivalence based on the concepts evoked by terms as well as on their syntagmatic behaviour is the most suitable approach for the identification of equivalents.

2.2.1. Definitions of equivalence

Over the last decades, lexicographers and terminologists have formulated distinct definitions of equivalence for two main reasons. Firstly, the concept of “equivalence” originally stems from disciplines such as logic, mathematics and physics, in which it is considered a transitive, reflexive and symmetric relation. It then became a concept used in general language and one that was also adopted and heatedly debated in translation studies, some of the theories developed here influencing both lexicography and terminology. We will not go into details on the debate that exists in translation studies over the theoretical grounds of equivalence because it is out of the scope of the research. The extent to which theories developed in translation studies influenced lexicography and terminology will only be dealt with when appropriate.

The second reason why lexicographers and terminologists have formulated distinct definitions of equivalence lies in the fact that they adopt or are expected to adopt radically different approaches or methodologies to the compilation of dictionaries. The former typically adopt a semasiological approach, in which the need to present equivalents for every source language lexical item has long led lexicographers to reflect on the phenomenon of equivalence. In contrast, most terminologists adopt an onomasiological approach that aims first and the foremost to document concepts and reduce ambiguity in expert communication. Van Campenhout (2001) rightly comments that compared to metalexigraphy considerations on equivalence found in terminology manuals are much poorer. We agree with him when he writes that this can be explained by the normative view in classic terminology (Van Campenhout 2001: 3):

Dans la logique viennoise, sont réputés équivalents les termes qui expriment un même concept. La problématique de l'équivalence partielle n'est pas niée, mais elle est davantage décrite comme un problème à éviter que comme un fait à gérer dans le plus grand respect des différences culturelles.

But even in lexicography, equivalence requires more thorough studies. The metalexigrapher Wiegand (2002: 241) argues that the concept of equivalence still needs to be defined specifically for dictionary research and be differentiated from the concepts from neighbouring disciplines. Adamska-Sałaciak (2010) seems to agree that this has not yet been fully accomplished in lexicography. We will try to demonstrate that, in this respect, the situation in terminology is not much different and that the concept of equivalence is either simplified or even rejected here. The main question guiding this section is then: what is equivalence?

Adamska-Sałaciak (2010: 387) reminds us that “to be able to talk about equivalence, there must be (at least) two entities of some kind, a certain relationship between those entities, and a certain value of that relationship”. This statement generates a further number of questions that were raised in Werner (1999), in Wiegand

(2005) and most recently in Adamska-Sałaciak (2010). Some of the questions Adamska-Sałaciak raises are similar to those raised by Wiegand (2005) but are not limited to them. From our point of view, these questions are so relevant to understand what the phenomenon of equivalence involves that we will reproduce them here (Adamska-Sałaciak 2010: 387-388):

1. *At what level of organization should one look for the entities between which the relationship of equivalence obtains?*
2. *What exactly are those entities?*
3. *What is the nature of the relationship between them (e.g. identity, interchangeability, similarity, correspondence)?*
4. *What is the feature according to which the relationship is established or measured (e.g. meaning, reference, message, effect)?*
5. *Is equivalence a unitary concept or should different types thereof be recognized?*
6. *Is equivalence 'discovered' (does it exist prior to being established by the lexicographer) or is it 'created' by the lexicographer's act?*
7. *Are the answers to 1-6 in agreement with the findings of linguists and translation theorists?*

The following sections proceed as follows. Firstly, we summarize the answers the author provides for the first six questions concerning specifically the literature on bilingual lexicography. We will not refer to the seventh question because it is out of scope of our project. Secondly, we comment on the answers the author provides for lexicography by directly or indirectly confirming or refuting the author's views. Finally, we attempt to answer the same questions regarding the practices adopted by terminologists so as to compare the theoretical grounds as well as the types of equivalence formulated in lexicography and in terminology.

2.2.1.1. *Langue and parole*

[Q1] “*At what level of organization should we look for the entities between which the relationship [of equivalence] obtains?*”

While studying equivalence, the first important aspect that needs to be examined is that of the levels at which equivalence can be formulated. Is equivalence a systemic or interlingual phenomenon because language is viewed as a system? Is equivalence a textual or intertextual phenomenon because language is viewed as a text? Or is equivalence both systemic and textual?

Adamska-Sałaciak (2010) explains that this distinction is based on the different approaches taken by translation studies and by lexicography. Using the Saussurian distinction between *langue* and *parole*, generally, in translation studies, equivalence is seen as a phenomenon belonging to the level of *parole* because it has to do with instantiations of language in texts. In contrast, in lexicography, equivalence is seen as a phenomenon that belongs to the level of *langue* in that the equivalence relationship only exists between units (words or expressions) that are given in a lexicographic product. Despite the distinction between systemic and textual levels, Adamska-Sałaciak (2010) rightly points out that, at first sight, one would think that lexicographic equivalence must be formulated at the systemic level but, in fact, it is formulated at both levels.

We remind the reader that Zgusta (1971: 294) wrote that “the basic purpose of a bilingual dictionary is to coordinate with the lexical units of one language those lexical units of another language which are equivalent in their lexical meaning” (systemic level). However, as Adamska-Sałaciak (2010: 388) notes, with the use of corpora lexicographers have come to apply both types of equivalence, “the intertextual type appearing in those instances where the source language (henceforth, SL) unit to be provided with an equivalent is larger than a single word”. Wiegand (2002: 245) takes a more radical position by arguing that:

the *langue*-related concept of equivalence of contrastive lexicology is inappropriate for bilingual lexicography, because bilingual dictionaries are not conceptualised as aids for contrastive studies of language systems [...] They are rather meant, in the first place, as a means to understand and produce foreign texts and to make translations in both directions.

Although we think that contrastive studies of language systems could be useful for the understanding and the production of foreign texts (either originals or translations) or that contrastive lexicology and lexicography are, at least, not entirely unrelated, we agree with Wiegand that the level of equivalence being sought by both is radically different. Whereas equivalence is a “*langue*-related concept” in contrastive lexicology, equivalence should be intertextual in lexicography. Thus, Wiegand argues that the concept of equivalence in metalexicography should be *parole*-related even if this brings it closer to the concerns of translation theory and that it should not be reduced to lexical items.

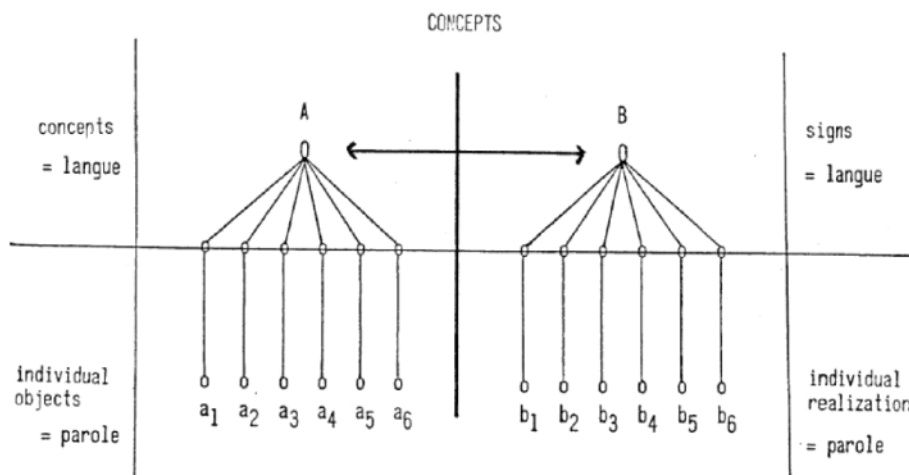


Figure 5. Wüster's four-word model (Picht and Draskau 1985: 93)

As for terminology, equivalence is generally formulated here at the “conceptual” level, i.e. two terms are equivalents if their conceptual properties coincide against the background of a specialized field. This raises the question whether concepts are

independent from language. If concepts belong to *langue* and not to *parole*, as Wüster's four-word model (1968) seems to suggest (Figure 5), then equivalence can be equated at the systemic level. In his model, elaborated from that of Saussure (1972 [1916]), Wüster considers the concept (A) and the sign (B) as two separate entities united arbitrarily and places the concept in the upper part of the diagram representing the language system. Thus, by placing *langue* as the level of organization at which the relationship of equivalence obtains, the textual level, at which equivalence is also formulated in lexicography, seems to be neglected.

Recently, however, the question on the level of organization at which the relationship of equivalence obtains in terminology has been debated in Rogers (2007). She argues that terminologists are increasingly using running texts to extract lexical data and when they move between text and system they do not necessarily find the same equivalents. This suggests that, as in lexicography, the intertextual type of equivalence is also taken into account in some kinds of terminology work.

Le Serrec et al. (2009) is a case in point. The authors use a term extractor (TermoStat) as well as a lexical aligner (Alinea) to identify and extract relevant equivalents for pre-defined candidate terms extracted from a climate change corpus. When searching for equivalents in corpora, the authors observed that: 1) "a term in language L1 can have more than one equivalent in the corpus of language L2"; 2) "a term that belongs to a given part of speech may be rendered by a term that belongs to a different part of speech"; 3) "terms expressed in language L1 may be translated by an anaphora (a more generic term or a pronoun) in language L2" (Le Serrec et al. 2009: 83-84). The third observation clearly illustrates that the intertextual type of equivalence is radically different from the interlingual type.

2.2.1.2. Concepts and designations

[Q2] “*What exactly are those entities [between which the relationship of equivalence obtains]?*”

Here, it is a matter of examining whether the phenomenon of equivalence is established between word senses, concepts or designations. For Adamska-Sałaciak’s (2010) the entities between which the relationship of equivalence is obtained can, on the one hand, be word senses: “when we talk about a lexical item X in the SL being equivalent to a lexical item Y in the TL, what we mean is that X *in a particular sense* is equivalent to Y *in a particular sense*”. On the other, if one accepts senses are artefacts of lexicographic analysis as some authors defend they are (Wierzbicka 1992, 1993; Rivelis 2007), the entities have to be words or expressions. For Wiegand (2005: 21), the entities are “lexikalsemantische Einheiten”, a notion which roughly corresponds to that of “lexical units” (Cruse 1986), i.e. words or expressions taken in one of their senses.

Interestingly, the International Standards Organisation (henceforth, ISO) defines equivalence as “the relation between designations in different languages representing the same concept” (ISO 1087-1 2000: 30). So, although we mentioned previously that equivalence is formulated at the conceptual level, the definition of equivalence provided by ISO (2000) seems to suggest that the entities in question are a matter of designations more than a matter of concepts. Rondeau’s definition of equivalence also mentions designations but is not limited to them (1981: 33):

Deux termes, T1 et T2, de différentes langues, L1 et L2, sont considérés équivalents parfaits si la dénomination D de la L1 partage une relation identique avec la dénomination D de la L2, et le concept C de la L1 partage une relation identique avec le concept C de la L2.

For Rondeau, both designations and concepts are the entities between which the relationship of equivalence is obtained. This is because Rondeau views terms as

Saussure views linguistic signs. For Rondeau, terms are composed of a designation and a concept, which constitutes a viewpoint different from that of Wüster (cf. Figure 5).

We can formulate two hypotheses on why sometimes equivalence is defined as a relationship between concepts and some other times as a relationship between designations. Firstly, ISO (ISO 1087-1 2000) identifies three types of relations between designations of concepts, i.e. synonymy, antonymy and equivalence. Each of these is defined as a kind of relation between two or more designations. Thus, equivalence is a relation between designations in different languages. However, most terminologists disagree with such formulation of equivalence and reiterate that equivalence is a relation between concepts and not designations or “terms” (Felber and Budin 1989). Secondly, for a very long time partisans of the classical approach to terminology believed that designations should be ‘transparent’ and reflect the concept and the place the concept occupies in the conceptual system (Felber and Budin 1989: 123). Thus, if designations mapped concepts, it would not make a difference to formulate equivalence either as a relation obtained between designations or as a relation established between concepts.

2.2.1.3. Similarity and interchangeability

[Q3] *“What is the nature of the relationship between them [the entities] (e.g. identity, interchangeability, similarity, correspondence)?”*

The phenomenon or the “relationship” of equivalence, as Adamska-Sałaciak calls it, is most often seen as a matter of similarity and interchangeability between two or more of the entities to which we referred in the previous section. Therefore, question 3 addresses the nature of equivalence.

Adamska-Sałaciak examines the definitions of ‘equivalence’ and ‘equivalent’ provided in the *Oxford English Dictionary online* (henceforth, *OED online*) as well as

in Hartmann and James (1998: 51) and concludes that the nature of the relationship described in both dictionaries slightly differs:

OED online

equivalence

1.a. The condition of being equivalent; equality of value, force, importance, significance, etc.

equivalent (n.)

2. A word, expression, sign, etc., of equivalent meaning or import.

equivalent (a.)

1. Equal in value, power, efficacy, or import.

2. Having equal or corresponding import, meaning, or significance: chiefly of words and expressions.

Dictionary of Lexicography (Hartmann and James, 1998: 51)

equivalence

The relationship between words or phrases, from two or more languages, which share the same MEANING. Because of the problem of ANISOMORPHISM, equivalence is ‘partial’ or ‘relative’ rather than ‘full’ or ‘exact’ for most contexts. Compilers of bilingual dictionaries often struggle to find and codify such translation EQUIVALENTS, taking into account the directionality of the operation. In bilingual or multilingual TERMINOLOGICAL DICTIONARIES, equivalence implies interlingual correspondence of DESIGNATIONS for identical CONCEPTS.

This way, the relationship between words or expressions or phrases is one of equality or correspondence for the former dictionary and one of “sharing (meaning)” or “corresponding (meaning)” for the latter.

According to ISO’s definition quoted previously (2000: 30), the relationship between designations is one of “sameness” and *Termium* (2011) also formulates the relationship in the same terms:

*Termium Plus***equivalence**

match

DEF - The relationship that exists between terms designating the same concept in different languages. Where the concepts designated are not quite the same, the equivalence of the terms is only partial and must be reflected in the semantic labels (e.g. generic-specific) used to identify the relationship between the terms.

OBS – Normally the validity of the equivalence is demonstrated by the textual match.

Interestingly, the observation field (“OBS”) suggests that interchangeability is a characteristic of the equivalence relationship as “the validity of the equivalence is demonstrated by the textual match”, i.e. two terms in different languages are equivalents when they can be used in the same situational context. This is in line with the view of equivalence as a relationship that is obtained at the textual level to which we referred in section 2.2.1.1.

Termium’s definition along with that of Hartmann and James (1998: 51) also stress that the relationship may not be symmetrical, an idea shared by other terminologists. Probably because of this, Picht and Draskau (1985) prefer to formulate the nature of the relationship between equivalent entities in terms of “congruence” (of systems of concepts). They argue that the use of a ‘system of concepts’ is an important aid in the elaboration of a terminology, namely because it enables one to recognize “the degree of congruence between the systems of concepts of different languages; this in turn is indispensable for the recognition of equivalence” (1985: 92). To sum up, both in lexicography and in terminology the nature of the equivalence relationship is one of more or less symmetrical correspondence.

2.2.1.4. Semantic content and collocational context

[Q4] “*What is the feature according to which the relationship is established or measured (e.g. meaning, reference, message, effect)?*”

This question may seem redundant when compared to the previous one, but it is not. Whereas Q3 focuses on the nature of equivalence itself, Q4 concentrates on the ways in which the nature of equivalence can be perceived by lexicographers. What matters here is the methodology for identifying the equivalence relationship.

Adamska-Sałaciak explains that the *OED online* allows the feature according to which the equivalence relationship is measured or compared to be one of the following: *import, meaning, importance, significance, value, force, power* or *efficacy*, whereas Hartmann and James (1998: 51) only mention *meaning* as the feature according to which the equivalence relationship is measured or compared. From our point of view, the dictionaries’ and Adamska-Sałaciak’s answer is not very helpful as there is little theoretical consensus on what *meaning* is.

Other interesting and interrelated answers to Q4 that are extremely relevant for this research can be found elsewhere in the literature. The first one is provided in Werner (1999) and in Wiegand (2005). These authors consider the context and cotext (“Kontext und Kotext”) of the entities an important feature according to which the relationship of equivalence can be measured, an idea also shared by Atkins and Rundell (2008). For them, there is not only one feature according to which the relationship of equivalence between lexical units is measured, but several ones: semantic content, collocational context, vocabulary type, message and function. They note that: “The first four of these factors relate to lexical items while the last is principally of interest when you’re looking for equivalents of grammatical items” (Atkins and Rundell 2008: 468).

For Atkins and Rundell, “semantic content” refers to what other linguists call denotation, reference and cognitive meaning. So, semantic content designates “the ‘literal’ meaning of an expression together with its ‘connotation’ or any figurative meaning that may be associated with it” (Atkins and Rundell 2008: 469). Usually, two words denoting the same object such as *tiger* and *tigre* form an exact match of semantic content.

“Collocational context” is an important feature according to which the relationship of equivalence between lexical units is established because sometimes collocates in the SL produce different translations in the TL (Figure 6). *Bunch* has different equivalents in French depending on whether it collocates, for instance, with *flowers* as in *a bunch of flowers* or *bunch of hair*. The French equivalent of *bunch* as in *bunch of flowers* is *bouquet* and the French equivalent of *bunch* as in *bunch of hair* is *touffe* or *houpe*. The same is valid for verbs and adjectives (Figure 6).

<p>bunch <i>n</i> [<i>flowers, watercress, herbs</i>] bouquet <i>m</i>; [<i>hair</i>] touffe <i>f</i>, houpe <i>f</i>; [<i>bananas</i>] régime <i>m</i>; [<i>radishes, asparagus</i>] botte <i>f</i>; [<i>twigs</i>] poignée <i>f</i>, paquet <i>m</i>; [<i>keys</i>] trousseau <i>m</i>; [<i>ribbons</i>] nœud <i>m</i>...</p> <p>grow <i>vi</i> [<i>plant, hair</i>] pousser; [<i>person</i>] grandir; [<i>animal</i>] grandir, grossir; [<i>tumour</i>] grossir; [<i>crystal</i>] se former...</p> <p>dark <i>adj</i> ... (c) complexion mat; skin foncé; hair brun; eyes sombre...</p>

Figure 6. Example of the importance of collocational patterns for evaluating equivalence (taken from *Collins Robert French Dictionary: French-English/English-French* (2006) in Atkins and Rundell 2008: 470)

“Vocabulary type” refers to register, style, attitude, etc. that can cause SL-TL mismatches. For instance, an informal expression should have an informal expression as equivalent. “Message” refers to those cases in which the literal meaning of a phrase is different from its underlying meaning or “pragmatic force”. For example, the French equivalent of the English expression *birds of a feather flock together* is *qui se ressemblent s’assemblent*.

Another very relevant answer to Q4 comes from one of the authors that Adamska-Sałaciak cites but to which she does not pay sufficient attention. For Piotrowski (1994), the feature according to which the relationship of equivalence should be established needs to be equated as a third external entity or “tertium comparationis”. He explains that “in order to be able to compare two entities it is essential to have a third one against which both could be described, evaluated, etc.” (Piotrowski 1994: 128).

The “tertium comparationis” should be external to both entities and it should also be something practical. Briefly, according to the author, referents or concepts as described in the semiotic triangle are not appropriate “tertium comparationis” principles because “there are no pure references, i.e. the act of distinguishing a referent depends to a large degree on the relevant language” and concepts “are not suitably external to any language” (Piotrowski 1994: 129). Neither is meaning because he rightly argues there is little theoretical agreement on what meaning is. Instead, the “tertium comparationis” should consist of two dimensions: a “situational dimension” and a “formal dimension”.

The “situational dimension” corresponds to the discursive dimension and as such it relates to culture: “Situations, in turn, cannot be separated from wider contexts, ultimately from the context of culture. That is why lexical comparison is ultimately based on cultural comparison” (Piotrowski 1994: 131).

The “formal dimension” corresponds to the collocational patterns of lexical items. As Atkins and Rundell (2008), Piotrowski believes collocational patterns should be compared so as to establish equivalents. However, he adds that only the most typical frequent collocability patterns, or “focal collocations”, should be taken into account. He further explains that the two dimensions mentioned are not only theoretical but that, in fact, bilingual lexicographers work on their basis intuitively, because lexicographers usually start from the formal dimension and then go on to the situational analysis. His position concerning equivalence can thus be summarized in his own words (Piotrowski 1994: 138):

Generally our approach to equivalence is in agreement with the theoretical view that meaning, however defined, is carried by larger linguistic expressions rather than by single lexemes, advocated by some logicians (e.g. Quine 1969) and by some linguists (cf. Apresjan 1974/80; Mel’čuk and Pertsov 1987).

[...]

In our approach equivalence does not hold between single lexemes in L1 and L2, or between their senses, but between whole syntagmatic expressions, i.e. between collocability patterns which contain lexemes.

As we will attempt to demonstrate similar positions to equivalence in terminology are only adopted by those terminologists who follow a lexicographic approach to the elaboration of specialized lexical resources. In fact, the feature according to which the relationship of equivalence should be established is not entirely clear or explicit in the literature on terminology. While explaining the onomasiological approach on which the search for equivalence should be based, Felber (1987: 128) states that “La compréhension d’une notion est l’ensemble des caractères qui constituent cette notion. C’est pourquoi comparer deux notions revient plus ou moins à comparer les caractères de ces notions”. However, he does not specify the characteristics to which he refers. Other answers in the literature refer to the place the concept occupies in the conceptual system of the specialized field, which can be inferred from the statements such as the following ones (Arnzt 1993: 6 and 13):

A concept can only be understood in the context of the system to which it belongs. Thus, before comparing two languages, it is first necessary to draw up or discover the independent systems of concepts existing in each individual language.

[...]

Basically, two terms can be considered as equivalent when they match in all characteristics, i.e. when there is conceptual identity.

The identity of content of the terms derives from the fact that they occupy the same position in both systems. So, it seems that conceptual characteristics are the features according to which the relationship of equivalence has been measured in terminology. However, not all terminologists adopt the onomasiological approach and those who adopt a lexico-semantic / lexicographic approach as well as a theoretical view of meaning closer to that defined by Piotrowski (1994) will not usually proceed as Arnzt (1993). Rather, they will take into account the collocability patterns of terms. This is, for instance, the case of L'Homme (2008).

In DiCoInfo (L'Homme 2008), a specialized lexical resource that describes the terminology of the subject field of computing and the Internet in English, French and Spanish, equivalents of terms are selected on the basis of the analysis of their actantial structures. The actantial structure roughly corresponds to the obligatory participants of predicative and quasi-predicative terminological units. The actants are identified by analyzing the patterns of collocates observable in a large amount of concordances. Although some actants are not always linguistically instantiated, they are mandatory meaning slots. Therefore, in DiCoInfo, equivalent terms contain the same number and type of actants (Table 1).

For instance, *email*₂ and *courriel*₂ are equivalents because they have three similar actants: Destination, Agent and Instrument. *Courriel*₂ cannot be an equivalent of *email*₃ because terms instantiating the actant Patient, part of *email*₃, do not have equivalents in *courriel*₂. Another example of what Piotrowski called the “formal

dimension” present in DiCoInfo is the fact that the syntactic behaviour of *email*₁ and *email*₂ can provide clues to the correct use of their equivalents. The countable and uncountable distinction of *email* (*email*₁) vs *an email* (*email*₂) corresponds to *un courriel* (*courriel*₁) and *du courriel* (*courriel*₂).

Table 1. Equivalent terms in DiCoInfo

English terms	French terms
email ₁ , n an email: ~ sent to Destination{recipient ₁ } by Agent{sender ₁ } with Instrument{email ₃ }	courriel ₁ , n. m. un courriel : ~ envoyé à Destination{destinataire ₁ } par Agent{expéditeur ₁ } avec Instrument{courrier électronique ₁ }
email ₂ , n email: ~ sent to Destination{recipient ₁ } by Agent{sender ₁ } with Instrument{email ₃ }	courriel ₂ , n. m. du courriel : ~ envoyé à Destination{destinataire ₁ } par Agent{expéditeur ₁ } avec Instrument{courrier électronique ₁ }
email ₃ , n email: ~ used by Agent{user ₁ } to send Patient{message ₁ } to Destination{recipient ₁ }	courrier électronique ₁ le courrier électronique : ~ utilisé par Agent{utilisateur ₁ } pour envoyer Patient{message ₁ } à Destination{destinataire ₁ }

Further considerations on this work and on how equivalents of specialized verbs are established will be drawn in sub-chapter 2.3.2. For the moment, it is important to add that in DiCoInfo the “situational or discursive dimension” of terms is not explicitly described. We believe this can be explained by the fact that the subject field of computing and the Internet is taken to be a relatively culture-independent domain whose terminology does not differ immensely from language to language in terms of “situational dimension”. The same, however, cannot apply to culture-bound domains such as Law in which the discursive intricacy of terms can be of utmost importance (cf. sub-chapter 2.1). Here, indeed, the use of an entity entirely external to the entities of the equivalence relationship, as advocated by Piotrowski (1994), could be of great

assistance to identify and validate candidate equivalents. Instead of calling this external entity *tertium comparationis*, in this research we will call it *frame*. Chapter 3 accounts for the theoretical basis of frames which will be used in Chapter 4 to link candidate equivalents.

2.2.1.5. Equivalence types

[Q5] *“Is equivalence a unitary concept or should different types thereof be recognized?”*

The discussion developed in the previous sections indicates that definitions of equivalence may vary. This section investigates why equivalence may not be a unitary concept and lists the kinds of equivalence that can be identified in the literature.

Based on the comparison of the definitions of equivalence included in the lexicographic works that she quotes, Adamska-Sałaciak (2010) argues that equivalence is not a unitary notion. She corroborates this conclusion with a review of literature as well as with a review of the terminology used to refer to the equivalence relationship. Another argument she seems to put forth is that the existence of degrees in the correspondence or sameness relationship that characterizes equivalence may explain the difficulty in elaborating a single definition of what lexicographic equivalence is. The author supports this argument with a reference to Sovran (1992) who demonstrates that “similarity” and “sameness” are not unitary concepts themselves. It follows that equivalence defined as a “similarity” or “sameness” relationship between at least two entities cannot be a unitary concept because the nature of the relationship itself is not unitary. Thus, although terminological variations do not necessarily mean that different phenomena are being discussed, some are. Based on the literature review, Adamska-Sałaciak then presents a classification of the several types of equivalence:

- *cognitive equivalence* (also called *semantic, systemic, prototypical, conceptual, decontextualized, notional*);
- *explanatory equivalence* (also called *descriptive*);
- *translational equivalence* (also called *insertable, textual, contextual*);
- *functional equivalence* (also called *situational, communicative, discourse, dynamic*).

To use the distinction made earlier in this sub-chapter, the first two types of equivalence can be considered interlingual while the last two are intertextual. Before examining each type of equivalence, it is important to mention that in terminology, in contrast with lexicography, not many types of equivalence such as the ones listed above are discussed. In fact, one could well say that, in terminology, there is one only kind of equivalence, i.e. terminological equivalence, although some authors also call it *conceptual equivalence* (Arnzt 1993; Bach et al. 2000). As there are differences in the definition of and approach to equivalence in lexicography and in terminology, we consider it relevant to add a fifth type of equivalence called *terminological equivalence* to the four types of equivalence presented above and that will be discussed below.

Cognitive equivalence

According to Adamska-Sałaciak, the *cognitive equivalence* refers to what Zgusta (1987: 30), Gouws (2000: 102) and Svensén (2009: 255) call *semantic*, to what Hausmann and Werner (1991: 2745) call *systemic*, to what Cop (1991: 2776) calls *prototypical*, and to what Piotrowski (1994: 134) calls *cognitive*. All these terms mainly differ in emphasis because they all describe equivalents whose function is to convey the meaning of a given linguistic unit and not necessarily to substitute it. Thus, Zgusta (1987: 30), Gouws (2000: 102) and Svensén (2009: 255) prefer the term *semantic* to emphasize the denotational identity of lexical items. Hausmann and Werner (1991: 2745) prefer the term *systemic* (interlingual) to differentiate it from the *translational* equivalence type

(intertextual). Cop (1991: 2776) uses the term *prototypical* because she wishes to emphasize the fact that full semantic identity of lexical items is rare and, as a result, what an equivalent must cover is the prototypical sense of a headword and not necessarily its less central senses. Finally, Piotrowski uses the term *cognitive* so as to place emphasis on “all relevant dimensions of meaning” (1994: 139). He also explains that this kind of equivalence is one of the means of restricting the number of equivalents in a bilingual dictionary given the fact that lexicographers sometimes have to cope with the infinitude of equivalents. A simple example of cognitive equivalence is that of *tiger* and *tigre* provided in Atkins and Rundell (2008: 469) that denote the same object and form an exact match of semantic content.

Most terminologists do not use the terms *cognitive equivalence* or *semantic equivalence*, but this kind of equivalence is the one that corresponds the most to *terminological equivalence*, as we will demonstrate later on. However, terminologists who adopt a lexico-semantic approach instead of a conceptual one will refer to equivalence as an interlingual semantic relation or as a relation between terms with the same meaning (as opposed to a relation between terms denoting the same concept). For instance, L’Homme (2004: 115) writes that “des termes sont équivalents lorsqu’ils ont les mêmes composantes sémantiques”, and for van Campenhoudt (2001) equivalent terms are those terms who share the same “sememes” or the same “semantic charge”.

Explanatory equivalence

Explanatory equivalence or *descriptive equivalence* are terms used by Zgusta (1971: 319) and Svensén (2009: 255) to refer to free phrases that provide information about the lexical unit of the target language. Svensén (2009: 257) cautions that “explanatory equivalents should be distinguished from those (mainly encyclopaedic) explanations that are used when there is no target-language expression at all”, because as Zgusta said “if stabilized and accepted into the language, it can become a lexical unit of the target

language” (2006 [1979]: 235). Adamska-Sałaciak explains that this type of equivalence has the same objective of conveying meaning as the cognitive type of equivalence, but while it is always possible to provide an explanatory type of equivalent it is not always possible to provide a cognitive one. Svensén (2009: 255) provides the example of *Kriegskind* whose explanatory equivalent is *child born during the war*. Terminologists never refer to this type of equivalence except when mentioning the strategies for coping with the absence of equivalents. In lexicography, explanatory equivalence is usually contrasted with the translation type of equivalence, to which we will refer next.

Translational equivalence

Cop (1991: 2776) calls it *insertable*, whereas Zgusta (1971: 319), Hausmann and Werner (1991: 2745), Piotrowski (1994: 134) and Svensén (2009: 255) call it *translational*. The translational equivalent must be a lexicalized unit of the target language that can be inserted in the running target-language text, and that has an explanatory power, although to a lesser extent than the explanatory equivalent. Svensén (2009: 255) provides the example of *Kriegskind* whose translational equivalent is *war baby*.

In terminology, Chromá (2004) mentions this type of equivalence in a similar sense to the aforementioned lexicographers. Nielsen (1994) seems to use this term in the sense of “semantic equivalence” because he states that the establishment of translation equivalents is the linguistic task of bilingual lexicography. He explains that in the subject field of law it is not always possible to provide “real lexical units in the target language which express exactly the same meaning as their respective source language terms owing to the different legal systems and terminological incongruency” (1994: 157).

Functional equivalence

Zgusta (1987: 30) calls it *functional*, Gouws (2000: 102) calls it *communicative*, and Svensén (2009: 255) calls it *pragmatic*. Adamska-Sałaciak explains that functional equivalence is sought “in situations where it is impossible to provide a lexical equivalent of the headword, one which would be both its semantic and grammatical (same part of speech) counterpart” (2010: 395). Functional equivalents are most often used when one wants to capture the stylistic and idiomatic overtones of the text. Compared to translational equivalents their explanatory power is smaller. It is upon this type of equivalence that bilingual dictionaries have relied the most to offer equivalents of idioms or proverbs. For instance, *porter de l'eau à la rivière* is a functional equivalent of *to carry coals to Newcastle*. As an intertextual kind of equivalence per excellence, this kind of equivalence seems to be close to the concerns of translation theorists, especially to the concerns of the functionalist approach or Skopos theory (Reiss and Vermeer 1984; Vermeer 1989), among others. Adamska-Sałaciak claims that ‘functional’ equivalence is our odd man out as, compared to the other kinds, it is the most marginal one. She accepts it as a type on its own right, although she says one could think of treating it as a subtype of translational equivalence.

We agree with the author that this type of equivalence is different from the others for the reasons mentioned and that it is a type on its own. Functional equivalence is close to the concerns of translation studies and of legal translation (Šarčević 2000: 236), but it has also been applied in legal terminography to such an extent that its importance cannot be denied. Harvey (2002 : 42) defines functional equivalence as follows :

Ce procédé consiste à trouver dans la langue d'arrivée un référent qui remplit une fonction similaire. Il s'agit d'une adaptation interculturelle. On peut citer comme exemples : « the Cour d'Assises – roughly the equivalent of the English Crown Court » (Chalmers, 1994 : 15) ; *intime conviction* = *being satisfied*

beyond reasonable doubt (Bridge, 1994: 173) ; hypothèque = mortgage (Bridge, 1994: 152).

In fact, most terminologists concerned with the elaboration of legal dictionaries often reflect on the notion of functional equivalence and they do it either to accept it (Groffier and Reed 1990; Sandrini 1995, 1996, 1999; Chromá 2004) or to reject it (de Groot 1990; Šarčević 1991, 2000). Section 2.2.4 gives further details on the approaches adopted by these authors.

Another notion that has been used in legal translation is the ‘principle of legal equivalence’ which is akin to functional equivalence. Briefly, according to this principle, legal translation will seek to achieve identity of meaning between original and translation, i.e. identity of propositional content as well as the identity of legal effects (Sager 1994: 180). For all these reasons, it seems that this type of equivalence cannot be discarded in legal terminology.

2.2.1.6. Creation and discovery

[Q6] “*Is equivalence ‘discovered’ (does it exist prior to being established by the lexicographer) or is it ‘created’ by the lexicographer’s act?*”

If one accepts senses are artefacts of lexicographic analysis as some authors defend they are (Wierzbicka 1992, 1993; Rivelis 2007), it is very relevant to ask whether the establishment of equivalents is a matter of creation or discovery.

For Adamska-Sałaciak, cognitive equivalence is *discovered* while explanatory equivalence, translational equivalence and functional equivalence are *created*. She thus seems to disagree with Hartmann (2007 [1985]: 16) when he claims that “lexical equivalence does not exist until it has been established as a result of a bilingual conscious act”. Werner (1999: 1867) also believes that equivalence is created with a

particular purpose in mind: “Äquivalenzen zwischen lexikalischen Einheiten verschiedener Sprachen bestehen nicht an sich, so dass sie nur entdeckt werden müßten. Sie werden nicht objektiv festgestellt, sondern zu einem bestimmten Zweck hergestellt”².

We agree with Adamska-Sałaciak that explanatory equivalence, translational equivalence and functional equivalence tend to be created, although they can always be discovered if one uses corpora to identify equivalents, especially parallel corpora. As for cognitive and terminological equivalence, lexicographers and terminologists may well wish to believe they discover equivalents that existed prior to being established, but it may happen that in the process of “discovery” they identify several equivalent candidates and then have to choose among them. This choice obviously corresponds to an intervention mechanism and the decision of the lexicographer and terminologist is thus a “conscious act” like Hartmann puts it.

2.2.2. Equivalence problems

Equivalence is not always easy to establish for two main reasons. Firstly, the organization of concepts and designations inside and between languages often differs. This phenomenon is called *anisomorphism*. Secondly, connotations, or the feelings which speakers of a certain language connect with certain words may also be difficult to describe and hence to compare between languages. This research is primarily interested in the first problem as connotations usually play a less relevant role in terminologies.

Yong and Peng (2007) explain that anisomorphism is most typically encountered in cultural words, categorical words, encyclopaedic terms, and technical terms. Al-Kasimi (1977) presents seven possible differences that may exist between two related

² Our translation: “Equivalence between lexical units of different languages does not exist in itself in that it would have to be discovered. It cannot be determined objectively, but created for a particular purpose.”

items in different languages, whereas Yong and Peng (2007) put forth five categories of anisomorphism: cultural, linguistic, componential, extralinguistic and specialized anisomorphism.

An example of linguistic anisomorphism is when languages differ in the grammatical category of gender. For instance, the word *sea* is masculine in Portuguese (*o mar*) whereas in French it is feminine (*la mer*). An example of specialized anisomorphism is that of the Portuguese term *arguido* and the English term *suspect*, to which we referred in sub-chapter 2.1.1. Portuguese Criminal Law makes a distinction between *arguido* and *suspeito* (suspect). An *arguido* is someone who is being treated by the police as more than a witness but has not been arrested or charged. They can choose to enter this status of their own volition or by being nominated by the police. In contrast, a *suspeito* is someone who is thought of as having committed or participated in a crime or who is about to commit or participate in a crime and they cannot enter this status voluntarily (Antunes 2004). British Criminal Procedure does not make the same distinction because the criminal system is different.

For other authors, anisomorphism is to be explained from a conceptual point of view, i.e. the number of concepts is not the same in two different languages and/or the conceptual systems may differ in structure (Svensén 2009). Well-known examples of the difference in the number of concepts are the Eskimo language, which has a large stock of concepts relating to snow compared to other languages, and Arabic, which is similarly equipped in regard to camels. Usually, this phenomenon takes place when a given reality or object plays a particularly important role in the culture of the linguistic community. Table 2 illustrates a situation in which the structure of conceptual systems differs from one language to another.

Table 2. Anisomorphism: example of differences in the conceptual structures (adapted from Svensen 2009)

Meaning	Portuguese	French	German	Danish
tree	<i>árvore</i>	<i>arbre</i>	<i>Baum</i>	<i>træ</i>
heating material	<i>lenha</i>	<i>bois</i>	<i>Holz</i>	<i>skov</i>
construction material	<i>madeira</i>			
small area of trees	<i>bosque</i>			
large area of trees	<i>floresta</i>	<i>forêt</i>	<i>Wald</i>	

Each of the languages presented in Table 2 has a term for designating “a perennial plant having a self-supporting woody main stem or trunk (which usually develops woody branches at some distance from the ground), and growing to a considerable height and size” (definition of *tree* in *OED online*). However, not all four languages have a monoreferential term that exclusively refers to “heating material”. For instance, the French word *bois* can either refer to “heating material” or “construction material” or even “a small area of trees”, whereas Portuguese has distinct words for each meaning. In these particular cases, among the four languages Portuguese is the one which makes the most distinctions and Danish is the one which makes the less.

It is relevant to mention here that this kind of differences in the structures of conceptual systems raises an important problem when it comes to elaborating a bilingual or multilingual dictionary: directionality. For instance, the German equivalent of *lenha* is *Holz* but *lenha* is not always the equivalent of *Holz* as *madeira* can also be the equivalent of *Holz*. For this reason, if the dictionary user is looking up the Portuguese-German section of a dictionary, s/he will not have difficulty in choosing the right equivalent, but if s/he is looking up the German-Portuguese section, s/he should be informed that *Holz* translates in Portuguese in two different ways so that s/he chooses

the appropriate equivalent. This is because the relation between *lenha* and *Holz* is said to be one of 1:1 (one lexical unit in one language corresponds to another one only in another language), while the relation between *Holz* and its equivalents is one of 1:2 (one lexical unit in one language corresponds to two lexical units in a different language). We will refer further to this scenario of equivalence in section 2.2.3.

Still regarding the anisomorphism problem, interlingual comparison is said to be more favourable in the field of terminology (Arnzt 1993). This may be true if one thinks of scientific-technical fields because a tangible field of objects exists independently of the language concerned. For example, if we consider Wüster's English-French dictionary, *The Machine Tool* (1968), we will find that the vast majority of entries are organized as in Figure 7.

1015 UDC 621.9-229.39
stripper: A part of a shearing or punching machine (see 1382) which holds back the workpiece (1390) during the upward stroke (return stroke 1118) of the tool (1325).
arracheur; extracteur: Élément d'une cisaille ou d'une presse (voir 1382) retenant la pièce (1390) pendant le retour (1118) de l'outil (1325).

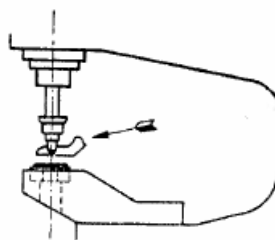


Figure 7. Example of an entry in Wüster's English-French dictionary, *The Machine Tool* (1968)

The number on the upper left side refers to the concept that is related with the previous and following numbered concepts. Below number 1015 is the English term *stripper* with a definition in English and below this are the French equivalents *arracheur* and *extracteur* accompanied by a definition in French. Definitions are written

in such a way that they are composed of smaller units referring to other concepts also described in the dictionary. In the vast majority of times, English and French definitions contain the same numbers, e.g. 1382, 1390, 1118 and 1325 (cf. Figure 7). Sometimes, there is even a picture to illustrate the concept being described. In Figure 7, the concept under 1025 has an English designation and two French ones that are perfect equivalents as all three can be defined in exactly the same way and they all represent the same object. In fact, this case of perfect equivalence between the French term and the English one can be found throughout most of the dictionary. However, Wüster also demonstrates that even in the vocabulary of mechanical construction interlingual divergences may exist (Figure 8).

From Figure 8 one can observe that there is no English designation for the concept 699, while there are two designations for it in French: *écrou à créneaux* and *écrou crénelé*. Concept 699 can be designated in English by means of two more specific terms, those indicated in 700 (*hexagon slotted nut*) and in 701 (*hexagon castle nut, castle nut, castellated nut, pinnacle nut*) which, in turn, have French equivalents different than those given in 699 (*écrou normal à créneaux, écrou HK (700); écrou haut à créneaux; écrou HKL (701)*). Similarly to the previously mentioned situation of anisomorphism in which the structure of conceptual systems differs from one language to another, French reveals here to have a term for a generic concept including concepts 700 and 701 whereas English has a hyperonym void.

As mentioned, Arnzt (1993: 5) argues that interlingual comparison is more favourable in the field of terminology because connotations play a secondary role as the conceptual content of the term is the most important aspect. We have attempted to demonstrate here that, although interlingual comparison may be more favourable in the field of terminology, this does not necessarily mean that there are no divergences at all in technical domains. In this section, we have also given the example of the specialized

anisomorphism between legal terms such as *arguido* and *suspect*. Bearing in mind the description of the most important characteristics of legal terminologies we provided in sub-chapter 2.1.1, it should be by now clear why interlingual comparison may be particularly challenging in the subject field of law.

699 UDC 621.882.32

> **hexagon slotted nut (700)** or > **hexagon castle nut (701)**: A hexagon nut (698) provided with a radial slot on each face for the reception of a split pin (767).

écrou à créneaux NF; **écrou crénelé VSM**: Ecrou hexagonal (698) muni d'une fente radiale sur chaque face pour recevoir une goupille fendue (767).

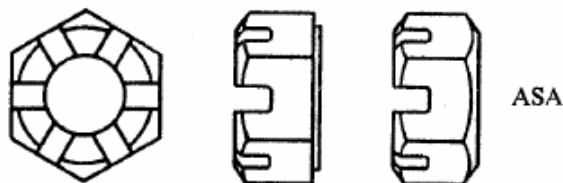
Vide spec. fig. 700, 701

700

UDC 621.882.32

hexagon slotted nut ASA: A nut, as defined under 699, whose external shape is similar to that of a non-slotted hexagon nut (698).

écrou normal à créneaux NF; **écrou HK NF**: Ecrou à créneaux (699) dont la forme extérieure est semblable à celle d'un écrou hexagonal (698) non crénelé.



701

UDC 621.882.32

hexagon castle nut ASA; **castle nut**; **castellated nut**; **pinnacle nut**: A nut, as defined under 699, whose slotted top is cylindrical.

écrou haut à créneaux NF; **écrou HKL NF**: Ecrou à créneaux (699) dont la partie supérieure, comportant les fentes, est cylindrique.

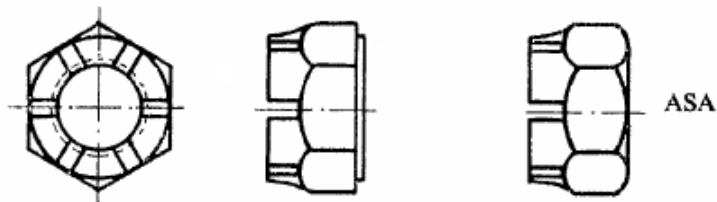


Figure 8. Interlingual divergences in Wüster's English-French dictionary, *The Machine Tool* (1968)

2.2.3. Qualitative and quantitative discrimination of equivalents

Due to the phenomena of anisomorphism and directionality, the first and last types of equivalence discussed in the previous section (cognitive equivalence and terminological) are usually attributed a gradation from full through partial to zero. Therefore, our next step must be to identify the typologies of degrees described in the literature as well as the criteria underlying them.

There are two different typologies: a qualitative one based on the nature of equivalence and a quantitative one based on the number of equivalents (Duda et al. 1986). The terminology used to refer to the different degrees of equivalence as well as the classifications thereof proposed in the literature vary widely. As for the qualitative typology of equivalence, most authors seem to agree that there are three main degrees of equivalence: full equivalence, partial equivalence and zero equivalence. Variations can be seen in the terminology used to differentiate types of partial equivalence.

In lexicography, Yong and Peng (2007) identify five types of partial equivalence: *analytical equivalents*, *approximative equivalents*, *synthetic equivalents*, *subordinate equivalents* and *superordinate equivalents*. Svensén (2009) distinguishes between *convergence* and *divergence*. In terminology, Felber (1987) distinguishes between *overlapping* and *inclusion*. Arnzt (1993) adopts the same classification. Nielsen (1994) talks about *inclusion* and *intersection*. Šarčević (2000) makes the same distinction but adds that functional equivalence is usually a type of partial equivalence. Van Campehoudt (2001) makes the same distinction as Nielsen but he specifies inclusion types: *inclusion and hyponymy* and *inclusion and meronymy*. Thiry (2006) concentrates on the reasons why equivalents are only partial.

Bearing in mind the gradation of equivalence and gathering up all the terms mentioned in the literature, we end up with the following scale of equivalence degrees reproduced in Figure 9.

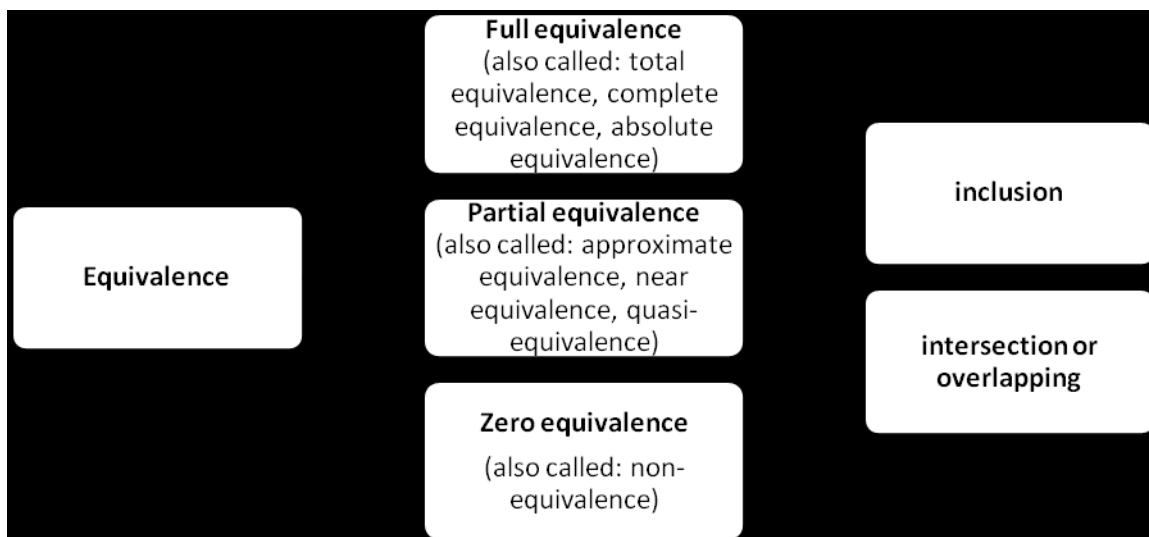


Figure 9. Equivalence degrees in terminology based on the review of the literature


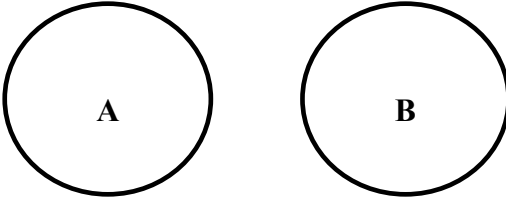
Full equivalence

Full equivalence occurs when there is an overall correspondence between the lexical unit in the source language and its counterpart in the target language in regard to semantic content, category, and conditions of use. Typically, full equivalents denote the same object (Table 3).

In terminology, full equivalence occurs when two terms in different languages designate the same concept. Thiry (2006: 804) notes that, most often, full equivalence co-occurs with literal, word-to-word correspondence, e.g. *responsabilidad civil extracontractual* and *responsabilité civile extracontractuelle*. Nevertheless, there may

be cases of full equivalence without literal equivalence, e.g. *capacidad natural de entender y querer* and *capacité aquilienne* (Thiry 2006: 804-808).

Table 3. Example of full equivalents

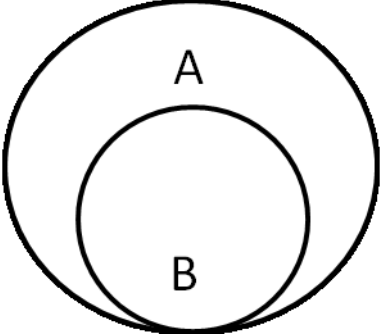
Lexical units	Meaning	Graphical representation of the relation
EN <i>table</i> (A)		
PT <i>mesa</i> (B)		

Partial equivalence

In lexicography, partial equivalence tends to be formulated as the situation in which a lexical unit in one language has the same semantic features as the lexical unit in the other language but includes others features that the equivalent does not include or has more or less features than the equivalent. Similarly, in terminology, partial equivalence occurs when: “Un terme T1 dans la langue L1 ne partage pas une relation identique avec un terme T2 dans la langue L2, quand le concept C dans la langue L1 ne correspond pas complètement au concept C dans la langue L2” (Rondeau 1981: 33). There may be different reasons why equivalents are partial:

- **Inclusion** – Terms do not have the same amount of semantic or conceptual traits in that one includes the other. They will, however, match up in terms of their *essentialia*, i.e. essential or necessary characteristics (Šarčević 1991). In Table 4, the *essentialia* shared by the two concepts are highlighted in bold. Term A denotes a wider concept than term B as the former contains *accidentalialia* (additional characteristics) not present in the latter.

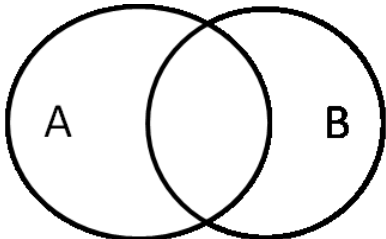
Table 4. Partial equivalence by inclusion

Terms	Meaning	Graphical representation of the relation
<i>cause de non-imputabilité</i> (A)	“ fait exonératoire ... qui empêche de considérer un fait dommageable comme une faute ... soit en établissant que l’élément psychologique fait défaut. ... soit parce que le fait provient d’une cause étrangère” (Thiry 2006 : 805)	
<i>causa de inimputabilidad</i> (B)	“ fait exonératoire ... qui empêche de considérer un fait dommageable comme une faute ” (Thiry 2006 : 805)	

- **Intersection** – Terms share a certain amount of semantic or conceptual characteristics but differ in others. In legal terminology, there are terms that have the same *essentialia* but their *accidentalia* are different because each has a specific value within its legal system. The *accidentalia* may refer to cases, theories, situations or proceedings which contribute to the meaning of the term. In Table 5, the term A denotes the same *essentialia* as term B which are highlighted in bold and basically correspond to the idea of “someone who the police have reasonable grounds to believe has committed an offence and to someone who is actually being detained”. However, the *accidentalia* of the two concepts are fundamentally different. Whereas the term *suspect* is used to refer to “a youth in the context of whether the police had reasonable grounds for believing that the youth had committed an offence”, the concept of *arguido* does not presuppose that the person be a youth. Whereas “a person can be called a *suspect* if a police officer has a hunch or intuition that he is involved in something illegal even if there is no proof at all”, the *arguido* status presupposes that there is strong evidence against the person. Finally, whereas an *arguido* has rights and duties because

he or she is given a relevant status in the case, a suspect does not have these same rights and duties or the same status in the case. For all these reasons, term A and term B denote concepts that intersect each other in their *essentialia* but that diverge completely in their *accidentalia*.

Table 5. Partial equivalence by intersection

Terms	Meaning
<i>suspect</i> (A)	<p>Regarding the term “suspect”, many of the cases that have interpreted and applied <u>s. 56(2) [of the Young Offenders Act, R.S.C. 1985, c. Y-1] and s. 146(2) [of the Youth Criminal Justice Act, S.C. 2002, c. 1]</u> have used that word to refer to a youth in the context of whether <u>the police had reasonable grounds for believing that the youth had committed an offence.</u> [...] for example, <u>a person can be called a suspect if a police officer has a hunch or intuition that he is involved in something illegal even if there is no proof at all, it can apply to someone who the police have reasonable grounds to detain for investigative purposes, it can apply to someone who the police have reasonable grounds to believe has committed an offence and to someone who is actually being detained—its use does not indicate which standard is being applied.</u> [...] R. v. S. (C.L.) (2011), [2011] M.J. No. 14, 2011 CarswellMan 14, 2011 MBQB 21 (Man. Q.B.) at para. 112 Beard J.</p>
<i>arguido</i> (B)	<p>Article 57, No 1 of the Code of Penal Procedure establishes that <i>arguido</i> is a person who is being accused or prosecuted in criminal proceedings. <u>Therefore, the <i>arguido</i> status corresponds to a procedural qualification attributed to a person that is being investigated, accused or prosecuted in criminal proceedings and that, therefore, is considered suspect of a crime.</u> <u>The <i>arguido</i> has rights (among others, the right not to tell the truth about the facts of which he or she is being accused, the right to silence, the right to appeal, the right to appoint a lawyer or request the appointment of a lawyer [...]) and duties (among others, the duty to respond truthfully about their identification, the duty to present themselves in all required stages of the case) [...].</u> Nowadays, the <i>arguido</i> of an accusatory case is considered a <u>“subject” in the procedure and not an “object”.</u> <u>According to Article 59 No 2 of the Code of Penal Procedure, the person thought to have committed a crime may be given the <i>arguido</i> status or they can enter it on their own volition</u> (Our translation from Prata 2010: 49).</p>
Graphical representation of the relation	 <p>A Venn diagram consisting of two overlapping circles. The left circle is labeled 'A' and the right circle is labeled 'B'. The two circles overlap in the center, representing the intersection of the two concepts.</p>

Zero equivalence

Zero equivalence can occur in three different situations. Firstly, there may not be a corresponding notion and designation in the target language. This is, for instance, the case of the Brazilian *caipirinha*. A *caipirinha* is a cocktail made of cachaça (sugar cane rum), sugar (preferably powdered) and lime. Although it is Brazil's national cocktail, it is almost unknown outside it.

Secondly, the notion exists but there may not be a designation in the target language. This is, for instance, the case of the *ombudsman*. *Ombudsman* is an originally Danish, Norwegian, and Swedish term that refers to a representative appointed by the government or by an organization who is charged with representing the interests of the public by investigating and addressing complaints reported by individual citizens. Countries other than Denmark, Norway and Sweden may know the notion but borrow the foreign term. Thirdly, the vast majority of semantic features or conceptual features of the source lexical unit or term is not included in the target one.

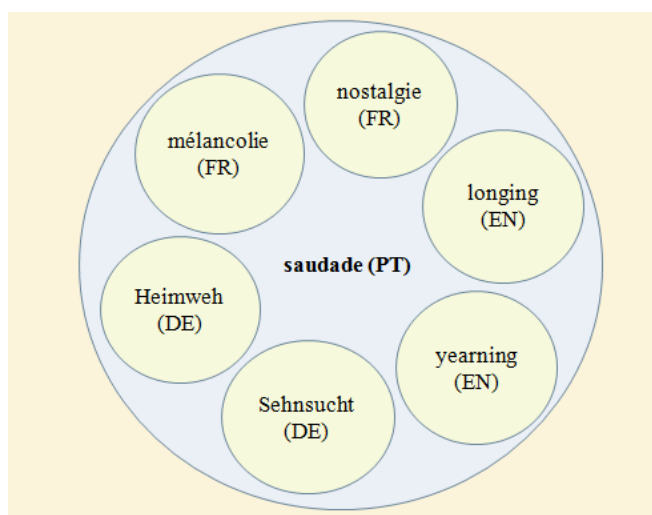


Figure 10. Example of zero equivalence between *saudade* and *yearning*

For instance, in Figure 10 *saudade* and *yearning* are non-equivalents because *saudade* includes a large variety of semantic features among which are *yearning*. As *yearning* corresponds to a very small portion of the meaning of *saudade* it will seldom be interchangeable with it.

Quantitative typology of equivalence

As mentioned in section 512.2.2, languages may exhibit differences that reflect divergences in conceptual systems and that raise the question of the dictionary's directionality. We provided the example of the German *Holz* and the Portuguese *lenha* and explained that *lenha* is not always the equivalent of *Holz* as *madeira* can also be the equivalent of *Holz*. In the Portuguese-German section of a bilingual dictionary the relation between *lenha* and *Holz* is one of 1:1 (one lexical unit in one language corresponds to another one only in another language). Conversely, in the German-Portuguese section of a bilingual dictionary the relation between *Holz* and its equivalents is one of 1:2 (one lexical unit in one language corresponds to two lexical units in a different language).

This kind of quantitative classification has been used in Hausmann (1977) who introduced the terms *Divergenz* (when a source language lexical item corresponds to two, three, etc. target language items) and *Konvergenz* (when two, three, etc., lexical items in the target language correspond to one source language item) to illustrate the problem of directionality. In fact, the underlying basis of this classification is line with the view taken by authors such as Piotrowski (1994) and Atkins and Rundell (2008) who underline the importance of syntagmatic contexts for equivalent differentiation. It can also be applied to equivalents in legal terminology. So, for instance, the Spanish term *culpable* can have three different equivalents in Belgian law, i.e. *fautif*, *coupable* and *culpeux* depending on the syntagmatic use of these terms:

- | | |
|--------------------|------------------------------------|
| | 1. <i>fautif</i> (act or a person) |
| 1. <i>culpable</i> | 2. <i>coupable</i> (person) |
| | 3. <i>culpeux</i> (act) |

As *culpable* is a more generic term than its three equivalents, i.e. it includes all three equivalents, they can only be said to be partial equivalents. So, this quantitative type of equivalence classification does not discard the other. Its purpose is, again, to account for the issue of directionality.

2.2.4. Methodologies for establishing equivalence

Despite the variety of definitions and typologies of equivalence presented in the previous sections, the literature is much more silent regarding methodologies or techniques for identifying and establishing equivalence. For instance, Svensén (2009) dedicates half a page to the topic of the establishment of equivalence in the twenty-eight page chapter called “Equivalents in bilingual dictionaries”. Basically for Svensén, the search for equivalents is similar to the search for suitable paraphrases in monolingual lexicography. The procedure consists in determining the headword’s content, for instance from a monolingual dictionary in the source language, and then in working towards the word or words available in the target language which best represent that content. He adds that (Svensén 2009: 266):

[t]he process need not always be as detailed as described here. Normally, there are from the very outset one or more equivalent candidates available in the sources on which the work is based, whether these consist of bilingual dictionaries (in digital form or not) or authentic material in the form of, for instance, bilingual corpora.

We admit that this simplistic view may be possible for general lexicography, but we find it insufficient for the elaboration of specialized lexical resources, especially if the work is carried out by non-experts of the domain that the resource aims to cover.

Another example of insufficient considerations on equivalence selection is that of Yong and Peng (2007). The authors write that equivalents should be discriminated on a semantic basis, i.e. whether a lexical item in the target language can be considered an equivalent of the source language item depends largely on the extent to which they correspond semantically (2007: 129). They also suggest making stylistic and pragmatic comparisons, but unfortunately no examples illustrating the implementation of such procedures are provided.

The considerations drawn by Yong and Peng (2007) as well as by Svensén (2009) and, most of all, the few considerations on methodologies for equivalent selection that can be found in the literature lead us to agree with Bergenholtz and Tarp (1995: 110) when they state that “equivalent selection is usually not discussed”. As mentioned in Chapter 1, one of the main objectives of the research is to contribute to the discussion on equivalent selection. Even though the literature does not discuss systematic methodologies for equivalent selection, a number of clues or criteria for accomplishing this task can be identified.

We have already referred to the factors that Atkins and Rundell (2008) consider relevant to be taken into account in the establishment of equivalence (semantic content, collocational context, vocabulary type, message and function). They also suggest that corpora can be used for finding equivalents. We agree with their statement (Atkins and Rundell 2008: 473) and argue for the use of corpora in terminography, particularly in terminography developed without the benefit of a wide knowledge on the subject field:

Translators start with some good ideas about how to translate words and phrases, but everyone has moments of doubt. Scanning bilingual dictionaries and checking out one’s intuitions with a native speaker of the language that is not your own have traditionally been the way to deal with such doubts. Indeed, until quite recently these were the only options open to bilingual dictionary editors. Now of course the world has changed, and we can use corpus data to widen our translating horizons.

The authors then explain how a target language corpus and parallel corpora can be used to identify equivalents, how to search concordances and use the information found to put translations in a database. They also mention the use of comparable corpora but unfortunately they do not specify how the same can be done with this kind of corpus, this being one of the issues to which our research attempts to contribute. We have also referred in section 2.2.1 to a contribution in terminology that uses a parallel corpus, a term extractor as well as a lexical aligner to identify and extract relevant equivalents for candidate terms (Le Serrec et al. 2009). One of these researchers is currently comparing the nature of equivalents extracted from parallel corpus and from comparable corpus.

Bergenholtz and Tarp (1995) are part of the few lexicographers who draw considerations on the matter of equivalent selection. They consider introspection an unreliable approach that should never stand alone and that should thus be combined with the use of corpora. However, in their *Manual of Specialised Lexicography* (1995: 106-110), they present five procedures that take introspection as the point of departure in a gradable way and all five use corpus as a tool.

They describe the first procedure as suitable for those situations in which the lexicographer has a priori knowledge of the equivalents and wishes to confirm or deny these by searching them in a corpus. The second procedure is used when the lexicographer is less certain about the correctness of equivalents but is still capable of identifying some possibilities and needs to confirm or deny these by searching them as well as other possibilities in a corpus. The third procedure consists in selecting a number of contexts of the lemma, searching on the surrounding words of it, looking up in a dictionary the equivalents of the surrounding words and searching a corpus containing translated texts for the possible equivalent. In the fourth procedure, the lexicographer familiarizes her/himself with the contents of the texts in which the lemma

appears and then skims texts in the other language to find a parallel context in which the equivalent occurs. This procedure works well for terms denoting objects or products, whereas the following procedure can be used for more abstract terms.

According to the authors, the fifth procedure is the only alternative available to lexicographers of culture-dependent LSP dictionaries, one that applies particularly to legal language. It consists in searching the thematic context as in the fourth procedure, but in addition to his or her linguistic competence, the lexicographer will have to draw on his or her encyclopaedic knowledge. The authors stress that it is of paramount importance to ensure that the LSP corpus contains the same typology of L1 and L2 texts. For instance, guesses on equivalents can be verified by looking at the introductory or concluding parts of texts if the lemmata typically occur there. The authors are aware that none of these procedures can successfully help the lexicographer find equivalents in all cases.

In terminology, this kind of work has traditionally followed an onomasiological approach, one that takes the concept as the point of departure. As a concept can only be understood in the context of the system to which it belongs, it is first necessary to discover the system of concepts. Therefore, classic terminologists will most often follow the approach described in Felber (1987) and in Arnzt (1993), i.e. unilingual systems of concepts are compiled separately so that there is no source-language target-language relationship and only then are the two systems compared. The task ends when the definitions of concepts are compared in the two languages.

The comparison should reveal if the conceptual systems differ from one language to the other as well as the extent to which they differ. As concepts do not always match up from one language to the other, Felber (1987) admits that each conceptual system will have its own structure in each of the languages considered.

Arnzt (1993) underlines the importance of using definitions to compare the concepts, but he admits that these can sometimes be problematic as concepts may be defined differently as regards the structure of the description and the point of view. He gives the example of the terms *ultrasonic welding* and *Ultraschallschweißen* that, based on the comparison of the definitions provided in the British and German standards, possess three common characteristics and five differing ones (he calls them *additional characteristics*). Nevertheless, Arnzt considers these two terms equivalents because they occupy the same position within the system of concepts.

This approach is, actually, very productive in legal terminography which also happens to be strongly influenced by theory on legal translation, especially by functional theories. For instance, Groffier and Reed (1990) adhere to the notion of “functional equivalence” as a method to solve problems of language transfer. In order to determine the accuracy of functional equivalents, they propose the following methodology (Groffier and Reed 1990: 84):

(...) analyser le terme à traduire dans la langue source pour en dégager les caractéristiques essentielles et accessoires et à faire la même chose dans la langue cible. L'évaluation finale consiste à comparer les caractéristiques correspondantes.

Unfortunately, the authors do not explain how they select candidate equivalents, what is considered “essential” and “accessory”, nor do they provide an example illustrating the methodology. We assume that their intuition as subject field experts may guide them in this task.

The most radical approach concerning methodologies for establishing equivalence is that of de Groot (1990), Šarčević (1991) and Sandrini (1995, 1996, 1999). Like other terminologists mentioned in the section 2.2.1.5 (cf. functional equivalence), Šarčević (1991) not only questions the acceptability of functional

equivalents but she also maintains that total equivalence does not exist. Even though she says that establishing a criterion to measure the acceptability of functional equivalents is a method to improve user reliability on dictionaries, she acknowledges that no consensus has been reached in the literature. Nevertheless, she refers to the methodology followed in 1966 by the Berlin Institute for the elaboration of the *Europaglossar der Rechts- und Verwaltungssprache* as a possible compromise solution. The methodology is based on the distinction between essential characteristics of concepts, or “essentialia”, and accidental characteristics or “accidentalia” (1991: 618) which is based on Dahlberg’s classification of the characteristics of concepts (1981). If all essential characteristics of the concepts denoted by candidate term equivalents match up and only a few of the accidentalia do, then the terms are considered equivalents.

Like de Groot and Šarčević, Sandrini (1995, 1996) argues that total equivalence is not possible with concepts coming from different legal systems. According to him, total equivalence is only possible with concepts coming from the same legal system. So, what Sandrini proposes is a comparative and descriptive approach in terminography that does not aim at complete conceptual correspondence but at complete documentation of the national concepts. By citing Snell-Hornby (1990), he explains that, traditionally, lexicography has hunted for immediately insertable equivalents, but that dictionaries should instead provide the translator with the necessary information so that s/he is best prepared in the decision process of recreating the text.

Sandrini’s approach is both onomasiological and functional, insofar as he argues that the criteria for establishing equivalence between concepts should be based in the analysis of their functions within a legal system (Sandrini 1995: 1). In 1996, he developed an entry model for term banks based on the classification of the relations between concepts and groups of concepts from one legal system and another, a model

that he reiterates and completes in 1999. The emphasis on conceptual relations underlies Sandrini's critical view on textual equivalence for use in terminography because he considers that it is the translator's responsibility and not the terminographer's to judge the particular communicative situation where the equivalents are to be inserted. To sum up, for Sandrini, dictionaries should be elaborated for legal systems and not for languages.

From our point of view, this approach is valid but not sufficiently ambitious. We agree that the documentation of concepts is unavoidable in legal terminography and we also understand that legal concepts are most of the times vague because their full meaning can only be grasped when interpreted in and applied to a specific legal situation. However, it seems to us that a terminographic resource built in these moulds is not only empowering translators to make the right decisions about the terminology with which they are dealing. Rather, on the basis that there is no such thing as perfect equivalence, this approach is also avoiding the task of searching for the best possible equivalents and of documenting the reasons why they are the best possible equivalents only. It is a well-known fact that, nowadays, translators have less and less time to do their work. If they merely look up a documentation resource like the one Sandrini proposes, then they will need some time not only to make a decision on the best equivalent but also to find the correct usage of the equivalent term.

For all these reasons, we believe that a suitable resource for legal translators would be a lexical resource that documents the concepts of the specialized field as well as the linguistic behaviour of terms. This resource would allow users to make both onomasiological and semasiological queries so as to meet the reception and production needs of translators. In this research, we propose to describe the extralinguistic information of the subject field by means of semantic frames, or conceptual scenarios (Fillmore 1976, 1977, 1982, 1985; Fillmore and Atkins 1992). Semantic frames are

defined by taking into account their mandatory participants and they can group together terms in one or more languages that are defined relative to the frames. So, based on Piotrowski (1994), we formulate the hypothesis that the feature according to which the relationship of equivalence should be established needs to be equated as an external entity or *tertium comparationis*. In the case of the present research, this entity is called *frame*.

As semantic frames tend to group together terms that share similar syntactic and semantic patterns, the description of the linguistic behaviour of the terms is facilitated. Based on the principles explained by Piotrowski (1994) as well as by Atkins and Rundell (2008), we formulate the hypothesis that the syntagmatic contexts of terms can be extremely useful for the differentiation of equivalents (i.e. the linguistic information). In fact, the extralinguistic (frames) as well as the linguistic (syntagmatic context of the terms) description of the terms should provide enough information to understand why a given term in one language is an equivalent of a term in another language.

The phenomenon of partial equivalence by inclusion is defined in the literature as a situation in which a term in one language denotes a more generic concept than the term in another language. How can one include the possibility of examining this phenomenon in a methodology for establishing equivalents? Could this generic-specific relation be identified by examining the linguistic behaviour of the terms? For instance, could the equivalents of specialized verbs be considered “partial equivalents by inclusion” because the realizations of the actants of a term in language A may denote generic concepts whereas the realizations of the actants of the equivalent in language B denote specific ones? Also, the literature states that two terms can be partial equivalents because they do not share some mandatory conceptual characteristics (partial

equivalence by intersection). Could the absent *essentialia*, to which Šarčević (1991) refers, be identified by observing the linguistic behaviour of the terms in the corpus?

Furthermore, according to the literature, partial equivalents may also correspond to *functional* equivalents. We mentioned that for Adamska-Sałaciak functional equivalence is sought “in situations where it is impossible to provide a lexical equivalent of the headword, one which would be both its semantic and grammatical (same part of speech) counterpart” (2010: 395) and that she feels that functional equivalents is our odd man out. In legal terminography, too, functional equivalence is not only very often mentioned but also defined in a slightly different way in that it is associated to the legal effect that terms create. Two partial equivalents are said to be functional equivalents if they create the same legal effect in the source text as well as in the target text. Given that one of the specificities of legal language is its performative and constitutive function (cf. section 2.2.1) has functional equivalence to be truly considered a category on its own? Is it valid only for those cases in which it is impossible to provide a lexical equivalent that corresponds to the same part of speech? These are some of the questions we will attempt to answer in Chapter 5.

2.3. Approaches to specialized verbs

Despite the scarce or null presence of verbs in terminographic resources, over the last decades some terminologists have defended that specialized knowledge can be expressed at word class level not only by nouns but also by verbs (L’Homme 1995, 1998; Lorente 2000). Other terminologists at least recognize that verbs play a relevant role in certain specialized discourses (Costa and Silva 2004; De Vecchi and Eustachy 2008). This way, although prototypical terms are still considered to be nouns, verbs occurring in specialized texts have been more and more studied.

Among these studies, some contributions are particularly relevant for the present research. This is the case of the criteria for validating the specialized status of verbs elaborated in L'Homme (1998, 2004) and in Lorente (2007) as well as the methodologies for describing specialized verbs (e.g. Lerat 2002a; Alves et al. 2005). These methodologies are based on several theoretical models; they have different application purposes and have been applied to several languages. Nonetheless, only a few have concentrated on the equivalence of specialized verbs as well as on the design of methodologies for identifying and validating the equivalents of this type of units.

In this sub-chapter, we will argue that a unified theoretical and methodological framework for the description of verbs occurring in legal texts and for the identification of their equivalents is still necessary. It will also be argued that the framework that will be used in this research should include, in a unified way, the principles described in the state of the art that are the most relevant for the purpose of the research.

In one way or another, five theoretical approaches have been applied to specialized verbs: the theory of classes of objects (section 2.3.1); the Meaning-Text Theory's Explanatory and Combinatorial Lexicology (section 2.3.2); the Communicative Theory of Terminology (section 2.3.3); an ontology-oriented approach (section 2.3.4); and a speech-act-theory-based approach (section 2.3.5). We then refer to the few works that have concentrated on the equivalents of specialized verbs (section 2.3.6). While reviewing these contributions emphasis will be placed on considerations regarding verbs that occur in legal texts.

2.3.1. The theory of classes of objects

The theory of classes of objects was developed by Gross (1994, 1995, 1996) and Le Pesant and Mathieu-Colas (1998) for Natural Language Processing (NLP) applications, namely for the elaboration of electronic dictionaries. The theory stems from the

methodology of lexico-grammar developed by Gross (1975, 1981) as well as from the transformational grammar of Harris (1964, 1968, 1976). The lexico-grammar model is based on the Harris' notion of transformation and on the idea that grammatical information should be formally described as clearly and as transparently as possible so as to be implemented by computers. The results of the descriptions in the lexico-grammar model consist in two-entry tables in which the semantic and syntactic properties of lexical items are intersected, i.e. all the admitted constructions and transformations concerning lexical items are thoroughly (quantitatively) listed.

Gross (1994, 1995, 1996, 2003) considered this theory suitable for NLP and developed it further into "the theory of the classes of objects". As argued by Gross, printed dictionaries are not directly useful for the automatic analysis and for the generation of texts because: 1) only the most frequent senses are described due to format and editorial constraints; 2) they do not provide all the necessary information on the construction of elementary sentences such as the different behaviour of certain arguments (*Je parle à Paul, Je lui parle, but Je pense à Paul, *Je lui pense*); 3) they do not list complex restructurations (*Il y a eu un grave accident à Paris; Paris a connu un grave accident; Paris a été le théâtre d'un grave accident*); 4) examples given are often insufficient or inappropriate. In contrast with printed dictionaries, electronic dictionaries must contain all the necessary information not only for the recognition of sentences and texts but also for the generation of them. To address the aforementioned problems of printed dictionaries, electronic dictionaries should be based on a logical, explicit and exhaustive description of language, in which every word has to be analyzed and described.

Gross views the lexicon as an entity composed of predicates and arguments instead of LUs ("mots"), as well as an entity inseparable from syntax and semantics. Predicates are words or sequences of words that carry more specific information than

other words or sequences of words in a given sentence and, therefore, bring more contribution to its meaning. Predicates can be verbs, nouns, adjectives and even prepositions taken in one single sense. Other parts of the sentence play a different role in that they complete the sentence. These are called *arguments*. The function of the predicate is to describe the specific relationship between the arguments (Clas and Gross 2003).

Languages should be described in terms of the semantics and syntax of a “schéma d’arguments” (the predicates together with the totality of their arguments). Predicates have a given number of arguments and these belong to a given semantic class. If the semantic class of a given argument changes, the sense of the predicate may change as well, i.e. in the case of polysemy, predicates cannot have the same classes of arguments. For instance, the verb *prendre* as in *prendre le train* and *prendre un couteau* has two different meanings. Although *train* and *couteau* belong to the semantic class of CONCRETE they also belong to narrower classes (means of transport and tangible objects, respectively) which are called *classes of objects*. In order to describe a predicate one has to list all the lexical units that occur as a given argument and make generalizations about their semantic classes and most importantly about their object classes.

Predicates, regardless of their part of speech, can be grouped together by means of their schemata of arguments and object classes. When predicates are enumerated along with their object classes, large classes of predicates that share the same general properties can be identified, e.g. predicates of movement, predicates of communication, etc. These large classes of predicates, or hyperclasses, can in turn be sub-divided into sub-classes, this meaning that a predicate both inherits properties of the hyperclass and is characterized by specific properties of the sub-class to which it belongs.

The theory of the classes of objects has been applied to the description of LSPs such as medicine (Gross and Mathieu-Colas 2001), football (Gross and Guenther 2002; Clas and Gross 2003) and the law (Lerat 2002a, 2002b, 2005; Chodkiewicz and Gross 2005). We will focus here on its application to legal language as well as to specialized verbs.

For Lerat (2002a) there are three types of verbs that occur in specialized discourse: very specialized verbs (“verbes très spécialisés”), support verbs and polysemous verbs. By stating that “tout emploi d’un mot spécialisé renvoie à un scénario de réalité lexicalisé au moyen d’un schéma d’arguments” (Lerat 2002b: 159), the author is suggesting using the identification of the schemata of arguments to differentiate between them. For instance, *intenter* is a specialized verb whose arguments can be *une demande en justice*, *une accusation* and *un procès*. These entities can be grouped into one and the same class, i.e. the class of objects of <action en justice> that intimately relates to the subject field of law. In fact, the first type of verbs, i.e. specialized verbs, is used with very strict classes of objects which can be described in terms of contextual rules as the following ones (Lerat 2002a: 206):

adjuger N <biens>
abroger N <règles de droit>
allouer N <sommes d’argent>
antidater N <preuves par écrit>
contrevenir N <règles du droit>, <valeurs juridiques>

The type of constructions in which they appear are not always free and should be made explicit and formalized as above. The second type of verbs, i.e. support verbs like *avoir*, *donner*, *mettre*, *porter* or *prendre*, are not specialized and, according to the author, should be treated under the noun forms with which they occur because the noun forms are the ones that are semantically relevant. This position is in line with common practices in specialized-dictionary making, in which verb supports are generally never given an independent entry.

The third type of verbs, i.e. polysemous verbs, usually corresponds to verbs used in general language that acquire a specific meaning in the subject field of law. Their description should take into account the constructions in which they are used as well as the hyperclasses and classes of their objects. Hyperclasses are very general semantic classes such as ABSTRACT. As a great variety of legal terms are abstract concepts, the use of hyperclasses to categorize them is not sufficiently discriminating. Hence, classes of objects can be helpful here. Nevertheless, in some cases, such as the one below, hyperclasses can still be used to illustrate the several meanings of polysemous verbs (Lerat 2002a: 209):

séquestrer HUMAIN // séquestration = retenir enfermé
 séquestrer <bien> // séquestre = mettre sous séquestre

According to the author, contexts taken from corpora are not entirely suitable to account for the formalization of the verbs' constructions, a position with which we do not agree. He argues that only the use of classes of objects allows for capturing regularities and making generalizations. We believe that corpus study could be of assistance here, by providing terminologists with evidence of regularities that allow them to make generalizations on the classes of objects to which the arguments of the verbs belong.

Finally, another contribution that has proposed a description of legal language based on this theory is that of Chodkiewicz and Gross (2005). Their goal is to account for the behaviour of legal language with the precision necessary for NLP applications. They argue that legal language should be treated by means of a methodology that has proved to be efficient for general language because (Chodkiewicz and Gross 2005: 25):

[...] un texte juridique comprend, pour la majorité de sa surface, des mots de la langue générale. Il est donc impossible de traduire ou plus généralement de générer un texte juridique sans avoir une description fine de la langue générale.

De plus, il n'existe pas de limite claire entre la langue générale et la langue du droit parce qu'il n'y a aucune différence de nature entre celles-ci.

In fact, Chodkiewicz and Gross (2005) view “legal language” as discourse that is instantiated in texts which, in turn, contain predicates. In this specific contribution, the authors propose to describe all predicates used in legal discourse by means of the theory of classes of objects. The considerations they draw on verbs are similar to those drawn by Lerat (2002a, 2002b).

To sum up, in the approach that we have just described, verbs used in legal discourse are seen as relevant relational entities for NLP whose meaning depends on the kind of arguments with which they occur. Arguments of predicates in legal discourse usually refer to abstract legal entities which can be sub-categorized by means of fine-grained generalizations (classes of objects). The stricter the argument selection, the higher are the probabilities of verbs being specialized. Legal texts can be treated for NLP purposes by means of a theoretical and methodological framework originally conceived for general language. The main difference between this theoretical framework and the one which will be used in this research, which was also originally developed for general language (chapter 3), lies in the fact that the scenarios in which a given class of predicates participate are only indirectly explained.

2.3.2. Explanatory and Combinatorial Lexicology

L'Homme (1995, 1998, 2002, 2003, 2004) was one of the first authors that argued for the study of specialized verbs as well as for their inclusion in specialized lexical resources. She has also contributed to the study of specialized verb equivalents, as we will demonstrate in section 2.3.6. For the time being, we would like to refer to two other particularly relevant contributions of the author. The first one consists in a set of criteria for validating candidate terms belonging to several word classes including verbs that the

author applied to the selection of terms of a specialized lexical resource. These criteria are based on lexical semantics, more precisely on the Explanatory and Combinatorial Lexicology (ECL) principles (Mel'cuk et al. 1984-1999), a component of the Meaning-Text Theory (MTT). The criteria were first proposed in L'Homme (1998), developed in L'Homme (2003) and reorganized in L'Homme (2004). According to L'Homme (2004), a given lexical item may be a term if:

- 1) The lexical item has a meaning related to the subject field in question;
- 2) The actants of the lexical item are terms themselves according to criterion 1;
- 3) The morphological derivatives of the lexical item are terms themselves according to criteria 1 and 2, and there is a semantic relation between the lexical item and its derivatives;
- 4) The lexical item has other paradigmatic relations to other terms validated by all three criteria.

For instance, *to install* (as in *The user installs a firewall*) is a term because: it has a meaning related to the subject field of computing (1); its actants *user*, *firewall*, *program* and *software* are terms according to criterion 1 (2); its morphological derivative *installation* is a term according to criteria 1 and 2 and there is a semantic relation between *to install* and *installation* (3); its antonym *to uninstall* is a term (4).

L'Homme (2004) argues that the first criterion is more easily applied to terms denoting entities, whereas the last three criteria mainly apply to predicative units. As we will see, these criteria are not completely different from those developed by Lorente (2002, 2007), to which we will refer in section 2.3.3. However, the applicability of the criteria developed by L'Homme is wider, in that they can be used with noun, verb, adjective and adverb terms, whereas Lorente's criteria are only applicable to verbs. This contribution is also very relevant in terminology, in general, as to the best of our

knowledge no other set of systematic criteria for the validation of terms has been proposed in the literature so far.

The second important contribution by L'Homme resides in the fact that she considers verbs as “an excellent starting point for capturing the lexical structure of a specialized domain” (L'Homme 2003: 407). For this reason, she implemented a lexicographic method to elaborate specialized lexical resources that include specialized verbs. The lexicographic method relies on the Explanatory and Combinatorial Lexicology (ECL) principles (Mel'čuk et al. 1984-1999), a component of the Meaning-Text Theory (MTT). The MTT is a theoretical framework for the description of natural languages launched in Moscow in the 60s that lends itself well to computer applications.

In ECL, the lexicon is viewed as a system of LUs (words or set phrases taken in one well-defined sense). LUs can be predicative or non-predicative. Verbs, adjectives, adverbs and also most nouns can be predicative LUs. Predicative LUs necessarily have participants in their meaning. An obligatory participant in the meaning of a given LU is called *actant* and an optional participant is called *circumstant* (Mel'čuk 2004). For example, in the sentence *Yesterday, John criticized Mary for her inappropriate behaviour*, the actants of the LU *criticize* are *John*, *Mary* and *her inappropriate behaviour*, while *yesterday* is a circumstant.

In ECL, predicative LUs should be exhaustively described by means of an actantial structure, i.e. a propositional form featuring the LU and its semantic actants represented by variables (X criticize Y for Z) as well as by means of a *definiens* or the definition proper (its paraphrase in terms of simple constitutive meanings) (Milićević 2006). Semantic relations between LUs are described by means of lexical functions (LFs). These can be divided into paradigmatic and syntagmatic LFs. Paradigmatic LFs

represent synonymy, antonymy, nominalization, and other kinds of semantic relations. Syntagmatic LFs correspond to very general and abstract meanings that can be expressed in different ways. For instance, Magn is a syntagmatic LF that expresses a high degree of what is designated by the LU (Magn means “very”, “very much” or “completely”). The expression *rely heavily* in *to rely heavily on somebody* could be then represented by the syntagmatic LF Magn(rely)=heavily (Mel’čuk 2001).

L’Homme (2008) applies these principles and methods to the elaboration of a dictionary of computing and the Internet called DiCoInfo (*Dictionnaire fondamental de l’informatique et de l’Internet*) which is a freely available online dictionary currently with three language versions: French, English and Spanish. This dictionary is original because it describes the linguistic behaviour of terms belonging to different parts of speech such as nouns, verbs, adjectives and adverbs. Terms are, thus, viewed as LUs and the lexical structure of a given subject field is described by taking into account the paradigmatic and syntagmatic relations among the terms included in the lexical resource. Paradigmatic and syntagmatic relations are described by means of ECL’s lexical functions. All the information concerning the terms is gathered from corpus evidence and encoded in an xml editor. Consider the entry of the term *install*₂ (Figure 11) in the sense that a user installs software as opposed to hardware (*install*₁).

Figure 11 shows that the entry is divided into four sections: actantial structure, linguistic realizations of actants, contexts and lexical relations. The first section accounts for the obligatory participants (or actants) in the sense of the verb that is being described. Here, the term *install*₂ has three actants: a user | *installs* | software | on a computer. Terms which typically represent those actants are presented in squiggly brackets.

install₂, vt Status: 2

Actantial structure: install: {user₁} ~ s {software₁} on {computer₁}

[Linguistic realizations of actants](#)

[Contexts](#)

[Lexical relations](#)

[Actantial roles](#)

Explanation - Typical term	Related term
Related Meanings	
≈	configure₁
≈	setup
≈	update₁
Opposites	
Antonym	uninstall₁
Other Parts of Speech and Derivatives	
Noun	installation₂
De nouveau	reinstall
Others	
A program used to i.	installer₁

Spanish: [instalar₂](#)
 French: [installer₂](#)

Written by: LPD MEP MCLH
 Last update: 08/04/2009

Figure 11. Entry of *install₂* in the *DiCoInfo*

The second section lists the terms found in the corpus that occur as the actants of the verb. For instance, if one clicks on the “Linguistic realizations of the actants”, one will find a list of the terms occurring as the first actant (*programmer, user*), a list of terms occurring as the second actant (*antivirus program, application, browser, compiler, daemon, demo, etc.*) and a list of terms occurring as the third actant (*computer, hard disk, PC*). Actants are attributed general semantic labels (Agent, Patient, Destination, etc.) which are reminiscent of the original version of case grammar (Fillmore 1968).

The third section provides users with contexts illustrating the terms as they occur in the corpus texts. If one clicks on “Contexts”, one will find not only three illustrative

contexts, but also a hyperlink called “Annotated contexts” which contains about twenty semantically and syntactically annotated contexts. These are accompanied by an annotation summary table which illustrates the semantic and syntactic patterns of the term.

Finally, the last section of the entry provides information on lexical relations. In Figure 11, “Related Meanings” lists synonyms and near-synonyms of the term; “Opposites” contains the antonym *to uninstall*; *installation*₂ and *reinstall* are indicated as derivatives; and the section “Others” accounts for the instrument used to perform the action of install.

DiCoInfo also provides the equivalents of terms. In the case of *install*₂ the French equivalent is *installer*₂ and the Spanish equivalent is *instalar*₂. We will refer to how this dictionary accounts for equivalents in section 2.3.6.

DiCoInfo’s theoretical and methodological frameworks have been applied to other researches such as Tellier (2008) and Le Serrec (2008, 2009) with some adaptations. For instance, Tellier (2008) uses the DiCoInfo model to analyze specialized verbs from the domain of infectiology. The main adaptation of Tellier (2008) consists in creating a specific system of conceptual labels for describing the actants of the verbs that occur in the infectiology subject field.

In conclusion, although the theoretical frameworks are not the same, this contribution is in line with the some of the principles followed by the contributions described in the previous section (classes of objects). Firstly, almost all parts of speech are candidate terms. Secondly, the lexicographic descriptions take into account the argument structure of terms and the nature of the arguments is extremely important for sense distinctions. Thirdly, the semantic and syntactic properties of verbs are

formalized. The main difference between the two frameworks lies in the fact that DiCoInfo describes the relations between terms to a greater extent than the theory of classes of objects.

2.3.3. The Communicative Theory of Terminology

Another theory that has been applied to the study of specialized verbs is the Communicative Theory of Terminology (CTT) developed by Cabré (1999). Cabré views terminological units as multifaceted entities that are “at one and the same time units of knowledge, units of language and units of communication” (Cabré 2003: 183). In CTT, lexical units are not taken to be specialized *per se* but acquire a specialized value in certain specialized contexts. The units that convey specialized meaning in specialized discourse are not necessarily lexical entities and can take the form of words, phrases, clauses and even textual fragments. They can also belong to parts of speech other than nouns. Thus, the CTT attempts to describe the behaviour of all the lexical categories that convey specialized meaning regardless of the form they may take.

Based on this theory, Lorente (2000, 2002) and Lorente and Bevilacqua (2000) decided to study verbs that occur in specialized texts in order to examine and contribute to three theoretical and methodological issues. Firstly, they are interested in understanding why terminological resources seldom include verbs and give preference to noun terms. Secondly, they want to identify those verbs that have a specialized value and to create a typology of verbs occurring in specialized texts. Thirdly, they wish to establish criteria for the validation of the proposed typology. In all cases, their objective is to help terminographers decide what kind of verbs should be included in terminological resources.

The typology of verbs appearing in specialized texts as well as the criteria used to validate the typology have been redefined in Lorente (2007). As we consider these contributions relevant for this research, we would like to account first for the proposals before 2007 and then for the modifications made in 2007. This will also allow us to better compare the criteria put forth by Lorente (2007) with those of L'Homme (1998, 2004) that were presented in the previous section. Finally, we will refer to two contributions regarding the synonymy of specialized verbs occurring in different kinds of legal texts (Freixa and Lorente 2006; Lorente et al. 2008) as this matter is addressed in the methodological part of our research (Chapter 4).

Classification of verbs: the initial proposal

In 2000, Lorente carries out a study in which she concludes that there are four types of verbs in specialized texts: *verbos discursivos* (Eng. discursive verbs), *verbos conectores* (Eng. connective verbs), *verbos fraseológicos* (Eng. phraseological verbs) and *verbos terminológicos (o verbos-término)* (Eng. terminological verbs). Some verbs can be considered units of specialized meaning whereas others cannot. Those verbs that are considered units of specialized meaning can be strongly linked to terms, they can combine with terms or simply be part of specialized meaning units without carrying a specialized meaning. Lorente admits that this classification may vary from one specialized field to another and that some verbs can have a hybrid character, i.e. they can belong to more than one category, because the typology is seen as a continuum and not as a rigid classification.

Discursive verbs are linked to the functions of the text in which they occur (e.g. *describir, narrar, dar instrucciones, argumentar*³), to speech acts (e.g. *decir,*

³ *to describe, to tell, to give instructions, to argue*

*comunicar, transmitir, opinar*⁴), to the structure of discourse (e.g. *organizar, estructurar, ordenar, continuar, concluir*⁵) and even to the purpose of discourse (e.g. *presentar, convencer, instruir, demostrar*⁶). They do not necessarily convey specialized meaning because they are not linked to the specialized field. Rather, they are linked to the metadiscursive information in that they help experts communicate knowledge. However, Lorente (2000) adds that some of these verbs may be hybrid in nature as they may also convey meaning related to the methodology followed by the expert (e.g. *hipotetizar, analizar, clasificar, deducir*⁷). Apart from these hybrid cases, she argues that discursive verbs should not be included in terminological applications. In our research, we will examine whether some discursive verbs can be included in terminological resources as they are relevant in the corpus we use. In fact, discursive verbs seem to be highly relevant in judgments as argumentation is a mandatory task for the parties in a law suit, for appellants, and for judges. We will return to this matter in Chapter 5.

Connective verbs are usually copula verbs that attribute qualities and values or express equivalence, equality, similarity and dependency relations (e.g. *ser, parecer, equivaler, corresponder*⁸). Lorente explains that this kind of verbs do not have a specialized value but only configure specialized knowledge units. They often occur in definitions (of concepts) and in metalanguage (when experts use language to talk about the language used), but their meaning is not really different from their common meaning or from their meaning in other specialized contexts. Therefore, she believes that connective verbs should not be included in terminological applications.

⁴ *to say, to communicate, to transmit, to give an opinion*

⁵ *to organize, to structure, to ordain, to continue, to conclude*

⁶ *to present, to convince, to inform, to demonstrate*

⁷ *to formulate an hypothesis, to analyze, to classify, to infer*

⁸ *to be, to seem, to be equivalent of, to correspond to*

Phraseological verbs are predicative verb units that appear in specialized texts in order to express actions, processes and states. When isolated, their meaning is no different than the meaning they have in non-specialized contexts (e.g. *generar, producir, fabricar, gastar, consumir*⁹). However, when they are included in syntagmatic units such as *generar energía, instaurar penicilina*¹⁰ in which they co-occur with, at least, one terminological unit playing the syntactic role of subject or object, then they acquire a specialized value and can be said to belong to “specialized phraseological units”. Support verbs, e.g. *dar tratamiento* (Eng. to treat), as well as total or partial metaphors, e.g. *instaurar un tractament (medicina)* (Eng. to administer a treatment) can also be included in this category. In terminological resources, one should include only phraseological verbs displaying behaviour or meaning different from other non-specialized contexts.

Terminological verbs correspond to those units whose meanings are specifically related to the specialized field, e.g. *eutrofizar (ecología), acetificar (química)*¹¹. These verbs often have noun derivatives that are terms themselves and should be included in terminological resources.

Verbs are discriminated by means of the following criteria (Lorente and Bevilacqua 2000, Lorente 2002):

- 1) **Discursive function.** The function of verbs is analyzed in terms of their role in the textual typology, discourse genres and speech acts. This criterion allows for the distinction between discursive verbs and the other three types of verbs. Typically, the discursive function of discursive verbs consists in the organization of discourse, in the expression of the experts’ intentions

⁹ *to generate, to produce, to manufacture, to spend, to consume*

¹⁰ *to generate energy, to give penicillin*

¹¹ *to result in eutrophication (ecology), to acetify (chemistry)*

and in the activity process of transmitting information. In contrast, the discursive function of connective, phraseological and terminological verbs is to transmit specialized information.

- 2) **Specialized value.** Here, one seeks to verify if the verb has a specialized meaning that can be identified without resorting to a context. One wants to verify if the verb conveys specialized meaning *per se* or when it co-occurs with other terms. For instance, discursive verbs, connective verbs and phraseological verbs do not have a specialized value because they do not transmit specialized knowledge by themselves. However, some constructions in which they appear may transmit specialized knowledge. It is the case of connective and phraseological verbs but it is not the case of discursive verbs. Terminological verbs have a specialized value because they only occur in certain specialized fields.

- 3) **Semantic content of the VP.** Here, the idea is to ascribe semantic categories to verb phrases so as to identify those that refer to actions, to processes of the specialized field, or to the discursive intentions. Discursive verbs refer to the action of informing, e.g. *presentar datos* (Eng. to present data), but in some cases they can also refer to the scientific methodology of the subject field, e.g. *analizar recursos energéticos* (Eng. to analyze energy resources). Connective verbs can be placed into three classes: dictum verbs, e.g. *llamar, denominar, nombrar* (Eng. to call, to name, to mention); copula verbs, e.g. *ser, parecer, tener* (Eng. to be, to seem, to have), and verbs that transmit logical relations, e.g. *estar formado por, proceder de, originar* (Eng. to be formed of, to come from, to originate). Phraseological verbs typically belong to four different semantic classes: inaccusative constructions, e.g. *la temperatura aumenta; el aire circula* (Eng. the

temperature rises; the air circulates); result constructions, e.g. *almacenar energía, generar electricidad* (Eng. to store energy, to generate electricity); process constructions, e.g. *fermentar azúcar, convertir el calor en energía útil* (Eng. to ferment sugar, to convert the heat into usable energy); and ergative constructions, e.g. *la radiación eleva la temperatura/la temperatura se eleva* (Eng. the radiation increases the temperature/the temperature increases). The semantic content of the VPs of terminological verbs usually corresponds to typical actions and processes of the specialized field. However, in contrast with connective and phraseological verbs, when the direct object of terminological verbs is a term, the specialized content is said to be contained at the same time in the two elements of the VP, e.g. *erosionar el lecho corriente abajo* (Eng. to erode the bed downstream).

- 4) **Morphological formation.** The authors assume that morphology conditions “the meaning and the behaviour of words” and use this criterion to take into account the lexical formation of the verb as well as the selection of lexemes, affixes and formants so as to establish relations between the verbs and other part of speech units. Discursive and connective verbs are said to be in most cases simple verbs. Phraseological verbs can be simple or derivative verbs formed by means of causative suffixes, e.g. *garantizar la potencia máxima* (Eng. to guarantee maximum power). Terminological verbs usually correspond to complex morphological structures and they often contain Greek and Latin formants in the subject field observed by Lorente and Bevilacqua (2000) and Lorente (2002). Although there are some simple terminological verbs, in either case the root lexeme is the same as in other word classes, e.g. *magneto – magnetizar – magnetización – magnetizado – desmagnetizar* (Eng. *magneto – to magnetize – magnetization – magnetized – to demagnetize*).

- 5) **Subcategorization.** This criterion refers to the syntactic characteristics of the verbs: copula, transitive, intransitive verbs, etc. In this respect, discursive verbs are usually transitive verbs. Connective verbs can be copula verbs, transitive verbs with a direct object NP and intransitive verbs with a PP. Phraseological verbs have less restrictions when it comes to verbal subcategorization, i.e. they can be transitive, intransitive with PP or without PP. Terminological verbs can be intransitive verbs without PPs or transitive verbs with a direct object that specifies the event denoted by the verb, e.g. *nuclearizar*, *galvanizar níquel* (Eng. nuclearize, to galvanize nickel).
- 6) **Semantic relation with the subject.** Here, the subject of the verb is distinguished in terms of its logical relation with the verb: Agent, Cause, Instrument, and Theme. The subjects of discursive verbs are always an Agent corresponding to the author of the texts. They are usually hidden in impersonal constructions. The subjects of connective verbs are usually an Agent that can also be hidden in impersonal constructions. However, the subjects of verbs expressing logical relations between two units of specialized meaning are usually an object or an abstract concept playing the semantic role of Theme, Cause, Origin and Place. The subjects of phraseological verbs and terminological verbs can refer to people controlling the action (Agent), to natural phenomena, to events and abstract concepts (Cause), to objects controlled by the Agent (Instrument) and to concrete objects (Theme or Result).
- 7) **Lexical selection.** This criterion is used to analyze the combinatory restrictions between the verb and its arguments so as to identify phraseological behaviour. Although the authors do not provide illustrative

examples, they state that discursive verbs are subject to combinatorics but their cooccurents do not contain specialized meaning and, as a result, both can often be paraphrased. Connective verbs show restrictions regarding the use of prepositions and can be paraphrased. Phraseological and terminological verbs show strong restrictions regarding combinatorics and paraphrases are not always possible.

After analyzing each type of verb using these criteria and considering the cognitive dimension (“specialized knowledge”) and linguistic one (“specialized meaning”) of the verbs, Lorente and Bevilacqua (2000) and Lorente (2002) reach the following conclusions. Firstly, discursive verbs are not specialized knowledge units or specialized meaning units. Secondly, connective verbs and phraseological verbs can be specialized knowledge units but are not specialized meaning units. Thirdly, terminological verbs are specialized knowledge units and specialized meaning units. This classification of verbs is graphically represented by means of a Venn diagram in which each group of verbs is part of a larger group (Figure 12).

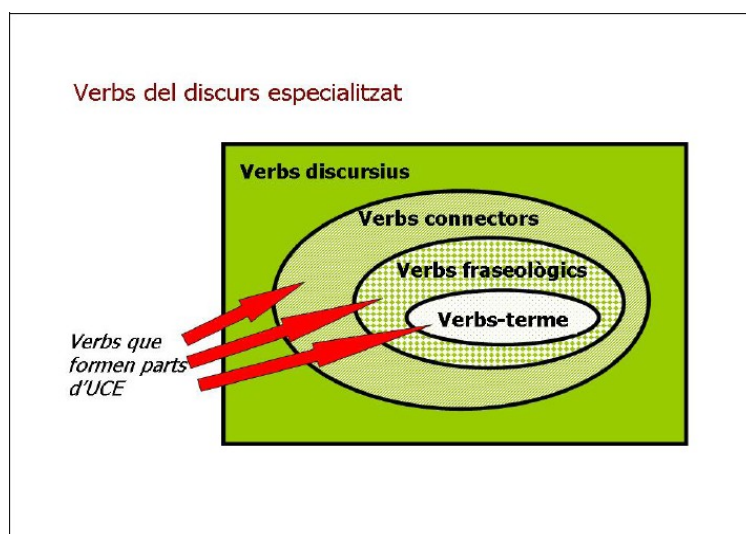


Figure 12. Classification of verbs that occur in specialized discourse: proposal by Lorente (2000, 2002)

Connective verbs, phraseological verbs and terminological verbs should be included in applications such as ontologies, computational lexicography, dictionaries and manuals for technical writing. In the case of production-oriented applications, the authors argue that it is very important to include phraseological and terminological verbs since these are the verbal specialized knowledge units of knowledge-rich predications.

Classification of verbs: redefinitions

In 2007, Lorente decided to redefine the classification presented above arguing that the latter was not systematic enough because it was based on superficial observation of insufficient data. She revises her initial work regarding four different aspects: the representation model (Figure 12), the structure of classification, the denomination of the classes and the criteria for distinguishing the classes of verbs.

As mentioned, the representation model she first proposed corresponds to a Venn diagram in which each group of verbs is part of a larger group (Figure 12). This model, as the author points out, does not represent well the classification of verbs occurring in specialized texts for several reasons (Lorente 2007: 6-7). Firstly, although the representation illustrated terminological, phraseological and connective verbs as part of the large group of specialized knowledge units, non-specialized meaning units such as discursive verbs were also included. Secondly, the smaller and larger groups of Figure 12 attempted to show that some categories can contain more or less verbs but, although it successfully illustrates that terminological verbs are rarer than phraseological verbs because the circle representing the former is smaller than the latter, the diagram cannot account for the fact that connective verbs occur very often in specialized texts (tokens) whereas their lemmas are reduced (types).

Another problem with this representation that is not mentioned by the author is that this kind of representation that presents categories embedded in other categories suggests an inclusion relation in which categories share properties with the others. However, this may not always be the case. For instance, terminological verbs are included in phraseological verbs which in turn are included in connective verbs, but the relation between terminological verbs and connective verbs in terms of their properties is not clear. Due to these problems, Lorente (2007) decided to redesign the classification of verbs that occur in specialized discourse by using a flowchart (Figure 13). In this flowchart ‘yes’ or ‘no’ conditions make the basis of the classification.

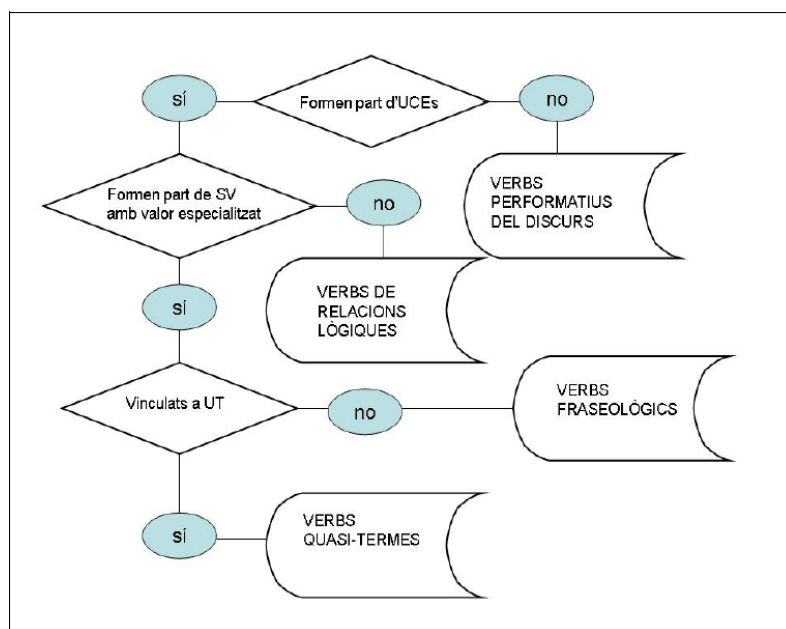


Figure 13. Classification of verbs that occur in specialized discourse: proposal by Lorente (2007)

Lorente (2007) also changes the labels she attributed to the four categories of verbs so as to better reflect what each of them represents. For example, she changes the label *discursive verbs* to ***performative verbs*** (*verbs performatius del discurs*), because

all verbs included in a specialized text have a certain discursive function, which means that the latter cannot be a distinctive trait of verbs. Nevertheless, this group of verbs that do not convey a specialized meaning do have a performative function in the sense defined by Austin (1962). Lorente also changed the label *connective verbs* to ***verbs of logical relations*** because the former label is traditionally used to refer to copula or attributive verbs only, although the author included predicative verbs in the category as well. Thus, *verbs of logical relations* refer to those verbs that are part of specialized knowledge units and that express generic logical relations. These label redefinitions seem to us more accurate for the same reasons mentioned by the author. Lorente does not change the label ***phraseological verbs*** and only points out that this category includes verbs that appear in collocations (strict lexical selection), in fixed phrases and in support verb constructions. As for *terminological verbs*, it is not entirely clear why the author changed the label to ***quasiterminological verbs*** (*verbs quasitermes*) as the only reason she provides is contradictory to the CTT's principle according to which terms can belong to several word classes (Lorente 2007: 9):

A mida que anem avançant en la descripció de construccions verbals dels discursos d'especialitat més ens ratifiquem en la idea que els termes són prototípicament de categoria nominal (Cabré 1999). De fet, [...] és precisament la relació que estableixen els verbs amb els termes d'un text allò que condiciona aquesta mateixa classificació dels verbs d'un text especialitzat.

Translation:

As the description of verbal constructions of specialized discourses advanced we were able to confirm the idea according to which terms typically belong to the part of speech of noun (Cabré 1999). In fact, [...] it is precisely the relationship established between the verbs and the terms that determines this classification of verbs that occur in a specialized text.

Finally, the last aspect of her initial proposal that she criticizes is the set of criteria put forth to analyze the contexts of verbs and decide to each category they belong. She rightly states that these criteria were not discriminatory enough. For example, the criterion of morphological formation showed that both discursive and

connective verbs are simple verbs, that phraseological verbs can be simple or derivatives and that terminological verbs reveal a tendency to complex lexical formation (derivation or composition). Thus, the criterion is not suitable to distinguish one class from another. In order to address this lack, Lorente applies to the classification of verbs two criteria only: 1) the nature and degree of connection of verbs to a given noun term (the main criterion), and 2) the semantic classes of verbs (the complementary criterion).

When there is a lexical relation between a given verb and a noun term relevant in the specialized field such as morphological derivation or a paradigmatic relation, the verb belongs to the category of quasiterminological verbs. When there is no morphological relation between the verb and a relevant term in the specialized field but the verb's syntactic object is a term, then the verb belongs to the category of phraseological verbs. When there is no connection between the verb and a noun term but there is a relevant term in the construction of the verb (other than its syntactic object), the verb belongs to the category of the verbs of logical relations. Performative verbs do not meet any of these conditions.

To sum up, Lorente's idea is that the relation between a verb and a noun can range from the most intimate (morphological relation) to the farthest (no connection between the verb and the noun), passing by varying degrees of syntactic relation. In order to be specialized knowledge units, verbs have to relate with at least a noun term because noun terms are prototypical terms and their strong referential properties allow for a direct usage in the representation of specialized knowledge.

The complementary criterion serves to confirm the distinctions made by means of the first criterion. Quasiterminological verbs and phraseological verbs are said to belong to the same semantic classes: action, change, cause change. In contrast, verbs of

logical relations are stative, whereas discursive verbs are cognitive, communication and aspectual verbs.

This theoretical approach and classification of verbs have been applied to other subject fields. Casademont (2008) studied the category of phraseological verbs as well as their behaviour in the specialized fields of economy and genomics and concluded that, whereas Lorente's main criterion (the nature and degree of connection of verbs to a given noun term) applies well, the complementary criterion (the semantic classes of verbs) does not.

Casademont (2008) demonstrates that phraseological verbs can be action verbs but also stative verbs, a semantic class attributed to verbs of logical relations in Lorente (2007). When they convey an action, specialized knowledge is transmitted by means of the verb and a sub-categorized argument. For instance, the verb *expressar* is a phraseological verb and part of a specialized knowledge unit because, in the subject field of genomics, it refers to an action of creation, fabrication and production (the sub-categorized arguments). However, verbs can also be stative and convey specialized knowledge by means of the verb and all its arguments (sub-categorized or not). For example, the verb *dividir* is a phraseological verb whose arguments not only relate to the verb but also to each other. According to Casademont (2008) this kind of verbs are halfway between phraseological and logical-relations verbs, this reinforcing the idea according to which the categories proposed by Lorente (2007) have to be seen as a continuum.

L'Homme's (1998, 2004) and Lorente's (2007) criteria: a comparison

The criteria put forth by L'Homme (2004) and the criteria underlying the latest classification put forth by Lorente (2007) share certain similarities as well as differences. First of all, the purpose of L'Homme's and Lorente's criteria is slightly

different. The criteria designed by L'Homme aim to validate candidate terms belonging to parts of speech as varied as nouns, verbs, adjectives and adverbs so that these can be included in lexical resources. In contrast, the criteria proposed by Lorente were designed to elaborate a classification of verbs that appear in specialized texts, but the author is also interested in determining the extent to which verbs participate in the expression of specialized knowledge as well as in providing arguments for the inclusion of some verbs in different kinds of terminological resources.

As L'Homme herself notes, the last three criteria that she proposes (nature of actants, morphological derivation and paradigmatic relations) mainly apply to predicative units. This makes the criteria particularly well suited to the validation of verbs and, therefore, comparable with Lorente's criteria. Thus, one similarity between the two set of criteria lies in the fact that they can apply to the same type of units. By implication, another similarity is that the authors wish to examine the specialized value of verbs occurring in specialized texts, even though the way they do this slightly differs because L'Homme does not analyze verbs as "specialized knowledge units" and "specialized meaning units" as Lorente does.

Despite the coincidence of the main criteria put forth by the authors to identify specialized verbs, the criteria used by Lorente (2007) allow her to differentiate between categories of verbs whereas L'Homme (2004) does not focus on this. For Lorente, the nature and degree of the connection between a given verb and a noun term is the main criterion for identifying verbs that convey specialized knowledge. This connection can be morphological and it allows for the identification of quasiterminological verbs. This criterion corresponds to L'Homme's third criterion, according to which a verb is quite likely a term if its morphological derivatives are terms themselves. However, L'Homme specifies that such morphological relation necessarily involves a semantic one as well, which is only implied in Lorente (2007). For Lorente, the connection between a verb

and a given noun term can be paradigmatic, but this criterion allows for the identification of the same type of verbs, i.e. quasiterminological verbs. For L'Homme, a verb can be a term if it has paradigmatic relations to other terms.

The third aspect taken into account by Lorente is the syntactic behaviour of the verbs. When there is no morphological or paradigmatic connection between a given verb and a noun term of the specialized field but the verb's syntactic object is a term, then the verb belongs to the category of phraseological verbs. When there is no connection between the verb and a noun term but there is a relevant term in the construction of the verb (other than its syntactic object), the verb belongs to the category of the verbs of logical relations. As these two types of verbs are taken to convey specialized knowledge, one can consider Lorente's criterion similar to L'Homme's second criterion according to which a verb is quite likely a term if its actants are terms themselves. Performative verbs do not meet any of L'Homme's or Lorente's criteria and, therefore, do not convey specialized knowledge.

Some of the differences that we observe between the two sets of criteria can be attributed to the fact that the authors work with different data and within distinct theoretical frameworks. Nonetheless, an important conclusion that can be drawn from these two contributions is that, in order to be specialized, verbs have to establish in one way or another (syntagmatically and paradigmatically) a relationship with other terms of the subject field.

Synonymy in legal verbs

The CTT has also been applied to the study of verbs occurring specifically in legal discourse. Freixa and Lorente (2006) focused on the verbs appearing in Catalan legal texts and their synonymic relations and Lorente et al. (2008) continue the same line of research but this time they focus on verbs appearing in Spanish legal texts. Their goal is

to show the mismatch that occurs between the information on synonymic relations described in dictionaries and the interchangeability of this kind of units in different contexts of use. The authors provide a methodology for the analysis of lexical variation that consists in crossing and adding a set of criteria to ensure, reject or set conditions of a particular relation of synonymy between two lexical items in specialized texts.

In order to do that, the authors randomly select 36 lemmas from the *Diccionario de términos jurídicos. Inglés-Español. Español-Inglés* (1997) by Alcaraz and Hughes. They observe their frequency of use in three different sources of information: the web, the *Corpus de Referencia del Español Actual*, and the *corpus de derecho en lengua española del Corpus Técnico del IULA*. They verify that the selected verbs often occur in both general and specialized texts and proceed to analyze how the occurrences are distributed in the *Corpus Técnico*, namely in the several branches of law (civil law, constitutional law, penal law, etc.). Finally, verbs are studied in terms of their semantic and syntactic behaviour. The definitions of the verbs provided in four dictionaries that they use are compared to the meaning the occurrences seem to have in the corpus texts. The argument structure of verbs, the semantic roles of the arguments as well as recurrent lexical combinatorics are also taken into account.

The authors conclude that there are many cases of partial synonymy because: 1) some verbs have a higher frequency in the corpus than other verbs; 2) their thematic distribution (through the several branches of law) is different; 3) they occur in different genres of texts (e.g. legislation, dispositions, law manuals); 4) some verbs have a more general meaning than others; 5) the argument structure of the verbs, the semantic roles of the arguments and the lexical selection differ. For example, *compulsar*, *legalizar* and *legitimar* are partial synonyms because, although they have the same argument structure (x(y)) and the arguments have the same semantic role (Agent and Patient), *legitimar* and *compulsar* are interchangeable only when their syntactic object is the noun *firma*, and

legalizar and *compulsar* are only interchangeable when the verb's syntactic object is the noun *copia*. When *legitimar* selects as syntactic object entities denoting people (*quienes, los que, accionistas, socios, administradores*) or representative bodies (*colegios oficiales, administraciones, consejos*), it cannot be replaced by any of the other verbs in the series. Similarly, when *legalizar* selects the nouns *libro, registro* or *ficha* as internal argument, which occurs exclusively in commercial law, it is not interchangeable with any of the other verbs of the group.

The application of the criteria taken into account by the authors allows them to explain why *compulsar, legalizar* and *legitimar* can be used as synonyms in the following contexts only: in commercial law and administrative law; in legal texts (laws, regulations, decrees and regulations); when their meaning refers to the verification of documents so as to give them legal status; when the lexical selection of the internal arguments of the three verbs is restricted to signatures, documents, copies and the like and never to people (*legitimar*) or records (*legalizar*).

We believe that the differentiation of the categories of entities that occur in the corpus as the arguments of the aforementioned verbs would have benefited from approaches like the theory of classes of objects (section 2.3.1) and Frame Semantics (Chapter 3) which insist on more fine-grained generalizations on the arguments of the verbs instead of the use of semantic labels as general as Agent and Patient.

2.3.4. The ontology-oriented approach

Specialized verbs occurring in legal texts have also been described for information retrieval and question and answer systems. Alves et al. (2005a, 2005b, 2007) explain that one of their aims is to develop the information retrieval system of the *Procuradoria Geral da República of Portugal* (Office of the Public Prosecutor of the Republic of Portugal) and that their methodology is “an integrated representation of the verbal

content from the perspective of the Formal or Logic Semantics, Lexical Semantics, Grammatical Semantics and Pragmatics heading for the construction of an ontology” (Alves et al. 2007: 93). This means that the linguistic analysis that they perform on verbs combines several but intertwined theoretical frameworks.

The authors use a corpus of electronic documents available in the legal databases of the *Instituto das Tecnologias de Informação na Justiça* of Portugal (Institute of Information Technologies in Justice). In order to extract verb terms they use a tool called XTRACTOR. They, then, select the most frequent verbs and proceed to analyze their concordances so as to select for each verb the following pieces of information (Alves et al. 2007: 93):

- 1) a definition,
- 2) its logic-semantic relations,
- 3) its semantic roles,
- 4) its frame elements.

According to them, the definition is useful for the people working with the ontology but not for the system itself. The logic-semantic relations are selected based on the relations proposed by *WordNet*, i.e. antonymy, entailment, cause, hyponymy and synonymy. Take the verb *condenar* (to condemn) as an example. The procedure to analyze its logic-semantic relationships proceeds as follows. Firstly, they refer to Borba (2002) for whom this verb can convey two types of situations: action-process and action. They consider the situation of “action-process” (meaning *declarar culpado* (Eng. to declare guilty) and *pronunciar uma sentença* (Eng. to pronounce a sentence upon)) as relevant in the subject field in question. Then, they use *WordNet*’s logic-semantic relations to account for the relations between the verb *condenar* and other verbs (Figure 14). For instance, *condenar* has three synonyms, i.e. *pronunciar*

juízo contra, *sentenciar* and *culpar*; it has a “coordinate term”, i.e. *absolver*; and, it has several hyperonyms, i.e. *julgar*, *declarar*, *verbalizar*, etc.

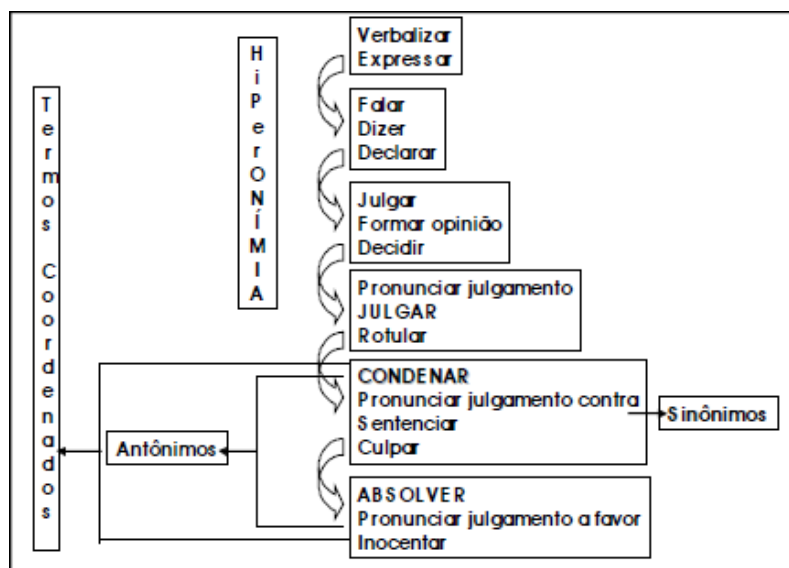


Figure 14. Logic-semantic relations of the verb *condenar* (to condemn) (Alves et al. 2005a: 130)

Based on the works by Fillmore (1968), Frawley (1992) and Borba (1996), they proceed to identify the semantic roles of the arguments of the verbs by analyzing their contexts. The list of labels they use for this task includes very general semantic roles: Agent, Instrument, Beneficiary, Patient, Goal, Source, Location, Purpose and Reason. Taking the same verb as an example, the following context provided by the authors illustrates the identification of the verb’s argument with the semantic role of Patient (“paciente”) as well as the verb’s argument with the semantic role of Goal (“objetivo”) (Alves et al 2005: 130):

Foi proferida nova sentença (fls. 241 a 252). E, no essencial, com o mesmo conteúdo da anterior, sendo a Ré [paciente] condenada a pagar aos autores, a

mesma quantia global, de 6151000 escudos [objectivo]. (Fonte: Acórdão 02B2159)

Translation:

A new sentence was pronounced (fls. 241 a 252). And similarly to the previous one, the defendant [Patient] was sentenced to pay to the authors the same global amount of 6151000 escudos. [Goal]. (Source: Acórdão 02B2159)

Finally, based on the FrameNet project, their analysis involves using frames to classify the entities related to the extralinguistic context. They explain that whereas semantic roles allow them to represent the participants in the predications, the frame elements allow them to represent the participants in the situation evoked by the LU in question. The same example illustrates the identification of the frame elements (Alves et al 2005: 130):

Foi proferida nova sentença [meio] (fls. 241 a 252). E, no essencial, com o mesmo conteúdo da anterior, sendo a Ré [avaliado] condenada a pagar aos autores, a mesma quantia global, de 6151000 escudos [tópico]. (Fonte: Acórdão 02B2159)

Translation:

A new sentence was pronounced [Means] (fls. 241 a 252). And similarly to the previous one, the defendant [Evaluated] was sentenced to pay to the authors the same global amount of 6151000 escudos. [Topic]. (Source: Acórdão 02B2159)

The methodology designed by this group of researchers allows them to represent the *condenar* as a judgment_communication verb (Table 6), in which a “communicator” (implicit in the context above) communicates a judgment on “somebody who was evaluated” (“a autora”) to a given subject (uninstantiated in the context above). They note that the information in Table 6 took the corpus as the point of departure but did not limit itself to it, as the relations among the selected verbs were linked to other verbs that did not occur in the corpus. Once the corpus analysis is completed, they then proceed to encode the information gathered in the ontology editor Protégé in OWL format.

Table 6. Ontological structure of *condenar* (Alves et al 2005a: 131).

<i>ENTIDADE: condenar</i>
<i>Definição: declarar culpado; pronunciar uma sentença a alguém em um tribunal, reconhecendo-o responsável pelo delito, crime ou falta e atribuindo-lhe uma pena (WN - tradução minha; BORBA, 2002 e DLPC, 2001)</i>
<i>Relações lógicas-semânticas: sinonímia, antonímia, hiperonímia, termos coordenados.</i>
<i>Papéis semânticos: agente, paciente, objetivo, instrumento, razão.</i>
<i>Frame semântico: avaliador, avaliado, meio, base legal, razão, local, condições, tempo, maneira, tópico.</i>

From this work, it is not entirely clear why the authors consider it relevant to use both semantic labels as general as Agent and Patient and frame-related labels as specific as Evaluator and Evaluatee, even though they mention that the former aim to differentiate the participants in the predications whereas frame elements allow them to represent the participants in the situation evoked by the LU in question. It seems to us that frame-related labels would be sufficient for reasons that will be mentioned in Chapter 3.

2.3.5. The speech act theory

Maciel's (2008) study focuses on verbs that instantiate macro speech acts in the subject field of law and that thus endow other verbs that occur in legal texts with the performative character as well. This work is placed in the perspective of the speech act theory (Austin 1962; Searle 1983). According to this theory, language is not only a means of conveying information but also a mode of action. The basic emphasis is on what an utterer means by his utterance rather than what it means in a language. Therefore, the uttering of a sentence is the doing of an action. Maciel's hypothesis is that actions in law are made by means of linguistic acts. Legal speech acts presuppose

entities with authority to transmit meaning as well as a set of norms that establish the use of terms. Compliance with conventional procedures determines the success or failure of the act. Verbs have a performative character and, as a result, they play an extremely important role in the subject field of law because they can create or delete entities, punish or condemn somebody, allow or prohibit something.

The author uses a corpus of constitutional texts from the eight members of the Community of Portuguese Language Countries (Angola, Brazil, Cape Verde, Guinea-Bissau, Mozambique, Portugal, São Tomé and Príncipe and East Timor). She explains that the Constitution follows a pre-established graphical form that, together with the writing characteristics of legal texts, constitutes a good example of the canonical semiotics of the subject field. This structure is one of the elements that correspond to the institutional facts pointed out by Searle (1983) as indispensable for the performance of a speech act. In this corpus she identified 829 verbs and, based on the analysis of concordances, she selected three types of verbs that seemed to be performative in the constitutional texts (Maciel 2008: 6):

1. Verbs that create a juridical norm: *promulgar* (Eng. to enact), *consagrar* (Eng. to lay down), *decretar* (Eng. to order) and *aprovar* (Eng. to approve);
2. Verbs that endow certain individuals and/or institutions with a part of governmental power: *caber* (Eng. to be formally responsible), *competir* (Eng. to be entitled to) and *incumbir* (Eng. to place the responsibility for);
3. Verbs that rule the behaviour in a politically organized society: *permitir* (Eng. to allow), *facultar* (Eng. to provide), *proibir* (Eng. to prohibit) and *vedar* (Eng. to preclude).

Then, the author analyzed the morphosyntactic, semantic and pragmatic behaviour of each verb in context, i.e. their verb tenses, voice, transitivity and the nature of the arguments. For instance, the first group of verbs consists of action-process, transitive verbs; their subjects are explicit or implicit agents; their objects are inanimate and denote legislative documents or socio-political fundamental principles; their pragmatic function is to publicize officially and to manifest agreement. Maciel concludes that the analysis of the componential structure of the verbs that she analyzes reveals that the syntactic subjects and objects of the verbs are all entities/terms from the subject field of law.

This conclusion corroborates the idea according to which a verb is quite likely a term if its actants are terms themselves (L'Homme 1998, 2004) but goes against Lorente's idea according to which performative verbs cannot convey specialized meaning.

2.3.6. Specialized verb equivalents

There are two different types of contributions on specialized verb equivalents. In the first one, researchers perform a contrastive analysis of terms in different languages for a given reason, and while doing so they also draw some considerations on specialized verbs in different languages (Valero Doménech et al. 2009, Pimentel and L'Homme 2011). In the second one, researchers specifically concentrate on the equivalents of specialized verbs (L'Homme 1995; Lerat 2002b).

In the first case, studies on specialized verb equivalents are based on the lexico-semantic approach as well as on the implementation of DiCoInfo, to which we referred in section 2.3.2. The comparison of the French and English entries of specialized verbs in DiCoInfo shows that the verbs that are equivalents share a similar actantial structure.

Nevertheless, Pimentel and L'Homme (2011) note that interlinguistic variations among French and English equivalent terms may exist. Differences can be observed mainly at the semantic and syntactic levels:

- **Semantic level.** Semantic classes of participants that are associated to certain semantic roles may vary from one language to another. For instance, in the contexts of the verb *connecter*, the participants associated with the semantic role Agent can be either animate or inanimate, whereas in the English contexts of the equivalent term *log on* participants are always animate (Figure 15).

CONNECTER 1		
Actants		
Agent	Sujet (SN) (5) Lien indirect (SN) Sujet (Pro) (2)	vous (4) utilisateur (2) qui(l'utilisateur)) qui(la machine)
Destination	Complement (SP -à) (12)	site (4) internet (3) système (2) serveur (2) réseau

LOG ON 1		
Actants		
Agent	Subject (NP) (9) Indirect link (NP) (7)	you (9) user (2) people (2) person i they(the bad guys)
Destination	Complement (PP -to) (11)	computer (3) internet (2) site (2) pc device application account

Figure 15. Participants of the terms *connecter* and *log on* and their realizations

- **Syntactic level.** Differences between French and English terms can be observed in the syntactic functions of the participants as well as in the syntactic groups of the participants, namely in the choice of prepositions. For instance, the participant with the semantic role Destination occurs in the

contexts of *enregistrer* with two prepositions, whereas in the contexts of the equivalent *save*, the same participant can occur with three different prepositions as well as an Adverbial Phrase.

Other observed differences between equivalent terms include the transitive and intransitive uses of certain verbs in English. This is the case of *click*₁ which can be used either transitively as in *click an icon* or intransitively as in *click on an icon*. The French equivalent is only used intransitively as in *cliquer sur une icône*. Although rare, in DiCoInfo certain terms in English do not have a lexical equivalent in French. This is the case of *launch* as in *the program launches*.

Certain interlinguistic variations between French and Spanish specialized verbs were also identified. Valero Doménech et al. (2009: 81) write that there is a greater use of synonyms in one language and less in another and that this has repercussions when it comes to the choice of equivalents. For instance, there are four synonyms for the verb to *chat* in French, i.e. *chater*, *clavarder*, *cyberbavarder*, *bavarder*, whereas in Spanish there is only *chatear* or *conversar en un chat*. In addition, some terms in one language can correspond to phrases in another language that are not necessarily specialized. For instance, *sauvegarder* corresponds to *hacer una copia de seguridad*. In this case, the authors explain that the verb *sauvegarder* can be linked to the noun *copia de seguridad*, where the section called “Lexical relations” provides the user with the phrase *hacer una copia de seguridad*.

Although these contributions based on DiCoInfo describe some interlinguistic variations between specialized verbs, they do not propose any typology of equivalence or systematic criteria for equivalence discrimination. In contrast, the other contributions that will be mentioned next (L’Homme 1995; Lerat 2002b) draw important considerations on this matter.

In 1995, L'Homme proposes a methodology to describe verbs that occur in technical texts and find their equivalents. The methodology consists in making sense distinctions by taking into account the semantic classes of the nouns that combine with the selected verbs as well as their syntactic functions. The semantic classes to which the author refers are adapted from Sager and Kageura (1994) who identify four groups of classes but which the author adapts (L'Homme 1995: 79):

Nous offrons une adaptation française fonctionnelle: 1. entity concept (material concepts and non-material concepts), 2. relation concepts, 3. activity concepts, and 4. property concepts (1. entités (réalité matérielle ou non) (chat, table, imprimante; information, bit); 2. relation (partie, type); 3. action (alésage, informatisation); 4. propriété (durabilité)). Les auteurs proposent également une amorce de subdivision qu'ils laissent plus ou moins ouverte et que nous avons aménagée en fonction de nos besoins. Nous avons retenu ce modèle, car les auteurs l'ont fondé sur la langue de spécialité.

As in the theory of classes of objects created by Gross (1994, 1995, 1996) and Le Pesant and Mathieu-Colas (1998), L'Homme argues that some verbs are used specifically with a given group of nouns and that if the same verb is used with more than one different class of nouns, then it has different meanings. In order to find the equivalents of the verbs, the contexts in which the verbs occur in each language should be compared. She explains that (L'Homme 1995: 80):

La confrontation des formes verbales consiste à associer deux significations ou emplois similaires dans les deux langues. Un sens ou un emploi distinctif dégagés dans une langue individuellement (structure grammaticale ou élément lexical associé) trouve un équivalent appartenant à la même partie du discours dans l'autre langue.

The idea is that equivalent verbs should combine with the same semantic classes. For instance, when the English verb *to absorb* combines with terms denoting “energy” and “work”, its French equivalent is *recevoir*. In contrast, when *to absorb* combines with terms denoting “vibration” and “shock”, its French equivalent is

absorber and *amortir*. This is made relatively easy because the author is dealing with technical texts in which terms in two languages refer to the same entities.

Later, Lerat (2002b) suggests that the theory of the classes of objects can be useful for the identification of the equivalents of specialized verbs, namely of verbs that are used in the subject field of the law. Very similarly to the findings of L'Homme (1995), the idea here is that verbs that are equivalents in two languages tend to combine with the same classes of objects or have the same "schémas d'arguments". For instance, the French verb *disposer*, the English verb to *provide*, the German verb *bestimmen* and the Italian verb *prescrivere* are equivalents because they are used with the same kind of argument "<écrit juridique>" (Lerat 2002b: 160).

Bearing in mind the contributions discussed in this section, it seems that there are two important elements that need to be analyzed in order to identify the equivalents of specialized verbs: the actantial structures and the nature of the arguments of the verbs. However, what the approaches that we described seem to fail to do is to establish the boundaries between full and partial equivalents, which are may be relevant in culture-bound subject fields such as the law (section 2.1.1).

In fact, even though Pimentel and L'Homme (2011) suggest that full equivalence may not always exist in technical domains such as computing and the Internet by providing examples of interlinguistic variation between terms, the authors do not draw considerations on what distinguishes a full equivalent verb pair from a partially equivalent one. The same is valid for L'Homme (1995) and Lerat (2002b) which correspond to the contributions that focus the most on methodologies for identifying the equivalents of specialized verbs. Although their findings prove to be useful for choosing appropriate translation equivalents, the workflow that they describe for the identification of equivalents would benefit from more systematicity. For all

these reasons, we believe it remains to be developed a systematic methodology for identifying and discriminating between full and partial equivalents that can be used in the translation of legal texts. The set of criteria for validating equivalents that could be derived from such methodology could help terminologists and translators choose the equivalents they need.

In section 2.2.4 (“Methodologies for establishing equivalence”) we formulated the hypothesis that a methodology based on the description of terms by means of semantic frames (Fillmore 1976, 1977, 1982, 1985; Fillmore and Atkins 1992) would help us identify full and partial equivalents. Full equivalents should be those terms that will be grouped together into the same frame and have the same number and nature of arguments. The following chapter describes the theoretical and methodological framework on which the methodology we propose is based as well as the reasons why we decided to use it.

3. Theoretical framework

This chapter presents the theoretical model of Frame Semantics (Fillmore 1976, 1977, 1982, 1985; Fillmore and Atkins 1992) as well as its applications to the elaboration of general and specialized lexical resources. It is organized as follows. Section 3.1 briefly outlines the background that led to the elaboration of this theoretical model as well as the main principles of Frame Semantics. Section 3.2 is divided into two parts: the first one concerns the application of Frame Semantics to the elaboration of a lexical resource for the English language (i.e. FrameNet), and the second one describes the applications of Frame Semantics to terminology. Finally, section 3.3 explains the choice of the theoretical model in the research.

3.1. Frame Semantics

In this subchapter we outline the background that led to the elaboration of Frame Semantics as well as a number of its most relevant theoretical principles. The term *Frame Semantics* refers to the theory whereas the term *semantic frames* refers to the object of study of the theory.

3.1.1. The origins

Until the second half of the 20th Century, verbs were considered as a mere syntactical element and were consequently left to the research scope of specialists in syntax. However, in the second half of the last century some linguists started to propose approaches to the study of verbs (and of the lexicon) that combine both semantic and syntactical analysis. One of these approaches, Frame Semantics (Fillmore 1976, 1977, 1982, 1985; Fillmore and Atkins 1992), has proved to be relevant for general lexicography and we will argue that it may be of relevant for terminography as well.

But in order to understand Frame Semantics and the way in which verbs¹² are described in this theory, it is helpful to retrace Fillmore's motivations (1969, 1976, 1977, 1982, 1985) as well as some work that preceded his own proposals.

Tesnière (1959) was one of the first (if not the first) linguist to theorize about the central role that the verb occupies in the sentence as the organizer of syntactic and semantic information. According to him, a sentence does not consist of a noun phrase plus a verb phrase, or of a subject and a predicate (first tree in Figure 16). Instead, a sentence consists of a verb that is usually accompanied by actants (traditionally called *arguments*). This is because, for Tesnière, sentences resemble scenes (*scène*), a sort of micro theatre play that includes a main action (*verbe*), actors (*actants*) and circumstances (*circonstants*) (see second tree in Figure 16).

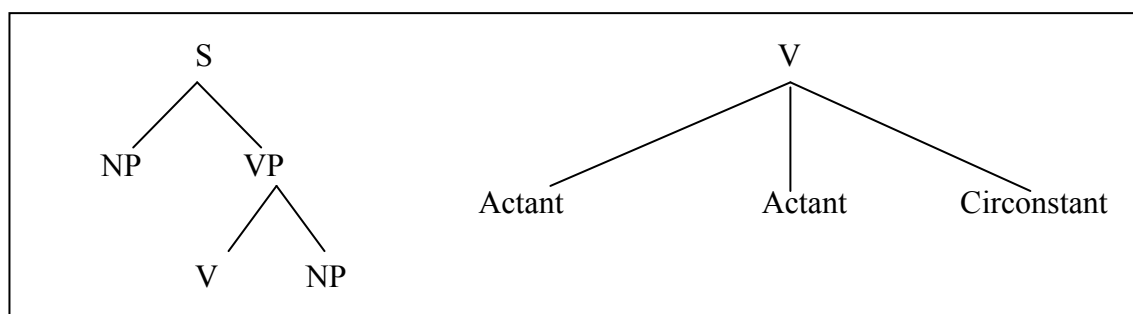


Figure 16. Chomsky's (1957) representation of sentences and Tesnière's (1959) representation of sentences

As a result, Tesnière categorizes verbs according to the number of their valence members (or number of actants): *avalent* (no actants), *monovalent* (one actant), *bivalent* (two actants) and *trivalent* (three actants). Also, according to him, each actant entails a semantic definition. As Pariollaud (2008: 18) puts it:

¹² Other parts of speech (as long as they are predicative units) are also taken into account in this theory but verbs play a central role as it will be clear in the following sections.

À une réalité syntaxique correspond une réalité sémantique et inversement. Ainsi, les informations syntaxiques apportées par la phrase renvoient-elles à des informations sémantiques. C'est le cas, en l'occurrence, des « espèces d'actants » qui renvoient à des fonctions sémantiques. Les actants sont donc distingués par un numéro d'ordre et sont donc appelés prime actant, second actant et tiers actant. [...] À cette définition syntaxique de prime, second et tiers actant correspond donc une définition sémantique : d'un point de vue sémantique, le prime actant est celui qui fait l'action, le second actant est celui qui supporte l'action, le tiers actant est celui au bénéfice ou au détriment duquel se fait l'action.

Thus, for Tesnière, syntax and semantics are two different independent levels of analysis, but the verb remains at the core of each one. In fact, valency successfully evinces the semantic potential of verbs at the same time it illustrates the cooperation between lexicon and syntax. For this reason, Leroyer (2001: 323) argues that Tesnière's model is particularly helpful for dictionaries and other lexical resources and explains that:

Dans la tradition de la syntaxe fonctionnelle en général, et de la syntaxe valentielle en particulier, *c'est la phrase qui constitue l'objet d'étude*. Pour le dictionnaire du genre des manuels surtout, le recours systématique aux exemples textuels syntaxiques devrait permettre une description lexicographique globale des données syntaxiques verbales, puisque l'exemple textuel syntaxique englobe implicitement l'ensemble des informations en unifiant les niveaux sémantiques, et les niveaux pragmatiques de la phrase comme un énoncé réalisé, ancrée dans un contexte situationnel, c'est-à-dire un **sénario verbal**. (author's italics and boldface)

Another relevant and concurrent contribution in linguistics that is important to mention is that of Chomsky (1957, 1965) and of the partisans of the Generative Grammar who also emphasize the borders between syntax and semantics. They advocate the primacy of syntax (with *subcategorization rules*) over semantics (with *selectional restrictions*) and, when compared to Tesnière, they view verbs as a less central unit in the syntax-semantics interface (cf. first tree of Figure 16). Over the last decades, their model has been considered insufficient to account for the argument selection of verbs because (Pariollaud 2008: 20):

Par exemple, les règles de sous-catégorisation indiquent que le verbe « manger » requiert deux arguments, et les restrictions sélectionnelles amènent l'information selon laquelle le premier de ces arguments peut être humain ou animal et que le second doit être un nom inanimé et concret (MANGER [N_0 humain + animal, N_1 inanimé concret]) (Le Pesant & Colas, 1998). Dans le cas du verbe « manger », les règles du modèle Chomksyen permettent de juger une phrase telle que « j'ai mangé deux sentiments » comme aberrante, mais elles n'empêchent pas « j'ai mangé deux armoires » d'être jugée cohérente.

Later, other linguists, like Fillmore (1968), questioned the autonomy of syntax and argued instead that semantics motivates syntactic phenomena and not the other way round (i.e. the deep structure of sentences is ruled by semantics and not syntax). In a truly Tesnièrean approach, Fillmore sees the predication of the verb spread over arguments (see second tree in Figure 16) which correspond to deep cases required by the verb (or by the predicative unit, in general). The author defines “cases” as follows (1968: 46):

The case notions comprise a set of universal, presumably innate, concepts which identify certain types of judgements which human beings are capable of making on the events that are going on around them, judgements on such matters as who did it, who it happened to, what got changed, etc. The cases that appear to be needed include: Agentive [...] Instrumental [...], Dative [...] Factitive [...] Locative [...] Objective [...]

This theory is developed in Fillmore's well-known paper “The Case for Case” (1968), in which he proposes a grammar to describe ‘case’ relationships – the Case Grammar. In Case Grammar, a case frame, i.e. “the case elements which the sentence provides” (Fillmore 1968: 49), describes important aspects of semantic valency. By way of an example, consider the following sentence with the verb *to give*:

[1] Mary gave Pete the apples.

The verb *to give* is inserted into the frame [A + O + D] because it requires obligatorily three arguments (or “frame features”): an Agentive (Mary), an Objective

(apples) and a Dative (Pete). However, case frames are subject to certain constraints. Firstly, a deep case can occur only once per sentence (note that in the previous example each case occurs only once). Secondly, some cases are obligatory whereas others are optional. Thirdly, if an obligatory case is deleted, the sentence will be ungrammatical. For example, sentence [2] below is ungrammatical because the verb's obligatory Dative case is not present:

[2] *Mary gave the apples.

Another fundamental hypothesis of Case Grammar is that grammatical functions, such as subject or object, are determined by the semantic valency of the verb and not by deep structure. For Fillmore, the relation called *subject* is an exclusively surface-structure phenomenon (as opposed to deep-structure phenomenon). This would explain *subjectless* sentences and languages appearing to lack entities corresponding to the *subjects* of the grammatical tradition.

Case Grammar is often considered the beginning of Fillmore's work on lexical semantics (1976, 1977a, 1982, 1985) as well as the linguistic basis of FrameNet (cf. Fillmore et al. 2003a: 240). As the following section will reveal, the author eventually came to realize that the rather spare deep cases that he had identified were not enough to capture the full range of meanings expressed in language.

3.1.2. Semantic frames

The previous section has just referred to the importance of the contributions of Tesnière and Chomsky for the theoretical model that Fillmore elaborated in 1968 and which he continued developing since then. Although Fillmore had used the term *frames* as when of the proposal of Case Grammar, it was not until his 1976 paper, "Frame semantics and

the nature of language”, that the author adopted the term *Frame Semantics* for what would be “a research program in empirical semantics which emphasizes the continuities between language and experience, and provides a framework for presenting the results of that research” (Petrucci, 1996: 1). In this paper, Fillmore refers once again to the limitations of the generativist tradition and explains his motivations to develop the theory of Frame Semantics (1976: 22-23):

Linguists especially those working within the generativist tradition, take as their main goal that of characterizing the set of abilities that together make up an individual’s knowledge of his language. [...] I have no quarrel with this program as far as it goes; but I feel that for many purposes we need to add to this approach an awareness of the importance of the social functions of language, a concern with the nature of the speech production and comprehension processes, and an interest in the relationships between what a speaker says and the context in which he says it. [...] A proposal that I favour is that in characterizing a language system we must add to the description of grammar and lexicon a description of the cognitive and interactional “frames” in terms of which the language-user interprets his environment, formulates his own messages, understands the messages of others, and accumulates or creates an internal model of his world.

Later, in 1982, Fillmore admits adopting the term *frame* from Minsky’s terminology (1975), although the term was being used by researchers working in other fields such as neuropsychology (Bransford and Johnson 1973) and sociology (Goffman 1974, 1981). Being a researcher in IA (Artificial Intelligence), Minsky was concerned with the question of how to equip computers with the world knowledge they would need to perform otherwise impossible tasks (Bednarek 2005: 689). One of Minsky’s often-cited definitions of “frame” is the following (Minsky, 1977: 355):

Here is the essence of the frame theory: When one encounters a new situation [...], one selects from memory a structure called a frame. This is a remembered framework to be adapted to fit reality by changing details as necessary. A frame is a data structure for representing a stereotyped situation like being in a certain kind of living room or going to a child’s birthday party. Attached to each frame are several kinds of information. [...] Some is about what one can expect to happen next.

Fillmore considers this term relevant for his theory and he elaborates his own definition of “frame”. For the author, a **frame** is “any system of concepts related in such a way that to understand any one of them you have to understand the whole structure in which it fits” (Fillmore 1982: 111). But in order to clearly understand what Fillmore means by this, consider the following sentences:

[3] We never open our presents until morning.

[4] My dad wasted most of the morning on a bus.

[5] Please finish chapter 3 on Frame Semantics by Tuesday.

Hearing sentence [3] we immediately understand that the speaker is talking about a Christmas practice, although the word *Christmas* is never mentioned, nor any of the other words necessarily relate to Christmas. Obviously, it is the association of the individual meanings of each word that allows the speaker to formulate such an interpretation. We can, therefore, say that this statement **evokes** the Christmas frame.

On its part, sentence [4] entails the simple fact that the speaker’s male parent spent some part of a day in a vehicle. However, hearing this sentence, we understand that (Fillmore 1985: 230-231):

1. *The speaker is not a grown-up;*
2. *The speaker is not talking to a member of his own household;*
3. *The time in question was somehow between 8 AM and 12 PM;*
4. *The vehicle in question was moving along its regular route (in service);*
5. *The presence of the speaker’s father was irrelevant to the route the bus was taking;*
6. *The parent’s time could have been better employed.*

This kind of understanding by the language-user is only possible because some words from that sentence **evoke** certain frames against which they are understood (we can also say that the speaker uses those words to **invoke** frames):

1. *dad*: the speaker is not a grown-up
2. *my dad*: the speaker is not talking to a member of his own household
3. *morning*: day as working day as opposed to calendar day
4. *on a bus*: a vehicle in service (and not '*in a bus*')
5. *wasted*: "time is precious"

Finally, hearing sentence [5] the reader may very well interpret the statement as a PhD Thesis frame. For those familiar with the elaboration of a doctoral thesis and this thesis in particular, the statement evokes a whole set of information that is part of the interpreter's background knowledge on what a PhD thesis involves, e.g. the fact that a thesis is composed of chapters, one or two supervisors and a student, deadlines.

These examples illustrate that Frame Semantics "makes the assumption that there is always some **background knowledge** relative to which a word does some profiling/highlighting, and relative to which it is defined" (Gawron 2008: 8). Take the word *Tuesday* from sentence [3]. We know that we live in a world where cyclic calendars divide time into repeating intervals, i.e. years are divided into months, which are divided into weeks which are divided into days, which have cyclic names. Each week has a Sunday, a Monday, a Tuesday, and so on. As Fillmore (1985) explains, defining *Tuesday* entails defining the notion of *cyclic calendar*. The concept of *cyclic calendar* provides the background frame for lexical units such as *week*, *month*, *Saturday*, etc. In the case of *Tuesday*, we can say that this lexical unit evokes the frame *Calendric_unit*.

According to this view, words denote human mental images and meaning is not an inherent property of words. In fact, “[...] to understand word meaning we must first have knowledge of the **conceptual structures**, or semantic frames, which provide the background and motivation for their existence in the language and their use in discourse” (Fillmore et al. 2003a: 247). Thus, in Frame Semantics the background knowledge relative to which a word is defined necessarily presupposes some kind of structured human experience because no concept is said to exist autonomously. To sum up, in Frame Semantics linguistic knowledge is not differentiated from world knowledge.

3.1.3. Frame elements and profiling

As mentioned, words are said to evoke frames. Each possible meaning that a word evokes is said to correspond to a frame, the organisational unit in Frame Semantics. Whenever a word is linked to a specific meaning it is called a **lexical unit** (henceforth LU), which is in line with Cruse (1986: 80) for whom an LU is “the union of a single sense with a lexical form”. In Frame Semantics, an LU is defined with respect to the frame and not necessarily relative to other words. Thus, frames organize words that are associated by experience or by conceptual scenarios.

Each frame has a given number of meaning slots or frame elements. **Frame elements** are regular participants or features or even attributes of the situation described by the frame and are always attributed a semantic label. For instance, the frame that the verb *to buy* evokes in a sentence like *Carla bought a bicycle from Pete for 50\$* presupposes a seller, a buyer, the goods and money. Frame elements are different from the case roles or semantic roles proposed in Fillmore’s previous works (Fillmore 1968, 1976). In fact, from 1977 on, Fillmore realized that the term *Frame Elements* is more appropriate than the term *semantic roles* for several reasons.

Firstly, according to him, semantic roles had fallen short of providing the detail needed for semantic description and it was necessary to account for larger cognitive structures capable of providing a new layer of semantic role notions in terms of which whole domains of vocabulary could be semantically characterized (Fillmore 1982: 115). Secondly, it was the combination of semantic roles which allowed him to describe particular categories of situation. As a result, he realized eventually that the situation types themselves were what should be known as frames and that the case roles or semantic roles within them should be identified relative to the frames. For instance, consider group A of sentences (Fillmore 1982: 115-116):

Group A

- [1] Carla bought a bicycle from Pete for 50\$.
- [1] Carla bought a bicycle from Pete.
- [3] Carla bought a bicycle for 50\$.
- [4] Carla bought a bicycle.
- [5]*Carla bought from Pete for 50\$.
- [6]*Carla bought from Pete.
- [7]*Carla bought for 50\$.

Based on the theory of cases, the verb *to buy* is said to have four deep cases. The cases and their roles can be identified by analyzing group A of sentences and labels are chosen to account for the interaction between the verb and its arguments:

Carla (Agent?) bought a bicycle (Theme?) from Pete (Source? Counteragent?).

Now consider Table 7. The role labels are chosen by appealing to the conceptual background that underlies the meaning of the verb *to buy*, i.e. when somebody buys something this involves a buyer, a seller, goods and money.

Table 7. Elements of the frame evoked by *buy*

Sentence	BUYER	BUY	GOODS	SELLER	MONEY
[1]	Carla	bought	a bicycle	from Pete	for 50\$
[2]	Carla	bought	a bicycle	from Pete	–
[3]	Carla	bought	a bicycle	–	for 50\$
[4]	Carla	bought	a bicycle	–	–

Now, examine group B of sentences:

Group B

[1] Pete sold the bicycle to Carla for 50\$.

[2] Pete sold the bicycle to Carla.

[3] Pete sold the bicycle for 50\$.

[4] Pete sold the bicycle.

[5]*Pete sold to Carla for 50\$.

[6]*Pete sold to Carla.

[7]*Pete sold for 50\$.

Again, based on the theory of cases, one can say that the verb *sell* has four deep cases. The cases and their roles are identified by analyzing the group of sentences and labels are chosen to account for the interaction between the verb and its arguments:

Pete (Agent? Source?) sold the bicycle (Theme?) to Carla (Counteragent? Goal?).

Now consider Table 8. Here, again, the role labels are chosen by appealing to the conceptual background that underlies the meaning of the verb *sell*. If one compares both groups of sentences one can see that both the verb *buy* and the verb *sell* have in common the fact that they entail the same elements of understanding: “a person interested in exchanging money for goods, (the BUYER), a person interested in

exchanging the goods for money (the SELLER), the goods which the Buyer did or could acquire (the GOODS), and the money acquired (or sought) by the seller (the MONEY)” (Fillmore 1982: 116).

Table 8. Elements of the frame evoked by *sell*

Sentence	SELLER	SELL	GOODS	BUYER	MONEY
[1]	Pete	sold	the bicycle	to Carla	for 50\$
[2]	Pete	sold	the bicycle	to Carla	–
[3]	Pete	sold	the bicycle	–	for 50\$
[4]	Pete	sold	the bicycle	–	–

As a result, *buy* and *sell* contain the same meaning slots (i.e. Buyer, Seller, Goods and Money), even if these are in a syntactically different order (compare Table 7 with Table 8). The verb *buy* focuses on the actions of the BUYER with respect to the GOODS, backgrounding the SELLER and the MONEY, whereas the verb *sell* focuses on the actions of the SELLER with respect to the GOODS, backgrounding the BUYER and the MONEY. This means that the verb *buy* requires (syntactically) obligatorily a BUYER and GOODS, and optionally a SELLER and MONEY. Similarly, the verb *sell* requires obligatorily a SELLER and GOODS, and optionally a BUYER and MONEY. Contexts [5-7] from Group A and from Group B are ungrammatical because the frame element GOODS which is obligatory in both *buy* and *sell* is omitted.

This way, these verbs are said to evoke or connect to the [Commerce] frame but they do it in a different way in that they present two different perspectives of the same situation: in the case of *buy* the Buyer is viewed as agent and in the case of *sell* the Seller is. Thus, although the LUs *sell* and *buy* share the same base (the frame [Commerce]), they are two different **profiles** of it ([Commerce_sell] and

[Commerce_buy], respectively) and their meaning lies exactly in the specification of the base and their profiling.

It should be by now clear why Frame Semantics is theoretically well suited to study the meaning and behaviour verbs. The following sub-chapter demonstrates that the theory has had successful practical applications.

3.2. Applications of Frame Semantics

Frame Semantics has been applied in several research areas such as lexicology, lexicography, terminology and the teaching of foreign languages. Section 3.2.1 describes FrameNet (Ruppenhofer et al. 2010), the first application of Frame Semantics to lexicography, and section 3.2.2 concentrates on the applications of Frame Semantics to terminology.

3.2.1. FrameNet

The word *FrameNet* refers both to the product (FrameNet 2012) and to the project (Baker et al. 1998, Ruppenhofer et al. 2010). As a product, FrameNet can be defined as an online lexical resource for English that groups related words together into semantic frames. Also, FrameNet is defined by its authors (Fillmore et al. 2003a: 235) as:

A computational lexicography project that extracts information about the linked semantic and syntactic properties of English words from large electronic text corpora, using both manual and automatic procedures, and presents this information in a variety of web-based reports. The name 'FrameNet', inspired by 'WordNet' (Fellbaum 1998), reflects the fact that the project is based on the theory of *Frame Semantics*, and that it is concerned with *networks* of meaning in which words participate.

As mentioned in the previous section, the idea of Frame Semantics is that word meanings must be described in relation to semantic frames. FrameNet lexicography uses the *British National Corpus* (BNC) to understand how frames underlie the meanings of a large number of English verbs, nouns, adjectives, adverbs, and prepositions as well as to identify their valence patterns (the ways in which the semantic properties are given linguistic form). Thus, FrameNet lexicography can be divided into two main activities. The first one consists in identifying the frames evoked by the LUs and in defining the frames. The second activity consists in annotating the sentences so as to show how the FEs fit syntactically around the LU that evokes the frame.

3.2.1.1. Frame development

The FrameNet methodology follows a top-down approach that consists in identifying a frame, describing it and developing a list of frame-evoking words. After choosing a frame, FrameNet lexicographers start working on the frame by giving an informal description of the type of situation that the frame represents. By way of an example, consider a situation in which someone is not in agreement with someone else about something. FrameNetters then prepare a list of words that may evoke this frame or that can be explained with reference to the frame. They explain that this stage is “the ‘armchair linguistics’ part of [their] work: [they] appeal to the native speaker intuition; [they] consult paper and electronic dictionaries and thesauri; and occasionally [they] make forays into the lexical semantics literature” (Fillmore et al. 2003b: 299).

For instance, a word that may evoke a situation in which someone is not in agreement with someone else about something is the verb *to argue*. FrameNetters then query a corpus and examine the KWIC lines of the lemma *argue* (Figure 17).

1	This lack is a key factor	arguing	against the existence of such a relationship.
2	'You'll stop	arguing	and do as you're damned well told!
3	We spent most of our time in cafes,	arguing	and holding hands
4	He was penalised for joking and	arguing	disruptively yesterday.
5	These features	argue	for a local origin.
6	Margaret Mead	argued	for a nurture perspective on behaviour.
7	There was a lot of	arguing	going on between Mum and Dad.
8	This can be seen, they	argue,	in many forms of state intervention.
9	The teachers and medics were	arguing	out who has which square inch of my time.
10	Dr Wilson	argues	that if ants were to disappear, most of the ...
11	Richard Dawkins has	argued	that it is their genes that survive.
12	Like Pareto, Burnham	argued	that Marxism was a self serving ideology.
13	It	argues	that a serious vehicle tax should be levied.
14	The popular press have	argued	the case.
15	The platoon commander was	arguing	with a gang of Christian Phalangists.

Figure 17. KWIC lines for the lemma *argue* (Fillmore and Atkins 1998: 2)

From the analysis of the KWIC lines, the lexicographers realize that the word *argue* is polysemous, namely that it has three senses: a sense of quarrelling, a sense of reasoning and a legal sense (Figure 18). In order to validate this sense distinction, the steps below are followed (cf. Fillmore et al 2003a: 255):

1. For each semantic type of complement that occurs with this verb, they look for other words with similar meanings that also take that kind of complement;
2. They notice which complement types cluster together with groups of meaning-sharing words;
3. Given two types of complement that both occur with the target word, if one complement regularly occurs with one group of related words, and the other with a different group of related words, this is a strong evidence for a sense distinction and, thus for frame distinction.

Quarreling:	
(3, 9)	the participants can be represented as a plural subject
(15)	the participants can distribute between the subject and a with-phrase
(2-4)	the verb occurs without a complement
Reasoning:	
(6, 10-12)	the subject can be the person who presents the case
(1, 5, 13)	the subject can be some sort of evidence
(5, 6)	the position can be marked with the preposition for
(10-13)	the position can be marked with a that-clause
(1)	a position being opposed can be marked with the preposition against
(8)	the verb occurs parenthetically
« The use in sentence (14) might belong to a third sense: legal. »	

Figure 18. Senses of the lemma *argue* (Fillmore and Atkins 1998: 3-5)

It can be observed from Figure 18 that the verb *argue* supports three different LUs which participate in different frames. In the sense of quarrelling the verb *to argue* belongs to a frame named *Quarreling* which can be defined as follows (FrameNet 2012):

A group of **Arguers** (also expressible as **Arguer1** and **Arguer2**) express incompatible opinions or beliefs about an **Issue**.

As mentioned in section 3.1.3, participants in frames are called *Frame Elements* (hereafter FEs). In the [Quarreling] frame there are two obligatory FEs: the FE ARGUERS (or ARGUER1 and ARGUER2) and the FE ISSUE. We will address the matter of ARGUERS also being expressible as ARGUER1 and ARGUER2 in the section called “Frame relations”.

After describing a frame, FrameNet lexicographers create a list of LUs that evoke the frame. In the case of the [Quarreling] frame, LUs that can evoke this frame are: *altercation.n*, *argue.v*, *argument.n*, *bicker.v*, *bickering.n*, *disagreement.n*, etc. Each

LU is validated for frame distinction following the steps mentioned above. Finally, lexicographers begin the description of each LU by annotating sentences extracted from the *British National Corpus* (BNC).

3.2.1.2. Annotation reports

The annotation of the LUs is organized in different layers: 1) target word; 2) frame element labels (FE); 3) grammatical function labels (GF), and 4) phrase type labels (PT). FEs are tagged with labels which are chosen to specifically describe the participants of each frame. The names of the FEs can be either frame-specific (e.g. Perceiver-active) or very general (e.g. Agent). Examples of grammatical function labels are: ‘Ext’ (External), ‘Obj’ (Object), ‘Comp’ (Complement), etc. Finally, examples of phrase type labels include: N (Noun), NP (Noun Phrase), Poss (Possessive), PP (Prepositional Phrase).

Throughout the annotation of contexts the lexicographer may realize that the frame also has optional frame elements, i.e. FEs that do not conceptually belong to the frames they appear in. For instance, the LU *argue* (v.) can be accompanied by modifiers such as *loudly* or *amicably* (as in *argue loudly* or *argue amicably*). Optional FEs are called “non-core frame elements” (henceforth non-core FEs). The annotation report of the LU *argue* indicates all types of participants in the frame (Figure 19).

Non-core FEs are subdivided into “extra-thematic” and “peripheral”. Peripheral FEs can situate events in space (e.g. PLACE) and in time (e.g. TIME), they can describe how the event takes place (e.g. MANNER) and they only introduce events if these are part of the frame. In contrast, extra-thematic FEs introduce new events (other frames) against which the main event is situated (e.g. DEPICTIVE and FREQUENCY). Some FEs can be further specified with ontological semantic types. *Sentient*, for example,

corresponds to a semantic type which refers to something alive that is able to reason (Lönneker-Rodman and Baker 2009).

Frame Elements	Core Type
Arguer1	Core
Arguer2	Core
Arguers	Core
Depictive	Extra-Thematic
Duration	Peripheral
Frequency	Extra-Thematic
Issue	Core
Manner	Peripheral
Means	Peripheral
Medium	Peripheral

Figure 19. Annotation report of the LU *argue* (FrameNet 2012)

3.2.1.3. Lexical entry reports

Once the annotation is complete, a report of the LU is automatically generated. The report contains a definition for the LU either devised by the FrameNet lexicographer or taken from the *Concise Oxford Dictionary of the English Language* as well as a summary table of the syntactic realizations of the FEs along with the number of times they appear in the annotated sentences (Figure 20).

For instance, the definition provided for the LU *argue* (v.) is “exchange diverging or opposite views heatedly”. From Figure 20 we learn, for example, that the FE ARGUER1 was annotated 20 times. More precisely, it was omitted 2 times, it occurs as the syntactic subject of the verb in the form of an NP 17 times, and it occurs as the syntactic subject of the verb in the form of a possessive NP once.

Frame Element	Number Annotated	Realizations(s)
Arguer1	(20)	CNI.-- (2) NP.Ext (17) Poss.Ext (1)
Arguer2	(20)	DNI.-- (3) PP[with].Dep (17)
Arguers	(18)	NP.Ext (18)
Issue	(38)	PP[about].Dep (6) INI.-- (14) PPing[about].Obj (1) NP.Dep (7) NP.Obj (2) PP[over].Dep (6) PPing[about].Dep (1) Swhether.Dep (1)

Figure 20. Lexical entry report of *argue*: FEs and their syntactic realizations (FrameNet 2012)

Also, a second table illustrates the valence patterns of the LU, i.e. its combinatorial requirements in terms of the number and kinds of arguments with which it can combine (Figure 21). Figure 21 shows that the FEs ARGUER1, ARGUER2 and ISSUE co-occur 20 times, whereas the FEs ARGUERS and ISSUE co-occur 18 times. We also learn, for instance, that the FE ARGUERS occurs only as a noun phrase external argument (subject), whereas there is a wider variety in the syntactic realizations of the FEs ARGUER1 and ARGUER2.

Number Annotated	Patterns		
20 TOTAL	Arquer1	Arquer2	Issue
(1)	CNI --	DNI --	PP[about] Dep
(1)	CNI --	PP[with] Dep	INI --
(1)	NP Ext	DNI --	INI --
(1)	NP Ext	DNI --	PPing[about] Obj
(7)	NP Ext	PP[with] Dep	INI --
(7)	NP Ext	PP[with] Dep	NP Dep
(1)	NP Ext	PP[with] Dep	NP Obj
(1)	Poss Ext	PP[with] Dep	NP Obj
18 TOTAL	Arquers	Issue	
(5)	NP Ext	INI --	
(5)	NP Ext	PP[about] Dep	
(6)	NP Ext	PP[over] Dep	
(1)	NP Ext	PPing[about] Dep	
(1)	NP Ext	Swhether Dep	

Figure 21. Lexical entry report of *argue*: valence patterns (FrameNet 2012)

3.2.1.4. Frame relations

In general, frames can be associated to other frames in a net-like way, which is why the project is called *FrameNet*. FrameNet lexicographers use the following relations: Inheritance, Subframe, Causative of, Inchoative of, Using, Precedes and Perspective_on. For instance, from Figure 22 it can be observed that the frame [Quarreling] uses the frame [Be_in_agreement_on_assessment] and inherits from the frame [Discussion], which in turn inherits, for instance, from [Reciprocity].

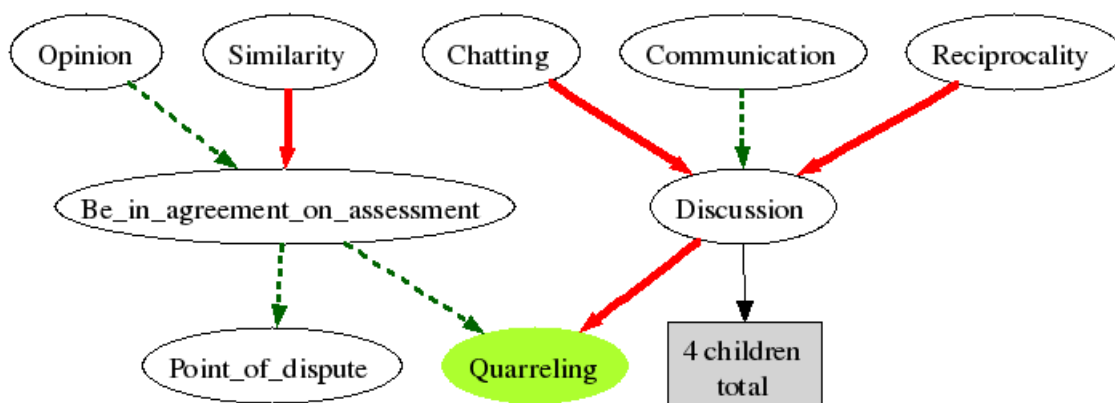


Figure 22. [Quarreling]: frame relations (FrameNet 2012)

The Using and Inheritance relations account for the way a frame may be related to more abstract frames. More specifically, the Inheritance relation is said to correspond to the relation *is_a* in many ontologies, this meaning that a child frame inherits from a parent frame if its semantics is equally or more specific than the semantics of the parent frame. Normally, the FEs of the parent frame will correspond to or will be more specific than the FEs of the child frame.

For example, the FEs in the frame [Discussion] are INTERLOCUTOR1, INTERLOCUTOR2, INTERLOCUTORS and TOPIC, which are more specific than the FEs in the frame [Quarreling] (ARGUER1, ARGUER2, ARGUERS and ISSUE). The [Reciprocity] frame is a non-lexical frame from which the frame [Quarreling], as an instance of reciprocal activity, inherits the possibility that the main participants can be expressed either as a plural subject (ARGUERS) or as a singular subject with a later *with*-phrase indicating the second participant (ARGUER1 and ARGUER2). According to Ruppenhofer et al (2010: 80) non-lexical frames such as the [Reciprocity] frame “have no lexical units and are present purely to connect two (or more) frames semantically”. The Using relation applies to cases in which a part of the scene evoked by the child refers to the

parent frame. The frame [Quarreling] uses the idea of “incompatible opinions or beliefs” which is defined in [Be_in_agreement_on_assessment] but not in [Discussion].

3.2.1.5. Lexicographic relevance

While the annotation of contexts covers both core FEs and non-core FEs, only the core FEs are used in the construction of the valence description to which we referred in section 3.2.1.3. For this reason, the sense and valence rich descriptions provided by FrameNet and which differentiate it from other resources such as dictionaries and thesauri have been said to offer a methodological contribution to lexicography. The authors of the project argue that, unlike most dictionaries which only indirectly give access to the conceptual structures underlying word meanings, FrameNet provides multiple annotated examples of each sense of a word in a given semantic frame, immediately raising questions of whether there are other words in the language evoking the same frame (Atkins et al. 2003). Unlike thesauri which show that certain groups of words are semantically related but only indirectly show how they are related, FrameNet groups together semantically similar words by means of a network of relations between frames. Also, thesauri do not provide the combinatorial behaviour of LUs, whereas FrameNet does (Ruppenhofer et al. 2010).

3.2.2. Terminology

Over the last few years, some researchers have decided to apply Frame Semantics and/or FrameNet’s methodology to languages other than English and to specialized fields, such as molecular biology (Dolbey et al. 2006, Dolbey 2009), environmental science (Faber et al. 2005, 2006, 2007, 2009; Reimerink and Faber 2009; García de Quesada and Reimerink 2010; López Rodríguez et al. 2010; Faber 2011; León Araúz et al. 2011), the law (Alves et al. 2005, 2007; Venturi et al. 2009; Bertoldi and Chishman 2012), soccer (Schmidt 2006, 2007, 2008, 2009) and computing and the Internet

(L'Homme 2008). The following sections investigate how the theoretical model of Frame Semantics and/or the FrameNet methodology have been implemented in each of these projects.

3.2.2.1. Molecular biology

BioFrameNet (Dolbey et al. 2006, Dolbey 2009) is an extension of FrameNet to the molecular biology domain whose aim is to “model the mapping of form and meaning in the linguistic structures that occur in biomedical texts” (Dolbey et al. 2006: 87) with links to biomedical ontologies. The authors introduce domain-specific frames that did not previously exist in FrameNet such as [Transport_intracellular] as well as domain-specific semantic relations between FEs. The corpus used has a primary focus on the domain of intracellular transport and is said to be very particular because the texts, called GRIFs (Gene References in Function), are relatively short descriptions of the function of certain genes. Corpus texts were annotated by biologists and annotation is reported to score 90% in consistency.

BioFrameNet is modeled as an OWL DL (Web Ontology Language based on Description Language) ontology, this meaning that it can be applied to biological question-answer reasoning. The author illustrates the overlap of grammatical properties across separate domain ontology classes and demonstrates that although the biology defined and classified in these classes is different, language used to describe and discuss them is not (Dolbey 2009), this suggesting that this approach can be applied to other domains.

Apart from the obvious difference between the subject fields, our research also differs from BioFrameNet in the methodology used because we do not aim at building an ontology and because BioFrameNet was built for English only.

3.2.2.2. Environmental Science

Another very relevant application of Frame Semantics and of the FrameNet methodology to terminography is the “frame-based approach to terminology” developed by Pamela Faber and her collaborators in the LexiCon research group from the University of Granada (Faber et al. 2005, 2006, 2007, 2009; Reimerink and Faber 2009; García de Quesada and Reimerink 2010; López Rodríguez et al. 2010; Faber 2011; León Araúz et al. 2011). This approach began with the elaboration of a database on coastal engineering (PuertoTerm project) and developed with the elaboration of a knowledge base representing the field of environmental science (MarcoCosta and Ecosistema projects). The end product, called EcoLexicon (<http://ecolexicon.ugr.es>), is a visual thesaurus that currently describes about 3,000 concepts and about 15,000 terms in English, Spanish and German used in the specialized field of the environmental science. It targets different user groups, such as translators, technical writers and environmental experts (León Araúz et al. 2011).

The authors propose a “frame-based organization” of specialized fields because they say that the representation of some domains cannot be static and be described only by means of conceptual trees, an approach often described in terminology handbooks (Sager 1990, Cabré 1993, Wright and Budin 1997). Since specialized fields are configurations of complex events it is necessary to situate concepts in a particular setting and to account for dynamic processes that describe the events in a given specialized field. Faber et al. (2009) mention that the “frame-based terminology” is a cognitive approach to terminology that shares the same premises as the communicative theory of terminology (Cabré 1999, 2000) and the sociocognitive terminology (Temmerman 2000, 2001). They also maintain that “trying to find a distinction between terms and words is no longer fruitful or even viable, and that the best way to study specialized knowledge units is by studying their behaviour in texts” (Faber et al. 2009: 4).

More precisely, the authors are interested in: “(1) the conceptual organization underlying any knowledge resource; (2) the multidimensional nature of conceptual representations; and (3) knowledge extraction through the use of multilingual corpora” (Faber et al. 2006: 190). In order to structure specialized domains and reflect all dimensions of meaning, this group of researchers use certain aspects of Frame Semantics (Fillmore 1976, 1977, 1982, 1985) and FrameNet methodology. As Garcia de Quesada and Reimerink state (2010: 102), both projects take on a situational perspective, they both use corpus evidence and they both study and provide information on the semantics as well as on the syntactical behaviour of the items under analysis. In addition, they both use an integrated top-down and bottom-up approach (Faber et al. 2009: 6):

The bottom-up approach consists of extracting information from a corpus of texts in various languages, specifically related to the domain. Our top-down approach includes the information provided by specialized dictionaries and other reference material, complemented by the help of experts in the field.

One of their first proposals in the context of the “frame-based approach to terminology” focuses on the domain of coastal engineering and illustrates why entities that take part in processes are hard to describe by means of conceptual trees. The authors start by identifying the “conceptual framework” of a central event in the domain, the Coastal Engineering Event (henceforth CEE), which serves as a kind of template to organize a frame-based structure of specialized knowledge. Again, this reflects the authors’ concern about the representation of specialized knowledge. The CEE is a PROCESS initiated by an AGENT that affects a PATIENT and that produces a RESULT. These “macrocategories” are concept roles characteristic of the domain and because they are complex they can include other categories. For example, AGENT can be divided into “natural agent” and “human agent”, PROCESS into “natural process” and “artificial process”, etc (Figure 23).

The Coastal Engineering Event

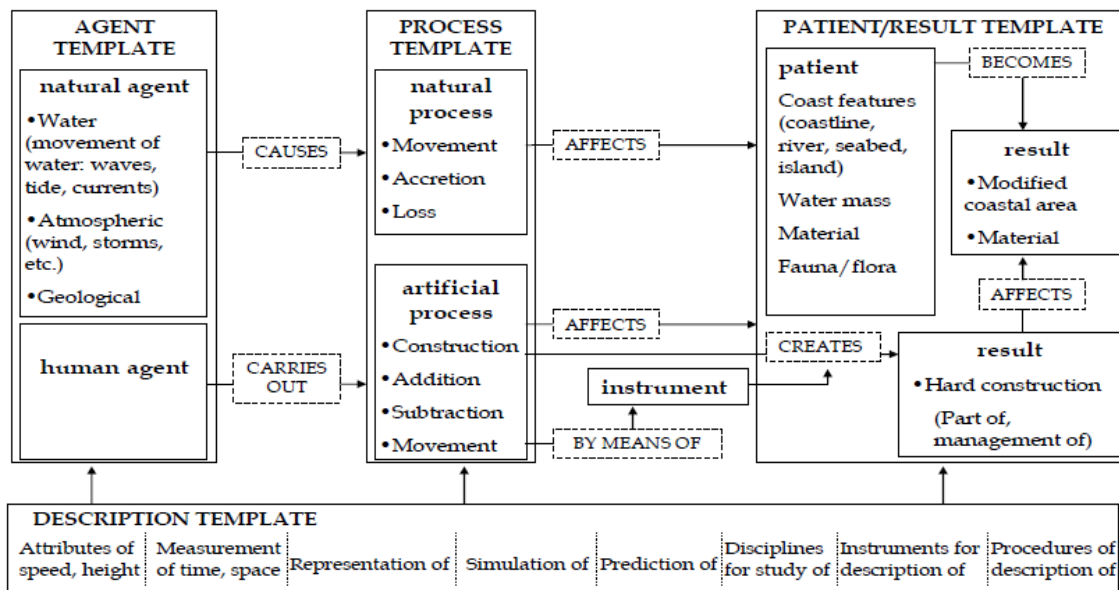


Figure 23. The Coastal Engineering Event (Faber et al. 2007)

López Rodríguez et al. (2010) explain that the elaboration of the CEE was based on the analysis of terminographic definitions of the key concepts of the specialized field so as to identify the basic concepts and their relations. Thus, even though this conceptual framework does not correspond to the notion of “frame” as defined in FrameNet, it serves the purpose of organizing the frames that will subsequently be identified.

For instance, after the identification of Beach Nourishment as one of the frames in the CEE, the authors proceed to create a list of terminological units extracted from a corpus that fit in the frame in a coherent way. In order to describe the frame of Beach Nourishment they analyze the argument structure of verbs such as *nourish*, *replenish*, *fill* and *feed*. The fact that the authors view specialized subject fields as configurations of complex events allows them to emphasize the role played by some verbs in the

comprehension and structure of specialized discourse. Their findings show that, in the engineering context, certain predicates are activated more frequently than others (Faber et al. 2005: no page number):

For example, in coastal engineering there is frequent reference to the concept of BEACH NOURISHMENT as a soft engineering solution to replenish coasts and beaches. Thus, the verb “nourish”, as derived from concordance analysis, is used in a way that is more specific than its usual meaning in general language, where the arguments are considerably less specific.

nourish (general language)	to give sb/sth what is needed in order to live, grow or stay healthy
nourish (coastal engineering)	to give sth [coast, beach, shoreline] what is needed [sediment, sand] in order for it to stay healthy

The definitions above show that whereas in general language one can “nourish” by giving practically any type of sustenance, both concrete and abstract (e.g. food, water, education, affection), in specialized domains things are quite different. The nature of the arguments (beach, sand, etc.) restricts the meaning of general language verbs when used in specialized discourse.

The next step is the identification of the FEs. They analyze the contexts in which the frame-evoking terms appear and draw a list of the entities that make up the categorization structure of the frame. They do not distinguish between core and non-core FEs. So, for instance, the FEs in the frame [Tide] are: SUN, MOON, EARTH, WATER, TIDE, CURRENT, COASTLINE, ATTRACTION, FREQUENCY, MAREOGRAPHICS and PREDICTION. The FEs are described by means of a sort of thematic role label such as AGENT and PATIENT. By way of an example, the sun and the moon are said to be Agents that attract a Patient.

Then, they describe the syntactic realizations of the FEs. It is only at this moment that the authors deal with interlinguistic differences. However, they do not state how the equivalents are assigned and the only differences between the English and

Spanish terms that are reported correspond to differences in the order of activation of the FEs, e.g. *lunar tide* (=AGENT + MOVEMENT) and *marea lunar* (=MOVEMENT + AGENT).

Finally, the relations between frames are identified and terminological definitions are written based on corpus analysis as well as on the description of frames and frame relations so as to reflect the underlying conceptual structure that a given term shares with other terms. Grammatical information, illustrative contexts and images are also provided for each term.

One big difference between FrameNet and the EcoLexicon database is that the latter uses images to illustrate and define the concepts. In fact, one of the most recent objectives of this project is to link contexts and definitions with images by means of semantic frames and their FEs so as to provide the user with a multimodal learning experience thanks to a coherent integration of frames, contexts and images (García de Quesada and Reimerink 2010). Although García de Quesada and Reimerink's work was carried out on a small number of terms and the annotations differ from those provided in FrameNet, it shows that this kind of information, superimposed on contexts, can reveal interesting aspects of the linguistic functioning of predicative terms and their arguments.

The most important difference between the EcoLexicon project and our research project is that the former prioritizes the representation of specialized fields, namely by providing visual information. As mentioned in Chapter 1, the main objective of this research is to understand the phenomenon of equivalence as well as to create a methodology for assigning equivalents of specialized verbs. As the goals of the projects are different, we do not concentrate on the visual representation of the verbs and we do not believe that these would lend themselves well to that task. The fact that the

EcoLexicon project prioritizes the dynamic representation of specialized concepts probably explains why the authors draw very few considerations on interlinguistic differences and even less on the process of assigning equivalents. Finally, the same way the authors use the CEE template to interpret and organize the frames evoked by the terms used in the environmental science, we use extralinguistic information on judgments as a legal genre to interpret our data.

3.2.2.3. Law

Frame Semantics and the FrameNet methodology has also been applied to the subject field of the law. The three research projects that will be mentioned in this section are NLP-oriented and, thus, aim at building ontologies or information retrieval systems. Since their goal is different from the goal of this research and since two of them are still in an early stage of development, we will only briefly present the works and concentrate on the aspects that we find the most relevant.

In section 2.3.4 of chapter 2 we described a contribution (Alves et al. 2005, 2007) to the creation of an ontological representation of legal verbs for information retrieval and question and answer systems. It was mentioned that the methodology used in this project is partially inspired by Frame Semantics. Firstly, the authors use Fillmore's (1968) semantic roles when they analyze the arguments of specialized verbs. Secondly, they use frames to classify the identified entities in connection to the extralinguistic context. They explain that whereas semantic roles allow them to represent the participants in the predications, FEs allow them to represent the participants in the situation evoked by LUs (cf. section 2.3.4).

Very recently, one of the researchers of the aforementioned group has launched a project for the construction of a “semantically annotated treebank of the Brazilian legal language” (Bertoldi and Chishman 2012: 2). In this project, Frame Semantics and

the FrameNet methodology will be used to annotate running text and not only sentences. The authors intend to use a corpus of legal decisions and explain that this project is “part of a larger project that researches how linguistic information could be used to improve legal information management and legal information retrieval in the Brazilian courts” (Bertoldi and Chishman 2012: 2). Apart from the fact that Frame Semantics allows the mapping between syntax and semantics of predications, the other reason why Bertoldi and Chishman chose to use this theoretical and methodological framework lies in the future connection that they wish to implement to other linguistic resources based on frames, such as the Brazilian FrameNet.

Even though this is not clearly stated, it seems that the authors want to evaluate the applicability of the legal frames and tags described in FrameNet to the annotation of Brazilian legal texts. This leads them to look for the English equivalents of the Portuguese lexical units that occur in the running texts. To accomplish this task, they state that they refer to their knowledge of the languages in question or to a bilingual dictionary (Bertoldi and Chishman 2012: 6):

Considering the verb *acusar* in Portuguese, an annotator will very easily identify to accuse as an English equivalent for *acusar*. In the next step the annotator can go to the Framenet on-line database to search which semantic frame is evoked by the lexical unit *to accuse*. The annotator will see that this lexical unit evokes three different frames, Judgment_communication, Judgment, and Notification_of_charges. Analyzing the three frames, the annotator will perceive that only Notification_of_charges is related to the legal domain. That is a simple case only to illustrate the manual work of finding equivalents in English for lexical units of a Brazilian legal corpus. After identifying the English equivalent and the evoked frame, the annotator has to verify whether the legal event and the frame elements described by that frame are correspondent to the Brazilian legal event.

They reach the following conclusions. Firstly, they illustrate by means of the frame [Criminal_process] and its subframes that the more complex the event described by a frame, the more difficult it is to use for semantic annotation in other languages.

Non-complex frames like [Legality] and [Law] are said to be “more universal”. Secondly, differences between the legal systems are said to make it difficult to apply to Brazilian Portuguese the semantic tags created for the English lexical units which were based on the American legal system. As a result, they find it more appropriate to create the legal frames for each legal system before the annotation of the texts. However, they also mention that some FrameNet frames are “very similar in different languages and can be used as a starting point to the development of a new frame-based legal lexicon” (Bertoldi and Chishman 2012: 13). Finally, whenever legal events are very specific of a country they have to be described as a new frame.

Interestingly, even though it is in an initial stage of development, this project has already revealed that differences between legal systems do not allow for a systematic use of the frames included in FrameNet and that, for this reason, frames should be created beforehand for each legal system. Similarly, in our research, frames are created during the analysis of the lexical items in each language separately. However, our goal is not to evaluate the applicability of the existing FrameNet frames to our data, but to test the possibility of assigning equivalents based on the description of terms facilitated by FrameNet’s methodology. In contrast to Bertoldi and Chishman’s project, we do not rely, at least to the level that they do, on the speaker’s intuition and on bilingual dictionaries to find the equivalents of specialized verbs. In chapter 1, we mentioned that there are very few resources that provide the equivalents of specialized verbs, especially for European Portuguese specialized verbs. What is more, in chapter 5, it will be demonstrated that cognate terms may not always be full equivalents. Instead, frame description should provide the necessary information that allows the terminologist to link one term in one language to another one in another language.

Another project that implements the theoretical model of Frame Semantics and FrameNet’s methodology in the subject field of law is that of Venturi et al. (2009) and

Agnoloni et al. (2010). Following Dolbey et al's idea according to which FrameNet can be seen "as a backbone of several domain-specific FrameNets" (2006: 93), this group of Italian researchers proposes the construction of an Italian FrameNet-like resource for the legal domain by extending and refining the general FrameNet resource. Their idea is to combine two different approaches from two different research communities, i.e. Artificial Intelligence and Law (AI&Law) and Computational Linguistics. They mention that the FrameNet-like approach is preferable to a WordNet-like approach for two reasons.

Firstly, legal experts claim that, despite their utility, WordNet-like resources are not completely adequate because words are organized as hierarchies or taxonomies of synsets, whereas in FrameNet word senses are related to each other by means of links to common background frames. Secondly, the FrameNet-like approach is better because the lexical units that evoke a frame are not restricted to a single part of speech, which allows, for instance, the inclusion of verbs such as *to conclude*, nouns such as *end* and adjectives such as *final* in the [Process_end] frame (Venturi et al 2009: 5). Thirdly, the case studies carried out so far have proved that the linking of a linguistic-oriented with a domain-oriented way of modelling is possible (Agnoloni et al. 2010). Their findings show that the mapping can be carried out at the Frame Element level or at the level of their lexical fillers.

Although this project is still in an initial stage of development, the authors already pondered on the following customization strategies: the exploitation of domain-specific semantic types which classify FEs from the general FrameNet repository, the introduction of one or more new FEs within an existing frame, and the splitting with a new frame (Venturi et al 2009: 6).

3.2.2.4. Soccer

The Kicktionary (Schmidt 2006, 2007, 2008, 2009) is a multilingual (German, English, French) lexical resource covering the terminology of soccer. It uses Frame Semantics, FrameNet’s methodology as well as WordNet’s semantic relations. While FrameNet claims to contribute to fields like lexicography, question-answering, machine translation and other natural language processing sub-areas, the author’s main goal is “to produce a lexical resource usable by *humans* for purposes of understanding, translating or otherwise paraphrasing texts in the domain of football” (Schmidt 2009: 101). This is one of the aspects that our research shares with Schmidt’s project.

Another similar aspect is that the Kicktionary does not follow the FrameNet guidelines (Ruppenhofer et al. 2010) by the book. There are two reasons for this. Firstly, the FrameNet methodology has been developed with a monolingual lexicon in mind and not a multilingual one. Secondly, while FrameNet covers about 10,000 LUs, the Kicktionary covers a lower number of LUs because it is a domain-specific resource. This allows the lexicographer to maintain a much more complete and detailed overview of the resource, namely by using a bottom-up approach that starts with a list of LUs and then adds structure to the list. Since these differences are particularly relevant for the research that we wish to conduct, we propose examining each one, starting by the second.

To carry out the lexicographic analysis, Schmidt (2009) uses a corpus of aligned texts and comparable texts from the Union of European Football Associations (UEFA) official website. The procedure consists in finding usages of soccer-specific LUs (verbs, nouns and adjectives), in analyzing their argument structure, in writing a definition that incorporates the argument structure and in annotating example sentences for each unit. Sentences are annotated following frame-based principles. Then, the frames evoked by the selected LUs are grouped into larger units or “superordinate constructs” called

scenes: “Whereas a scene is defined in terms of pieces of abstract (and possibly non-linguistic) knowledge, the notion of a frame is concerned with the properties of concrete linguistic means of expressing this kind of knowledge” (Schmidt 2009: 103). Finally, using the WordNet approach the author partitions the LUs into a number of synsets, which, in turn, are (partly) organised into a number of concept hierarchies.

For example, a scene called Match has 11 frames: [Match], [Home_Game], [Away_Game], [Result], [Victory], [Defeat], [Draw], [Progression], [Elimination], [Match_Temporal_Subdivision], [Start_End_Match]. Each frame contains a certain number of terms which belong to a synset which, in turn, may belong to a concept hierarchy. With this kind of description, the Kicktionary is able to provide the user with three possibilities of research, i.e. by LUs, by scenes (which include frames) and by conceptual hierarchies (“hypernymy/hyponymy”, “holonymy/meronymy” and “troponymy”). Scenes are often illustrated with one or more schematic diagrams because they are a language-independent way of organizing multilingual vocabulary.

Schmidt justifies his bottom-up methodology (in contrast to FrameNet’s top-down procedure of frame by frame) by saying that, although FrameNet uses empirical data, it does not use an empirical methodology. In fact, while following a top-down approach, FrameNet lexicographers may miss an important member of a frame because they simply did not think of it or they may not cover all senses of a word because they haven’t got to that frame. Using a bottom-up approach may prevent this.

As mentioned, whereas FrameNet was originally developed for one language only, the Kicktionary was developed for three. Based on Boas’s idea (2005) according to which semantic frames can act as a kind of interlingua for multilingual resources, Schmidt uses scenes-and-frames analysis as a type of language-neutral backbone for the identification of equivalents (Schmidt 2009: 107-110). However, this task is greatly

facilitated by the fact that he uses a parallel corpus aligned on the paragraph level. The identification of the equivalents allows him to put forth a typology of situations for confirmation of cross-linguistic correspondences and for solving cross-linguistic divergences (Table 9).

Based on the typology of equivalence degrees described in section 2.2.3, we can observe from Table 9 that Schmidt (2009) identifies full, partial and zero equivalents. LUs in different languages that share identical meaning, parts of speech and argument structure are considered full equivalents. This is the case of *nutmeg* and *tunneln* (Table 9). As for partial equivalence, Schmidt's typology identifies three cases: 1) LUs in different languages can share the same semantic characteristics and argument structures, but differ in their part of speech; 2) LUs in different languages share identical meaning and part of speech, but the grammatical properties of the LUs differ in some aspect; 3) there is no direct translation equivalent for a given LU but the user can look for less specific LUs in other languages such as hypernyms (Table 9).

It will be relevant to compare Schmidt's typology which was based on the observation of equivalents extracted from a parallel corpus with a typology that is based on the observation of equivalents extracted from a comparable corpus such as the one we use. We will attempt to do this in chapter 6.

Recently, another project that covers the field of soccer as well as the field of tourism and that is based on Frame Semantics as well as on the Kicktionary has been launched in Brazil (Gamonal 2011). "Copa 2014" aims at developing a bilingual (English-Portuguese-English) electronic dictionary for the next FIFA World Cup which will be held in Brazil in 2014. Since this project has just been launched, no results or have been reported yet.

Table 9. Confirming cross-linguistic correspondences and solving cross-linguistic divergences (based on Schmidt 2009: 107-110)

Cross-linguistic divergences	Language	Examples	Equivalence
LUs in different languages share identical meaning, parts of speech and argument structure.	English	[Hector Font]PLAYER_WITH_BALL tried to <i>nutmeg</i> [Ionannis Skopelitis]OPPONENT_PLAYER.	Since <i>nutmeg</i> and <i>tunneln</i> belong to the same frame (Beat frame in the One-On-One scene), they are considered translation equivalents.
	German	[Ailton]PLAYER_WITH_BALL <i>tunnelte</i> [Chris]OPPONENT_PLAYER und spielte so Klasnic frei.	
LUs in different languages share the same semantic characteristics and argument structures, but differ in their part of speech.	French	[Bastian Schweinsteiger]PLAYER_WITH_BALL manquait le cadre après avoir réussi un <i>petit pont</i> [sur William Gallas]OPPONENT_PLAYER.	<i>Petit pont</i> is a noun while <i>nutmeg</i> and <i>tunneln</i> are verbs. However, since all three LUs belong to the same frame they are considered translation equivalents.
LUs in different languages share identical meaning and part of speech, but the grammatical properties of the LUs differ in some aspect.	English	On that day [Northern Ireland]TEAM1 play [England]TEAM2 [at Old Trafford] MATCH_LOCATION.	Although the English LU <i>play</i> and the German LU <i>spielen</i> are different in number agreement, and although their objects have a different form, they are considered translation equivalents since they belong to the same frame (Match frame in the Match scene).
	French	[Wales]TEAM1 spielt [in Cardiff]MATCH_LOCATION [gegen Nordirland]TEAM2.	
There is no direct translation equivalent for a given LU.	French	“coup du sombrero” (frame Beat)	The user can look for less specific LUs in other languages such as hypernyms like <i>round</i> and <i>ausspielen</i> which are adequate translations.
There is no hypernym inside the frame in other languages.	—	—	The frame may be language-specific. In this case the Kicktionary user can consult other frames belonging to the same scene to find paraphrasing possibilities.

3.2.2.5. Computing and the Internet

In section 2.3.2, we described how the entries of DiCoInfo (L’Homme 2008), a dictionary on computing and the Internet, are organized by giving the example of *install*₂. As will be seen in this section, DiCoInfo provides contextual annotations and the methodology used is largely based on that developed within the FrameNet project (Ruppenhofer et al. 2010). Although the theoretical and methodological principles on which this lexical resource is based, in general, are those of the Explanatory Combinatorial Lexicology (ECL, cf. Mel’čuk et al. 1984-1999), previous work has addressed the compatibility of the two frameworks (Coyne and Rambow 2009; Fontenelle 2000). Consider the following annotation of one of the contexts of the term *install*₂:

*install*₂
Most *operating systems* (Agent) *INSTALL* a *driver* (Patient) *automatically* (Manner).

In this context, the term *operating system* realizes an actant of *install* and it plays the semantic role of Agent; *a driver* realizes another actant and it is labelled as a Patient; and *automatically* is a circumstant with the semantic role Manner. Once up to 20 contexts are annotated for each term, DiCoInfo presents the user with summary tables (Table 10). One characteristic that DiCoInfo shares with FrameNet is that the annotation layers are identical. Both projects take the target LU as a starting point (in DiCoInfo LUs are called *terms*) and they both use grammatical function labels and phrase type labels.

From the annotation summary tables, users can learn about the behaviour of the terms in running text. The first part of the table presents information on actants. For instance, from Table 10 users can learn that the syntactic subject of the term *install* refers to a human being (*you, user*) or to the *operating system* and that *install* is followed by: 1) a Patient which is typically the syntactic object and that can take the form of an NP or a pronoun; 2) a Destination expressed by a prepositional phrase headed by the preposition *on*.

INSTALL 2		
Actants		
Patient	Object (NP) (10) Object (Pro) (3) Subject (NP) (2)	operating system (2) program (2) screen saver one{all the required protocol to run a lan (802.3-5)} firewall driver game browser software application it{ this tool on the internet} anything malware
Destination	Complement (PP -on) (3)	hard disk computer pc
Agent	Subject (NP) (7) Indirect link (NP) (3)	you (7) user we operating system
Autres		
Method	Indirect link (NP)	method
Manner	Modifier (AdvP) (2)	automatically inadvertently

Table 10. Summary of the annotation of the contexts of the term *install*₂ in DiCoInfo (2012)

The second part of the table lists all the other syntactic groups that are related to the term but that are not actants. Table 10 shows that two sentences specify the manner in which someone installs something.

However, there are some differences between the two projects. While FrameNet groups LUs by frames, DiCoInfo does not. DiCoInfo uses semantic labels reminiscent of

the original version of case grammar (Fillmore 1968) to describe the actantial structure of all terms belonging to the same domain (the term *actant* as used in DiCoInfo is inspired by Tesnière's theory to which we referred in section 3.1.1). In contrast, semantic labels in FrameNet are created specifically for each frame (although some labels may be recurrent throughout frames). A relatively small set of labels that are assumed to apply to a large number of lexical units within the field of computing is used by lexicographers. The aim is to capture, within the field of computing, regular phenomena, such as the following (Pimentel et al. forthcoming):

Alternations (such as the causative-inchoative alternation):

Patient boots (e.g. *the system boots*)

Agent boots Patient (e.g. *the user boots the system*)

Other alternations (such as the Agent-Instrument alternation):

Instrument prints Patient (e.g. *the printer prints the file*)

Agent prints Patient with Instrument (e.g. *the user prints the file on a laser printer*)

Semantically-related lexical units with similar argument structures:

Agent programs Patient in Material (e.g. *the programmer programmed this application in C++*)

Agent writes Patient in Material (e.g. *the programmer wrote this widget with Java*)

Programming of Patient in Material by Agent (e.g. *programming in Java*)

Programmer of Patient in Material (e.g. *a C++ programmer*)

Language used by Agent to act on Patient (e.g. *Java is used to write programs*)

Another difference between DiCoInfo and FrameNet lies in the characteristics of the obligatory and optional participants in the meaning of terms. FrameNet's core FEs are obligatory in the frame but may not be profiled in all LUs that evoke the frame, whereas the actants in DiCoInfo are always profiled in the meaning of the terms. Also, FrameNet's non-core FEs are subdivided into extra-thematic and peripheral, whereas DiCoInfo's circumstants are not.

Contrary to the FrameNet approach according to which frames are defined prior to lexical analysis, in DiCoInfo, lexicographers notice these phenomena and generalize semantic role labels while writing lexical entries. Like the Kicktionary, the methodology applied in the compilation is bottom-up and combines automatic and manual analyses. As it will be clear from section 4.3.8, the methodology and the annotation model used in our research borrows elements from DiCoInfo's in addition to FrameNet.

3.3. Choice of the theoretical model

In this chapter we presented the theoretical model of Frame Semantics (Fillmore 1976, 1977, 1982, 1985; Fillmore and Atkins 1992) as well as its applications to the compilation of general and specialized lexical resources. At this point, it is necessary to justify the choice of Frame Semantics as the theoretical model to be used in the present research. Based on the literature reviewed, we believe that there are three main arguments for using Frame Semantics as well as the FrameNet methodology to assign the equivalents of specialized verbs and establish validation criteria for them.

Firstly, Frame Semantics seems particularly well suited to study verbs because they are “frame-evoking” or “frame-bearing” words *par excellence*. Since frames can provide the organizing background for a set of words, it follows that a frame-based description of verbs should be able to provide an organizing background for the study of verbs. Verbs are also easier to describe and annotate. In the FrameNet methodology, a complete description of verbs requires a description of the clauses in which they occur, whereas a complete description of nouns potentially involves more layers, such as the noun's complements, the internal structure of the NP in which the noun occurs, and the larger structures in which the NP functions. In fact, this is the reason why the FrameNet project started up with the description of verbs. What is more, Baker (2009: 46) has argued that: “[...] FrameNet serait utile pour reconnaître des événements exprimés par des verbes dans des domaines

spécialisés, puisque la plupart des travaux en terminologie tendent à se focaliser sur les noms et les adjectifs”.

Thus, our second argument lies in the assumption that Frame Semantics and the FrameNet methodology are useful to study terminology, in general, and legal terminology, in particular. Frame Semantics assumes that content words in a language are best explained by appealing to the conceptual backgrounds (the frames) that underlie their meanings and motivate their use. Its methodological application, i.e. FrameNet (Ruppenhofer et al. 2010), takes on a situational perspective, uses corpus evidence and provides information on the semantics as well as on the syntactical behaviour of the items under analysis which is interesting for terminology work that wishes to combine the analysis of extralinguistic and linguistic properties of terms.

What is more, Frame Semantics is to a certain extent based on empirical observations of technical language, namely on observations of legal language. For instance, Fillmore observed that for many instances of polysemy a word has a general use in everyday language but has been given a separate use in technical language (Fillmore 1982: 124). He calls this phenomenon “special-purpose framings of words” and illustrates it with some examples taken from legal language (Fillmore 1982: 128):

In the prototype case of events fitting the word MURDER, one person (A), intending to kill a second person (B), acts in such a way as to cause that person to die. This prototype does not cover a case in which A, intending to kill B, aims his gun at B, and kills C (who is standing next to B) instead. Some of the properties of MURDER relate A and B; other relate A to C. The question somebody needs to answer, of course, is whether for the purposes of the law, it is proper to say that A murdered C. The law does this, not by modifying the definition of MURDER so that it will cover this ‘wrong-target’ case, but by adding to the system of legal semantics a statutory interpretation principle called ‘Transfer of Intent’ according to which A’s intent to kill B is fictitiously transferred to C so that the definition of MURDER can fully fit what A did to C.

Also, in an article entitled “Frame Semantics for Text Understanding” Fillmore and Baker (2001) use the example of legal discourse to illustrate how knowledge can be represented using Frame Semantics. They select the terminology that occurs frequently in a newspaper article on criminal justice procedures and analyze the frames evoked by the terminology. They conclude that 16 frames are needed to understand the criminal proceedings described in the news story. From the 16 frames, only 2 are high-level, abstract frames ([Action] and [Event]), while the others are domain-specific ([Court], [Criminal Process], [Arraignment], [Pre-trial Confinement], [Court-date-setting], etc.).

Another reason why Frame Semantics seems particularly well suited to study terminology lies in the fact that its applicability to specialized fields has already been tested. While it is true that the way Frame Semantics is applied in each of the research projects mentioned in section 3.2.2 may vary considerably, the results that have been reported indicate that the theoretical model is suited to cover different specialized subject fields, to meet different objectives and to build different kinds of resources. The projects that we mentioned that cover the subject fields of biomedicine and the law explore the NLP potential of the FrameNet methodology, whereas the projects that cover the subject fields of soccer and computing demonstrate its applicability to the elaboration of multilingual specialized lexical resources. Finally, the EcoLexicon project makes use of the two approaches so as to build a multilingual visual thesaurus.

This leads us to our last argument. Frame Semantics seems particularly well suited to the construction of monolingual lexical resources as well as multilingual lexical resources. Since frames are considered to be language independent to a fair degree, Boas (2005) and Baker (2009) argue that the FrameNet model can be used to build lexical resources in any language, namely by exporting FrameNet to create multilingual resources because the content of the database is reusable. Boas (2005), for instance, presents an approach to construct multilingual lexical databases using Frame Semantics, which consists

in stripping the FrameNet database of its English-specific lexical descriptions and in re-populating the lexical database with non-English lexical descriptions (cf. Boas 2005: 457). Lexicon in different languages can then be linked via semantic frames.

In fact, several databases for languages as varied as German, Spanish, Japanese, Chinese, Portuguese, and Swedish have been created or are in the process of being created based on the same FrameNet model. The way they do this as well as the research goals may vary from one project to another. For instance, the Spanish FrameNet (SFN) was structured along lines similar to those of the original FrameNet project (Subirats 2007; Subirats and Hiroaki 2004; Subirats and Petruck 2003). However, if the majority of the projects covering the general lexicon decided to reuse the FrameNet database, not all projects that describe specialized domains do this. For instance, the Kicktionary and the EcoLexicon find it more appropriate to follow a bottom-up approach in which the frames are not copied from the frames already described in FrameNet because the vast majority of the frames they identify are simply not in FrameNet. Even though some frames related to the subject field of law are described in FrameNet (Appendix 7), we believe that for our research purposes it is better to use the same bottom-up approach followed in the Kicktionary and in the EcoLexicon. There are two reasons for this.

Firstly, FrameNet was conceived for the general language and it does not guarantee that it thoroughly describes technical fields. So, if we were to strip the FrameNet database of its English-specific lexical descriptions and re-populate it with non-English lexical descriptions, we would not only miss some relevant frames but we would also be forced to fit the non-English lexical descriptions of cultural terms into the moulds of English-specific lexical descriptions. Secondly, as Bertoldi and Chishman (2012) note, differences between the legal systems may render difficult the application of the semantic tags created for the English lexical units, which were based on the American legal system, to another language. However, this does not mean that the frames described in FrameNet may not serve as a

support for the characterization of the frames that we identify because some frames describing law-related scenarios may be very similar in different (Bertoldi and Chishman 2012: 13). Among other aspects, the following chapter describes the way in which the FrameNet methodology will be adapted to the objectives of the research.

4. Methodology

This chapter outlines the methodology we use to select specialized verbs from a corpus of judgments, to describe the linguistic and extralinguistic properties of the verbs, and to assign their equivalents. Section 4.1 focuses on the corpus design and Section 4.2 provides details on the methodology workflow.

4.1. Corpus design

The research presents a methodology to assign equivalents for specialized verbs taken from a comparable corpus of European Portuguese and Canadian English judgments. We use a comparable corpus instead of a parallel corpus because no Portuguese-English or English-Portuguese translations of judgments are available. It was therefore necessary to design and build a new corpus for the objectives of the research.

In chapter 2, we argued that it was important to take text genres into account when it comes to designing a specialized corpus, because this is thought to allow for a more accurate analysis of terminological data. In this subchapter, it will be demonstrated that the Portuguese and Canadian texts included in the corpus correspond to the same text genre, although they are culturally different products written by experts working in two different countries and legal systems, i.e. Portugal and the civil law, and Canada and the common law, respectively. It will also be argued that the corpus assembled is comparable and representative of the discourse of Portuguese and Canadian high court judges.

As there is no consensus on what makes a corpus comparable, guidelines put forth in the literature were followed but were not limited to them. For example, authors like Bowker and Pearson (2002), Maia (2003) and McEnery and Xiao (2007) privilege different issues in the design of comparable corpora and seldom do they clarify the oft-mentioned criterion of “similarity” or “comparability”. Bowker and Pearson (2002: 93) argue that corpus comparability is ensured when features such as subject matter or topic, text types,

period in which the texts were written, degree of technicality are similar. Maia (2003: 27) mentions similarity in relation to form, content, structure, function, register, tenor, field, mode and dialect of texts. For McEnery and Xiao a comparable corpus should contain “the *same proportions* of the same texts of the *same genres* in the *same domains* in a range of *different languages* in the *same sampling period*” (2007: 3 authors' italics).

While the authors seem to agree that aspects such as text genres and dates of texts should be taken into account when it comes to designing a comparable corpus, the criterion of choosing texts based on their content or topic is important for Bowker and Pearson (2002) and for Maia (2003), but it is less important for McEnery and Xiao (2007). For reasons that will be mentioned throughout this subchapter, we will come round to the point of view of McEnery and Xiao (2007).

4.1.1. Corpus features

The comparable corpus is formed of two subcorpora¹³: a European Portuguese subcorpus of judgments and a Canadian English subcorpus of judgments. The comparable corpus totals approximately 5,000,000 words¹⁴. Table 11 provides further information on the corpus, such as the number of words and the number of texts per subcorpus, the average of words per text in each corpus, and the dates of the texts.

The Portuguese and English subcorpora have one element in common but three other are different. The total amount of words per subcorpus is similar, i.e. approximately 2,500,000 words. Subcorpora differ in the number of texts, in the average number of words per text and in the dates of the texts. The Portuguese subcorpus contains approximately 400 texts while the Canadian subcorpus contains approximately 200 texts, i.e. the Portuguese subcorpus is composed of twice as texts as the Canadian subcorpus. In average, the

¹³ The term *subcorpora* is used here in the sense of “a subset of a corpus, either a static component of a complex corpus or a dynamic selection from a corpus during online analysis” (Atkins et al. 1992: 1).

¹⁴ *Words* correspond to the forms identified by the word counting function of *MSWord*.

Portuguese texts have about 6,500 words while the Canadian texts have about 12,000 words, i.e. the Canadian texts are twice as long as the Portuguese texts. The Portuguese texts were published between July 2009 and December 2009, while the Canadian texts were published between January 2007 and December 2009.

Table 11. Features of the corpus used in the research

	Comparable corpus		
	Portuguese subcorpus	English subcorpus	Total
Number of words	2,574,335	2,220,707	4,795,042
Number of texts	397	181	578
Average number of words per text	6480	12270	9375
Dates of texts	July 2009 – December 2009	2009, 2008, 2007	January 2007 – December 2009

The following sections characterize the Portuguese and Canadian texts based on the following features: the functions of the texts, the institutional context in which they were produced, the experts who produced them, the macrostructure and the content. The comparison of these characteristics will prove that the Portuguese and Canadian texts belong to the same legal genre at the same time it provides arguments that explain the existence of the aforementioned differences.

4.1.2. The Portuguese judgments

The Portuguese corpus consists of authentic texts called *acórdãos*. The term derives from *ACORDAM*, the third person plural of the verb *acordar* (Eng. to agree), used by the judges at the beginning and at the end of the judgments to manifest their agreement on the decision they reach. *Acórdão* differs from *sentença* in that a *sentença* is a decision reached by one judge working in lower courts (the distinction between *acórdão* and *sentença* is also valid

for Brazilian Portuguese). The English equivalent of *acórdão* is *judgment* or *decision*. All *acórdãos* were downloaded from the freely available online database of the *Instituto das Tecnologias de Informação na Justiça* (Eng. Institute of Information Technology in Law) from the Department of Justice in Portugal. This database contains the decisions produced by different types of courts in Portugal.

4.1.2.1. Function

An *acórdão* is a decision reached by a high instance court in Portugal on the review of a decision reached by a lower court or on other legal matters eligible to be heard by that high instance court. An *acórdão* is not only written for the benefit of the parties involved in a case, it is also written for the benefit of legal profession, other judges as well as appellate Courts. *Acórdãos* may set a precedent but, in the Portuguese legal system, there is no rule making the *acórdão* binding on lower courts.

4.1.2.2. Institutional context

In Portugal, judicial courts are organized into three degrees or instances, to which corresponds a specific jurisdiction area: the *Supremo Tribunal de Justiça de Portugal* has a national jurisdiction; the *Tribunais da Relação* are the second instance courts or courts of appeal; the *Tribunais de Primeira Instância* are the courts of first instance. As a rule, high instance courts are called to when the unsuccessful party in a lawsuit is not contented with the decision of a lower instance court decision. The unsuccessful party asks for a new assessment of the matter and files an appeal to a higher instance court.

All court decisions of the Portuguese corpus were produced by judges working for the *Supremo Tribunal de Justiça de Portugal* (henceforth, STJ). The STJ is the senior body in the hierarchy of courts of law without prejudice of the Constitutional's Court's own competence. It is composed of civil, criminal and social chambers (*Secções*) and it can

function as a plenary court, in plenary chambers and in chambers. It is the STJ's duty to: hear appeals of the decisions made by the criminal chambers; hear appeals of the decisions made by the first instance committees; hear appeals in matters of law; harmonize rulings by setting uniform jurisprudence; try crimes committed by the President of the Republic, the President of the Assembly of the Republic and the Prime-Minister for crimes committed during the exercise of their Office (Prata 2005: 1149).

4.1.2.3. Experts

The STJ currently has one presiding judge and 22 judges. STJ judges are called *Juízes Conselheiros*. All texts from the Portuguese subcorpus were written by STJ judges. As mentioned, what makes an *acórdão* different from a *sentença* is that an *acórdão* is a decision reached by at least two judges. Texts are elaborated by one *Relator* (the main judge) but signed by all judges that participated in the decision.

The role of judges in the Portuguese legal system consists in discovering and applying the appropriate law to a given case. The Portuguese judge can be seen as *la bouche de la loi*, i.e. an interpreting entity that makes objective decisions (Castanheira Neves 2008). The formal sources of law on which grounds of judgment are based consist of the statutory law (the codes) and of the positions taken by legal science (books, articles written by academic lawyers, etc). Although Portuguese judges also cite prior cases or precedents (case law) in the grounds for judgment, these play a minor role in the process of reaching a decision because they are not considered a formal source of law.

4.1.2.4. Macrostructure

Schematically, the *acórdão* consists of a certain fact to which certain values are applied. Guimarães (2004) compares the structure of the *acórdão* to a syllogism in which the major premise corresponds to the matter of law discussed, the minor premise to the facts of the

case. In its written form, an *acórdão* contains three sections: an identification section, a summary section, and a thematic section. Table 12 illustrates the identification section of the *acórdãos*.

Table 12. Example of the identification section of the *acórdãos*

Processo:	2799/08.7TBVCD.P1.S1
Nº Convencional:	2ª SECÇÃO
Relator:	ÁLVARO RODRIGUES
Descritores:	INVESTIGAÇÃO DE PATERNIDADE, CAUSA DE PEDIR, PROCRIAÇÃO, INCONSTITUCIONALIDADE, TRÂNSITO EM JULGADO
Data do Acórdão:	09/09/2010
Votação:	UNANIMIDADE
Texto Integral:	S
Privacidade:	1
Meio Processual:	REVISTA
Decisão:	CONCEDIDA A REVISTA
Área Temática:	DIREITO CIVIL - DIREITO DA FAMÍLIA
Doutrina:	- Antunes Varela, Código Civil anotado, Vol.5º, pg. 303. - M. Andrade, Noções Elementares de Processo Civil, pg. 322. - Paulo Cunha, Direito de Família, II, pg. 256 . app
Legislação Nacional:	CODIGO CIVIL : - ARTº 1871.º. CONSTITUIÇÃO DA REPÚBLICA PORTUGUESA (CRP):- ARTºS 26º, Nº 1, 36º, Nº 1 E 18º, Nº 2 E 282.º, N.º4.
Jurisprudência Nacional:	ACÓRDÃO DO TRIBUNAL CONSTITUCIONAL PROFERIDO EM PLENÁRIO, N.º 23/06, DE 10 DE JANEIRO DE 2006.

The identification section allows the document to be identified physically as information. As a rule, it includes the following items of information: identification code of the *acórdão*, number of the *acórdão*, name of the judge responsible for the elaboration of the *acórdão*, indexation terms, date of the text, vote, confidentiality, type of appeal and final decision. Some documents also discriminate bibliographical references used by the judges. References can be divided into: doctrine (*Doutrina*), legislation (*Códigos*) and case law (*Jurisprudência*).

The summary section follows the identification part. In this section the judge summarizes the key issues of the *acórdão* (Table 13) and, according to the article 713 of the *Código de Processo Civil* (Eng. Code of Civil Procedure) (2002), it is the duty of the judge that elaborated the decision to write the summary of the *acórdão*.

Table 13. Example of the summary section of the *acórdãos*

Portuguese	Translation
<p>(Acórdão: 2799/08.7TBVCD.P1.S1.)</p> <p>Sumário:</p> <p>I-A identidade da causa de pedir que caracteriza a repetição da causa e que está na base da oponibilidade do caso julgado, não se confunde nem se relaciona directamente com a identidade das palavras, argumentos ou razões tecidas nos petítórios respectivos ou a configuração do seu desenvolvimento no seio de cada um destes articulados.</p> <p>II-A causa de pedir é, como se sabe, «o acto ou facto jurídico (contrato, testamento, facto ilícito, etc.) donde o autor pretende ter derivado o direito a tutelar: o acto ou facto jurídico que ele aduz como título aquisitivo desse direito» (M. Andrade, <i>Noções Elementares de Processo Civil</i>, pg. 322). [...]</p>	<p>(Judgment: 2799/08.7TBVCD.P1.S1.)</p> <p>Summary:</p> <p>I- The identity of the cause of action that characterizes the repetition of the cause and that underlies the enforceability of <i>res judicata</i> should not be mistaken by nor directly related to the identity of words, of arguments or of the reasons provided in the corresponding petitions or even the configuration of their development within each of the enacting terms.</p> <p>II- The cause of action is known to be «the legal act or fact (contract, will, tort law, etc.) from which the author claims to have derived the right to protect: the act or fact s/he adduces as justification for acquiring a right» (M. Andrade, <i>Noções Elementares de Processo Civil</i>, pg. 322). [...]</p>

The aforementioned article of the *Código de Processo Civil* (Eng. Code of Civil Procedure) also establishes that the thematic part of the *acórdão* should be composed of three parts: *relatório* (Eng. introduction, facts and issues) *fundamentos* (Eng. analysis) and *decisão* (Eng. conclusion or decision). These parts are clearly separated and introduced in the texts by Roman numerals (Table 14) or by headers (Table 15). In either case, the thematic part is always preceded by the sentence “Acordam no Supremo Tribunal de Justiça” meaning that the STJ judges agree with the factual description and history of the case (Table 14 and Table 15).

Table 14. Beginning of the thematic part *relatório* with Roman numerals

Portuguese	Translation
(Acórdão: 188/07.0TBMCD.P1.S1.) Acordam no Supremo Tribunal de Justiça I REFER – Rede Ferroviária Nacional EP moveu a presente acção com processo ordinário contra ... – Tratamento e Limpezas Ambientais SA, pedindo que a ré fosse condenada a pagar-lhe a quantia de € 106.585,00, acrescida dos respectivos juros legais desde a citação.	(Judgment: 188/07.0TBMCD.P1.S1.) The judges of the Supremo Tribunal de Justiça agree that: I REFER – National Railway EP filed this action against... - Processing and Environmental Cleaning SA, under ordinary process asking that the defendant be ordered to pay the sum of € 106,585.00, plus interest thereon from the legal citation.

Table 15. Beginning of the thematic part *relatório* with a header

Portuguese	Translation
(Acórdão: 2799/08.7TBVCD.P1.S1.) Acordam no SUPREMO TRIBUNAL DE JUSTIÇA: <u>RELATÓRIO</u> AA propôs, no 2º Juízo Cível da Comarca de Vila do Conde, a presente acção declarativa com processo comum ordinário, contra BB, ambos com os sinais dos autos, pedindo que se declare que o Réu é pai da Autora e se altere o seu assento de nascimento, em conformidade. [...]	(Judgment: 2799/08.7TBVCD.P1.S1.) The judges of the SUPREMO TRIBUNAL DE JUSTIÇA agree that: <u>INTRODUCTION</u> AA filed this action for declaratory relief with common ordinary process in the 2nd Civil Court of Vila do Conde against BB, both following the written procedures, and asked that the defendant be declared the father of the author and be accordingly named on her birth certificate [...]

The *relatório* corresponds to the initial part of the *acórdão*. It describes the facts of the process, the matters of law discussed by the parties and the factual and legal principles on which the decision will be based. For instance, the *relatório* section of the *acórdão* 532/09.5YFLSB in Appendix 1 raises the following questions and provides the following answers:

Question 1: What happened?

Answer: A judge working in a low instance court is friends with the brother of the appellant in a case he is called to judge.

Question 2: Which legal remedy is requested?

Answer: The appellant, i.e. the judge working in the low instance court, requests permission to not judge the case.

Question 3: What is the legal principle involved?

Answer: The principle of the impartiality of judges according to which all judges involved in the case must act objectively and base their decisions without personal bias or preconceived ideas on the matter and persons involved and without promoting the interests of any one of the parties.

The second thematic part of the *acórdão*, called *fundamentos*, presents the analysis performed by the judges concerning the factual and legal issues described in the *relatório*. The logical basis of the decision and the reasons that determine the decision of the judges are declared here. Taking the same *acórdão* as an example, the following questions are raised in this section:

Question 1: What are the factual grounds for the decision?

Answer: The appellant is friends with the brother of the appellant in the case he requests to not intervene but he is not friends with the appellant himself.

Question 2: What are the legal grounds for the decision?

Answer: The Code of Civil Procedure states that a judge should not participate in a law suit if there is serious suspicion that he or she may not be impartial. Reasonable suspicion is evaluated based on objective and subjective grounds.

Question 3: How do the legal grounds apply to the factual grounds?

Answer: There is no objective circumstance that may affect the appellant's impartiality as a judge, because he does not know personally the appellant in the law suit. There is no subjective circumstance that may affect the appellant's impartiality as a judge, because he has no personal interest in the case.

The *decisão* is the final section of the *acórdão*, in which the judge answers the questions raised by the parties in the law suit. The *decisão* corresponds to the conclusion of the syllogism developed in the previous parts. It is the result of a logical sequencing of facts and legal grounds and the judge may not go beyond the matter to which he was called. Decisions can be favourable or unfavourable to the author of the appeal. Verbs play a very important role in the formulations used by judges to express their decision. Verbs used to express favourable decisions are: *conceder* (Eng. to grant), *deferir* (Eng. to allow). Verbs used to express an unfavourable decision are: *improceder* (Eng. to dismiss), *indeferir* (Eng. to reject), *negar* (Eng. to deny), *rejeitar* (Eng. to reject). Formulations of favourable decisions may vary and sometimes they also mention the consequences and/or effects of the decision:

Em conformidade com o exposto, acorda-se em:

- *Conceder a revista;*
- *Revogar o acórdão impugnado;*
- *Repor o sentenciado na 1ª Instância que, julgando improcedente a oposição à execução, ordenou o prosseguimento da acção executiva contra o Oponente, e,*
- *Condenar o Recorrido nas custas.*

(1017/07.0TVLSB.L1.S1)

Translation:

In accordance with what was mentioned, we agree:

- *to allow the appeal;*
- *to revoke the impugned judgment;*
- *to reinstate what was decided by the First Instance Court, which ordered the continuation of the executive action against the Opponent because it dismissed the opposition to the execution, and,*
- *to sentence the defendant to pay for the costs.*

(1017/07.0TVLSB.L1.S1)

Formulations expressing an unfavourable decision may vary too, and judges usually mention that the decision of the low instance court was correct:

Com base no exposto, indefere-se o pedido de escusa. (532/09.5YFLSB)

Translation:

Based on the above, the request is dismissed. (532/09.5YFLSB)

Na improcedência do recurso, nega-se a revista e confirma-se o acórdão recorrido. (765/06.2OPGL.S2)

Translation:

The appeal is rejected, the review is denied and the appealed judgment is confirmed. (765/06.2OPGL.S2)

Do exposto resulta que acordem negar a revista mantendo o Acórdão recorrido. (1842/04.3TVPRT.S1)

Translation:

From the above it follows that the review is denied and the appealed judgment is maintained. (1842/04.3TVPRT.S1)

In the case of the *acórdão* 532/09.5YFLSB in Appendix 1 the judges unanimously decided to dismiss the appellant's request: *Com base no exposto, indefere-se o pedido de escusa* (Eng. *Based on the above, the request is dismissed.*). The group of judges (the court) have to vote to reach a decision. Consequently, decisions can be unanimous, majoritarian, concurring or dissenting. Whenever the opinions of the judges differ, the *Relator* (judge-rapporteur) has to describe each dissenting opinion and give details on the motives presented by each judge. The information on the type of vote can be found in the identification section of the *acórdão* (cf. Table 12).

4.1.2.5. Content

Although the *acórdãos* have the same macrostructure, their content can vary considerably. As mentioned, each document contains an identification section with indexing terms for documentation purposes, which point to or indicate the topic of the texts. The *Divisão de Documentação e Informação Jurídica* (Eng. Department for Legal Information and Documentation) is the department of the STJ responsible for the management of the documentation, namely for the elaboration of indexing keyword lists of the *acórdãos*.

In order to identify the content of the texts included in the Portuguese corpus, a list of all indexing terms was compiled. The indexing terms with the highest frequency score are *contrato* (Eng. contract), followed by *direito* (Eng. right) and *dano* (Eng. damage or harm). These terms may have the form of simple keywords (*contrato*) or the form of complex keywords (*contrato de arrendamento*, *contrato de compra e venda*, etc.). Appendix 2 lists 44 indexing terms that appear at least 10 times in the identification sections of the Portuguese corpus.

4.1.3. The Canadian judgments

The English subcorpus consists of authentic and translated judgments written by the judges of the Supreme Court of Canada. *Judgments* differ from *cases* in that the latter are abridged versions of very elaborate and detailed judgments. All texts were downloaded from the freely available online database of the *Judgments of the Supreme Court of Canada*, which is a collaborative effort of the Supreme Court of Canada and the LexUM laboratory in the Faculty of Law of the University of Montreal.

The authentic texts were written by a judge representing a group of judges. Non-authentic texts of the corpus correspond to French to English translations which were written by official translators. Contrary to what some authors state, namely Bowker and Pearson (2002: 11), we believe that a comparable corpus may contain not only authentic texts but also translated texts as long as these are not the translations of the authentic texts included in the same corpus. In Canada, official translations used in courts have the same status as authentic texts (Lavoie 2005). For this reason, in this research, translated judgments are considered as legitimate as authentic texts for the inclusion in the corpus.

4.1.3.1. Function

A judgment is the final decision in a legal dispute which is argued and settled in a court of law and determines winners and losers (Songer 2008: 78). A judgment is written not only for the benefit of the parties involved in the case, but also for the benefit of legal profession, for the benefit of other judges and for the benefit of appellate Courts. In fact, decisions may set a precedent which is always binding on lower courts. This is called the doctrine of binding precedent or *stare decisis*.

4.1.3.2. Institutional context

In Canada, judicial courts are organized into three levels, each one corresponding to a specific jurisdiction area: federal courts are courts constituted under federal statutes with judges federally appointed (e.g. Supreme Court of Canada and Federal Court of Canada); appellate courts are courts constituted under provincial statutes with judges federally appointed (e.g. Alberta Court of Appeal); provincial courts are courts constituted under provincial statutes with judges provincially appointed (e.g. Youth Court, Family Court) (Gall 2004: 230).

All court decisions of the English corpus were produced by the Supreme Court of Canada (henceforth, SCC), which is the highest court in Canada. According to the *Supreme Court Act R.S., c. S-19, s. 35* (1985), the SCC has and exercises an appellate, civil and criminal jurisdiction within and throughout Canada. SCC judgments are, in all cases, final and conclusive. The SCC grants permission to between 40 and 75 litigants each year to appeal decisions rendered by provincial, territorial and federal appellate courts (Hogg 2009).

4.1.3.3. Experts

All authors of the selected texts are SCC judges, also called Justices. The SCC is composed of a chief justice called Chief Justice of Canada and eight *puisne* judges. According to the *Supreme Court Act, R.S.C., c. S-26* (1985), at least three of the nine judges are appointed from among the judges of the Court of Appeal or of the Superior Court of the Province of Quebec.

One of the functions of the SCC judges is to carry out judicial review, i.e. to examine cases previously tried by an inferior court. Judges rely upon the advocates to present legal and factual argument and they act as impartial referees in an adversarial judicial process. They evaluate the evidence presented in the court, apply the existing rules of law to the facts, look back to see how previous judges have dealt with earlier cases involving similar facts in that area of law, and then reach a decision that may set a precedent (that is binding on lower courts).

4.1.3.4. Macrostructure

Canadian judgments are composed of two main parts: an identification part and a thematic part. The identification part includes data elements that allow the document to be identified physically as information. Some elements are mandatory and others are optional (Pelletier et al. 2009). Mandatory elements correspond to those pieces of information that must be present at the very beginning of a judgment file such as the name of the court where the case was tried, etc. (Table 16). Optional elements are those which may not be needed in every judgment such as dates and place of the hearing, case origin and judicial history, disposition, reasons, names of counsel, appendices and cover and backing sheets.

Table 16. Mandatory elements in the identification section of Canadian judgments (adapted from Pelletier et al. (2002) and Pelletier et al. (2009))

Mandatory elements (mandatory presence and sequence)		
Element's name	Label	Example
Name of court	[Label not required]	Supreme Court of Canada
Neutral citation	Citation:	Citation: 2008 SCC 62 or Citation: R v. Solowan, [2008] 3 S.C.R. 309
Decision date	Date:	Date: 20081114
Docket number	Docket:	Docket: 32237
Registry [mandatory only if applicable]	Registry:	---
Full style of cause	Between: or Parties: or In the matter of: or [Label not required]	BETWEEN: Kenneth Stephen Terrance Solowan Appellant and Her Majesty The Queen Respondent
Translation Notice [mandatory only if applicable]	[Official English translation] / [Label not required]	---
Publication restriction [mandatory only if applicable]	Restriction on publication:	---
Correction notice [mandatory only if applicable]	Corrected decision:	---
Name(s) of the judge(s) hearing the matter	Coram: or [Any consistent label]	Binnie, LeBel, Deschamps, Fish, Abella, Charron and Rothstein JJ.
Case origin [mandatory only if applicable]	On appeal from or On judicial review from or Supplementary reasons to	on appeal from the Court of Appeal of British Columbia

The thematic part of Canadian judgments is organized according to the judge's preferences, but it is mandatory that they number paragraphs. Judgments contain the following information in one form or another: Introduction, Facts, Issues, Analysis, and Conclusion. The last four sections are also called "Reasons for judgment". Judges may use headings and subheadings in longer judgments.

The “Introduction” states the basics of the case. It introduces the parties, summarizes the determinative facts and essential procedure, and briefly states the issues. The introduction lays the foundation for the analysis that follows. For instance, from the Introduction section of the judgment *R v. Solowan*, [2008] 3 S.C.R. 309 (cf. Appendix 3) one learns that: 1) the accused pleaded guilty of hybrid offences against the Crown; 2) the accused appealed the maximum sentences arguing that the trial judge did not follow the principle of “worst offender, worst offence”¹⁵ applicable to maximum sentences; 3) the Court of Appeal rejected the appeal but changed the sentence that had been imposed on the accused; and that 4) the accused now appeals on the ground that the Court of Appeal disregarded the Crown’s election to proceed by way of summary conviction¹⁶.

In the section called “Facts”, the facts and history that affect the analysis and decision of the case are discussed. Facts are written in chronological order or by theme when a chronological order would be confusing. Where the facts are in dispute, the judge may prefer to narrate the facts in greater detail. Consider the case *R v. Solowan*, [2008] 3 S.C.R. 309 mentioned above (cf. Appendix 3). Here, we learn about: the reasons why the accused was sentenced (stolen property, failure to stop a motor vehicle while being pursued by the police), the procedure elected by the Crown to try the case (summarily as opposed to as indictment), and the response of the Court of Appeal (the principle of “worst offender,

¹⁵ “By “worst offender” we mean that the defendant must be the worst type of offender “within the group of persons committing the offense in question.” *Wilson v. State*, 582 P.2d 154, 157 n.3 (Alaska 1978). In evaluating whether a particular defendant is a worst offender we look at the manner in which the crime was committed, as well as the character and background of the defendant. *Moore v. State*, 597 P.2d 975, 976 n.4 (Alaska 1979); *Saganna v. State*, 594 P.2d 69 (Alaska 1979). In *State v. Wortham*, 537 P.2d 1117, 1120 (Alaska 1975), we listed several factors the court has looked to in order to support a characterization as worst offender: prior criminal convictions, age, military records, employment history, drug or alcohol addition, presentence report evaluations and predictions, and the possible presence of antisocial tendencies which pose a clear risk to the public.” (*MICHAEL LOREN HINTZ v. STATE ALASKA* 1981).

¹⁶ *Summary conviction*: “The conviction of a person, (usually for a minor misdemeanor) as the result of his trial before a magistrate or court, without the intervention of a jury, which is authorized by statute in England and in many of the states. In these proceedings there is no intervention of a jury, but the party accused is acquitted or condemned by the suffrage of such person only as the statute has appointed to be his judge. A conviction reached on such a magistrate’s trial is called a “summary conviction.” *Brown; Blair v. Com.*, 25 Grat. (Va.) 853.” (*Black’s Law Dictionary* 2012)

worst offence” does not operate when a maximum sentence is appropriate bearing in mind the principles set out in the *Criminal Code, R.S.C. 1985* and in other case law).

After stating the facts of the case, the judge should identify the “Issues” to be addressed, i.e. the arguments on which the analysis and the *ratio decidendi* (the reasons for the decision) will be based. The issues are raised in a logical order, usually in the order of importance to the conclusion. In the “Issues” section of the aforementioned judgment, the judge cites the impugned passage of the text of the Court of Appeal in which it is stated that maximum sentences are not imposed when the Crown proceeds summarily. However, the Crown proceeded summarily and the accused received maximum custodial sentence for one of the offences. The judge explains that the issue is whether the Court of Appeal erred in law in affirming that sentence. He adds that, from his point of view, the Court of Appeal did not err and proceeds to justify his opinion.

The “Analysis” comes after the “Issues”. Here, the judge states the legal principles that should be applied to the facts of the case. This is the *ratio decidendi*, the reason for the decision. Thus, a logical reasoning must follow in reaching a decision. For instance, in the “Analysis” section of the aforementioned judgment, the judge explains that a fit sentence for a hybrid offence by way of summary conviction should follow the principles set out in the Criminal Code for that mode of procedure (these principles would be different were the defendant to be prosecuted as indictment).

Finally, the “Conclusion” is the last part of the judgment, in which the judges express their decision. Conclusions can be in favour or against the author of the appeal. The judges may dismiss an appeal or give the judgment and award the process or other proceedings that the court whose decision is appealed against should have given or awarded. Verbs used to express the decision of the judges are performative because they are legally binding actions reflecting the prescriptive authority of judges. Formulations of

favourable decisions are quite standard and the performative verb does not vary: *(The) appeal (is / should be) allowed (with costs / in part)*. Formulations expressing an unfavourable decision are quite standard too: *(The) appeal (is / should be) dismissed (with costs)*. In some cases, the decision made by the judges can be both positive and negative: *Appeal allowed and cross-appeal dismissed*.

In the case *R v. Solowan*, [2008] 3 S.C.R. 309 (cf. Appendix 3), the judges decided to deny the request of the appellant (*Appeal dismissed*). Judges have to vote to reach a decision. Decisions can be unanimous, majoritarian, concurring or dissenting. In the case of the aforementioned judgment the decision of the judges was unanimous.

4.1.3.5. Content

Although the judgments of the English subcorpus have the same macrostructure, their content can vary considerably. As mentioned, each document contains an identification section with indexing terms for documentation purposes. These terms point to or indicate the themes of the texts. In order to identify the content of the texts included in the English subcorpus, a list of the indexing terms of the texts of the corpus was compiled. Indexing terms with a very high frequency score in the corpus are *Charter of Rights*, followed by *Criminal law* and *evidence*. Indexing terms may take the form of simple keywords (*evidence*), the form of complex keywords (*exclusion of evidence*) and even the form of clauses (*Whether doctrine of issue estoppel should be retained in criminal law*). Indexing terms in the form of clauses occur in the corpus about 380 times. Appendix 4 lists 36 indexing terms appearing 10 times or over in the identification sections of the English texts.

4.1.4. Comparability and representativeness

The corpus used in the research was designed to compare the legal terminology used by Portuguese civil law judges and Canadian common law judges. It is representative of the

discourse of the Portuguese and Canadian Supreme Courts because each subcorpus has approximately the same number of words, i.e. 2,500,000 words, and includes the same text genre. Portuguese and Canadian texts are instantiations of the same legal genre, i.e. judgments, because they share elements such as the text's communicative function, equivalent institutional context, structure and even content. However, they also differ in some aspects because, as Bhatia (1993) reminds us, socio-cultural constraints can affect certain characteristics of the genre.

Table 17. Comparison of the Portuguese and Canadian judgments

Comparison of the judgments		
Criteria	Similarities	Differences
Function	<ul style="list-style-type: none"> - To solve legal disputes - Source of information for the parties and the community of experts 	<ul style="list-style-type: none"> - Judgments may set a precedent in Canadian Law but rarely in the Portuguese law.
Institutional context	<ul style="list-style-type: none"> - High instance courts 	<ul style="list-style-type: none"> - Legal theories - Sources of law - Eligibility of cases
Experts	<ul style="list-style-type: none"> - Judges 	<ul style="list-style-type: none"> - Judges work within two distinct countries and legal systems.
Macrostructure	<ul style="list-style-type: none"> - Identification part and thematic part 	<ul style="list-style-type: none"> - The thematic part of Canadian judgments is longer because judges need to use more documentation than Portuguese judges.
Content	<ul style="list-style-type: none"> - Matters of law - Judicial proceedings - Argumentation - Reaching a verdict - ... 	<ul style="list-style-type: none"> - Topic of cases described in the judgments differs not only from one language version of the corpus to another, but also within the same text corpus.

Table 17 summarizes the similarities and differences that characterize each subcorpus. Details on the aspects according to which Portuguese and Canadian texts were studied are described into the following sections. Even if the aspects are presented separately, in the course of the study some are intertwined. For example, the description of the role played by the experts and authors of the corpus texts necessarily took into consideration the institutional context in which they work.

4.1.4.1. Function

Portuguese and Canadian judgments serve two similar functions. Firstly, they are decisions in a legal dispute argued and settled in the highest court of the countries. As decisions, they are written for the benefit of the parties involved in the case and are even said to exert a persuasive authority (Slaughter 2004). Secondly, judgments constitute a source of information available in a given (digital) library for the community of experts and therefore have the same communicative purpose, which is the most privileged criterion for the identification of genres according to Bhatia (1993).

4.1.4.2. Institutional context

The STJ and the SCC are the highest instance courts of the Portuguese and Canadian judiciary systems. Both institutions hear appeals on civil and criminal matters and appeals of the decisions made by the lower instance courts. However, there are also some characteristics that set them apart. Firstly, the STJ can try crimes committed by the President of the Republic, the President of the Assembly of the Republic and the Prime-Minister for crimes committed during the exercise of their Office. The SCC does not try similar cases. Secondly, both courts harmonize rulings by setting uniform jurisprudence, but they do this differently because the Portuguese and Canadian systems have different formal sources of law. Thirdly, the Supreme Court of Canada grants permission to only 40-75 litigants each year, whereas the Supreme Court of Portugal does not impose that restriction. This explains the striking imbalance concerning the number and dates of texts included in each subcorpus: whereas about 120 judgments are produced by the STJ per month, only 40-75 judgments are produced by the SCC per year.

4.1.4.3. Experts

The authors of the texts in the comparable corpus correspond to judges who work in a given legal system based on theories and on conventional procedures. Their place and role in the

hierarchy of the judiciary system is the same: “Au sommet de la hiérarchie juridique, le législateur énonce le sens du langage du droit, mais c’est le juge qui en fixe la signification lorsqu’il est appelé à interpréter le texte litigieux qui lui est soumis par les parties” (Gémar 1991: 281).

Nevertheless, while Portuguese judges work in a civil law system, Canadian judges work in a common law system, which results in their roles being different in some respects. Portuguese and Canadian judges enter into dialogue with a number of texts: with the evidence, with the arguments and submissions made by the litigants in court, with the decision which is being appealed, with statutory law, with similar decisions in the past (precedents) and with their colleagues on the bench who may decide a case differently (Vázquez Orta 2010). Judges also enter into a dialogue with possible future texts, i.e. with judges and lawyers who will be involved in similar cases in the future (Allard 2001: 77). The dialogue is facilitated by the electronic technologies that legal networks use more and more.

However, Portuguese and Canadian judges adopt distinct methodologies in entering into a dialogue with the elements mentioned above, because they use different sources of law. Canadian judges not only discuss statutory law (the statutes) and the positions taken by legal science (books, articles written by academic lawyers, etc), but they also have to discuss the precedents (*stare decisis*) that apply to the case at hand as well as the meaning of those precedents (*ratio decidendi*). In fact, precedents are discussed in a far more elaborated way in the Canadian judgments than in the Portuguese judgments because these are mandatory principles in the Canadian common law system but not in the Portuguese civil system. As precedents are binding on lower courts, Canadian judges are said to be law makers or *jurislatores* (Devinat 2005: 173):

Sur le plan prescriptif, il ressort nettement du discours de la Cour suprême que le rôle des tribunaux est celui d’adapter la common law aux faits sociaux, ce qui

semble impliquer qu'ils doivent tenir une fonction qui s'apparente à celle du législateur, sans toutefois se substituer à celui-ci.

In the Portuguese system, there is no theory of *stare decisis* or of *ratio decidendi* as such despite its application in practice. The formal sources of law on which grounds of judgment are based are statutory law (the statutes) and the positions taken by legal science (books, articles written by academic lawyers, etc). Portuguese judges can be said to be *la bouche de la loi*, although their active and normative role is being more and more recognized and encouraged (Castanheira Neves 2008).

As Canadian judges necessarily have to take into account one extra formal source of law than Portuguese judges (i.e. case law) to reach a decision, Canadian texts are twice as long as Portuguese texts. This explains why, in average, Canadian judgments have 12,000 words while Portuguese judgments only have 6,500.

4.1.4.4. Macrostructure

The structure of the Portuguese and Canadian judgments is closely related to the communicative function of the genre. Descriptive and thematic elements are organized in such a way that allows the institutional goals and the informational needs of the text users to be met. Portuguese and Canadian texts share a comparable but not exactly identical macrostructure because socio-cultural constraints affect the essential move-structure of the legal genre of which they are instantiations. STJ judgments have only three thematic parts: *relatório*, *fundamentos* and *decisão*, whereas SCC judgments have five: Introduction, Facts, Issues, Analysis, and Conclusion. However, the comparative analysis reveals that the Introduction part of the SCC judgments is comparable to the Summary section of the Portuguese judgments and the Facts and Issues are conflated in the *fundamentos*.

4.1.4.5. Content

As mentioned, the topic of the texts was identified on the basis of the indexing terms from the identification section of the documents. According to the criteria set out in the Eagles Report (1996) on text typology, corpus texts used in this research can be said to be “reflexive”, i.e. the texts talk about themselves and propose their own classification. Although the existence of the indexing terms does not constitute incontestable evidence of the accuracy of the classification, “for the control of large corpora there is no practical alternative” (EAGLES 1996: 8). The comparison of Appendices 2 and 4 suggests, however, that the Portuguese subcorpus and the Canadian subcorpus do have some themes in common: “Criminal law”, “rights”, “evidence”, “duties”, “appeals”, “negligence”, etc. Chapter 5 provides more information on the content of the texts, as the frames observed provide clues to common themes across texts.

4.2. Bottom-up workflow

This sub-chapter presents a methodology for describing specialized verbs and for assigning their equivalents. In contrast to the top-down approach adopted by FrameNet lexicographers (cf. Chapter 3), the approach described here is bottom-up, i.e. verbs are first selected, analyzed and then organized in frames (Figure 24). The following sections describe each stage of the methodology: the extraction of candidate terms for each language (section 4.2.1), the validation of the candidate terms (section 4.2.2), the description of terms (sections 4.2.3 - 4.2.5), the identification of frames grouping terms together (section 4.2.6), data encoding (section 4.2.7), the annotation of contexts (section 4.2.8), the validation of data (section 4.2.9), and the assignment of equivalents (section 4.2.10). Even if these steps are described separately, in the course of the analysis, some are intertwined or superimpose on each other.

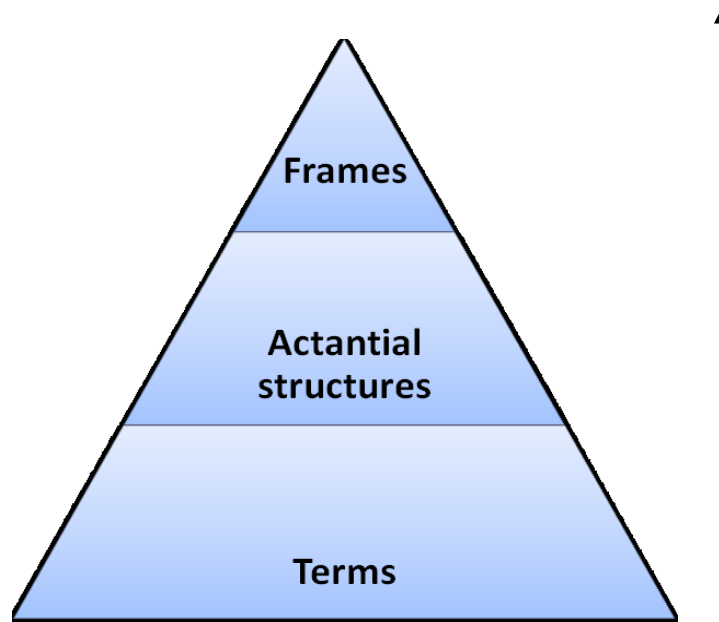


Figure 24. Bottom-up approach

4.3.1. Extraction of candidate terms

Candidate terms were extracted by means of a tool called *TermoStat* (Drouin 2003), a term extractor that computes the “specificities” of words occurring in a given specialized corpus by comparing their frequency in that corpus with their frequency in a general-language corpus (or reference corpus). Basically, the higher the specificity of a word, the more likely it is to be a term of the subject field. Conversely, a word with a low specificity coefficient is likely to belong to the general language. *TermoStat* can perform extractions based on the form of terms (single- or multi-word terms) and based on the part of speech of terms (nouns, verbs, adjectives and adverbs). This term extractor was chosen for two main reasons. Firstly, contrary to other term extractors, *TermoStat* can extract verbs, the type of units on which this research focuses. Secondly, *TermoStat* has been used in other terminographic projects with good results (L’Homme 2008; Le Serrec et al. 2009).

Two lists of candidate terms were extracted: a list of Portuguese candidate terms was extracted from the Portuguese subcorpus (cf. section 4.1.2) and a list of English candidate terms was extracted from the English subcorpus (cf. section 4.1.3). For the extraction of Portuguese candidate terms, a part of the freely available corpus *CETEMPublico* was used as reference corpus. This corpus includes texts of around 2,600 editions of the Portuguese newspaper PÚBLICO written between 1991 and 1998 and amounting to approximately 180 million words. Appendix 5 lists the Portuguese candidate terms with the highest specificity score.

The newspaper section of the *BNC World* was used as the reference corpus for the extraction of the English candidate terms. The *BNC World*'s articles were published between 1985 and 1994. Appendix 6 lists the English candidate terms with the highest specificity score.

4.3.2. Validation of candidate terms

In order to validate candidate terms, we analyzed their behaviour in the corpus by means of a concordance tool called *AntConc* (Anthony 2006) and used a set of criteria proposed by L'Homme (2004) which have been tested in previous research projects (Carreno 2005; Le Serrech 2008). According to this author, a given lexical item may be a term if: 1) it has a meaning related to the subject field in question; 2) its actants are terms themselves according to criterion 1; 3) its morphological derivatives are terms themselves according to criteria 1 and 2, and there is a semantic relation between the lexical item and its derivatives; and 4) the lexical item has other paradigmatic relations to other terms validated by all three criteria. L'Homme (2004) argues that the first criterion is more easily applied to terms denoting entities, whereas the last three criteria apply mainly to predicative units.

Despite this word of caution, we decided to apply not only criteria 2, 3 and 4 but also criterion 1 as it may guide us in the identification of specialized meanings and frames. We used external resources such as law manuals, monolingual dictionaries, legislation, and other documentation resources to help us understand the meaning of candidate terms. For the application of criterion 2 we used only corpus evidence and for the application of criteria 3 and 4 we used corpus evidence along with the aforementioned type of external resources. The following paragraphs describe the application of these criteria to the selection of a Portuguese and an English candidate terms.

(Criterion 1) For example, *absolver* (to acquit) is a Portuguese candidate term with a very high specificity score (cf. Appendix 5) and it is quite likely a term because it has a meaning related to the subject field of law, in general, and to Penal Procedure Law, in particular. According to Santos et al. (2010), Penal Procedure follows three stages in the Portuguese doctrine: *inquérito* (investigation), *instrução* (optional stage; preparatory inquiry) and *juízo* (judgment). *Absolver* evokes the last stage of Penal Procedure, i.e. the trial, and as a linguistic form it typically occurs in the last section of the corpus texts, i.e. in the decision. At the end of the trial, the judge(s) and/or the jury have to decide whether the defendant is guilty or not of a crime of which he is accused. Their role is to reach a decision that performs the act of *absolver* (to find somebody not guilty of the charges of which they are accused) and/or of *condenar* (to find somebody guilty of the charges of which they are accused).

(Criterion 2) Secondly, the verb *absolver* is a predicative unit whose actants are terms themselves. In the corpus, the first actant of *absolver* is realized by terms denoting either a judge (*juiz*) or a group of judges (*tribunal*), the intervenients with legal power to reach a decision after the case is tried. The second actant of *absolver* is typically the defendant or the accused (*arguido, réu*, etc.), the intervenients in a case on which a decision

is reached. The third actant of *absolver* corresponds to the charges brought against the defendant (*pedido, acusação*, etc.).

(**Criterion 3**) Thirdly, *absolver* is a term because its morphological derivatives *absolvição* and *absolutório* are terms that relate semantically to *absolver*. The term *absolvição* occurs in the article 31 of the Portuguese Code of Penal Procedure (2010). *Absolutório* is one of the adjectives that qualify and distinguish verdicts: *sentença absolutória* (absolutory sentence) and *sentença condenatória* (condemnatory sentence). This adjective appears not only in the corpus but also in the following article of the Portuguese Code of Penal Procedure (2010):

ARTIGO 461º

*Sentença **absolutória** no juízo de revisão*

1. Se a decisão revista tiver sido condenatória e o tribunal de revisão absolver o arguido, aquela decisão é anulada, trancado o respectivo registo e o arguido restituído à situação jurídica anterior à condenação.

Translation:

Section 461

Acquittal in the review

1. If the reviewed decision had convicted the defendant and the review court then decides to acquit the defendant, the former decision should be annulled, the corresponding register should be suspended and the defendant reinstated to the legal situation prior to conviction.

(**Criterion 4**) Finally, *absolver* is a term because it relates paradigmatically to other terms of the same subject field. As mentioned, *absolver* relates to *condenar* which can be found in the corpus. The two verbs denote two types of verdicts and they are hyponyms of the verb *julgar* (to judge).

(**Criterion 1**) The same way, *convict* is one of the English candidate terms with the highest specificity score (cf. Appendix 6) and it is quite likely a term because it has a sense related to the subject field of law, in general, and to Criminal Law, in particular. *Convict*

evokes the last stage of the criminal court proceedings, i.e. the verdict. At the end of the trial, the judge(s) and/or the jury have to decide whether the defendant is guilty or not of a crime of which he is accused. Their role is to reach a decision that performs the act of *acquit* (to find somebody not guilty of the charges of which they are accused) and/or of *convict* (to find somebody guilty of the charges of which they are accused).

(**Criterion 2**) Secondly, the verb *convict* is a predicative unit whose actants are terms themselves. In the corpus, the first actant of *convict* is realized by terms such as *judge*, *court* and *jury*, the intervenients who have to reach a decision on a case. The second actant of *convict* is typically the *accused* or the *appellant*, the intervenients in a case on which a decision is reached. The third actant of *convict* corresponds to the charges brought against the defendant (*assault*, *manslaughter*, *murder*, etc.).

(**Criterion 3**) Thirdly, *convict* is a term because its morphological derivatives *conviction* and *convicted* (adjective) are terms semantically related to it. The terms *conviction* and *convicted* occur not only in the corpus but also in the Criminal Code (R.S.C., 1985, c. C-46, s.662):

Conviction for infanticide or manslaughter on charge of murder

(3) Subject to subsection (4), where a count charges murder and the evidence proves manslaughter or infanticide but does not prove murder, the jury may find the accused not guilty of murder but guilty of manslaughter or infanticide, but shall not on that count find the accused guilty of any other offence.

487.071 (1) Before taking samples of bodily substances from a person under an order made under section 487.051 or an authorization granted under section 487.055 or 487.091, a peace officer, or a person acting under their direction, shall verify whether the **convicted** offenders index of the national DNA data bank, established under the DNA Identification Act, contains the person's DNA profile.

(**Criterion 4**) Finally, *convict* is a term because it relates paradigmatically to other terms of the same subject field. *Convict* is the antonym of the term *discharge* and *acquit* which can be found in the corpus.

However, not all candidate terms proposed by TermoStat were selected. There are two reasons for this. Firstly, some candidate terms correspond to erroneous part of speech tagging due to part of speech ambiguities. For example, the Portuguese candidate term *aludir* (to refer to) most often occurs in the corpus as an adjective deriving from the past participle of the verb *aludir*:

*Tal sistema veio, então, com o **aludido** DL 39/95, a ser substituído pelo da oralidade mitigada, preconizado por Franz Klein, assim se permitindo um amplo recurso sobre a matéria de facto. (STJ 115/1997.S.1)*

Translation:

The aforementioned Decree-Law 39/95 then replaced this system by a more oral one advocated by Franz Klein, thus allowing for a broad appeal of facts.

The candidate term *tender* is another invalid term because its form *tendo* can both refer to the first person singular of the verb *tender* (to tend to) or to the gerund form of the auxiliary verb *ter* (to have). We verified in the corpus that *tendo* systematically occurs as the gerund of the auxiliary verb in complex verb forms:

*[...] o autor respondeu ao anúncio, **tendo** sido convocado para uma entrevista no escritório que a 1.^a ré então possuía em Lisboa [...]* (STJ 09S0470)

Translation:

[...] the author answered the ad and was invited for an interview in the office that the first defendant owned in Lisbon [...] (STJ 09S0470)

English candidate terms such as *accuse*, *enumerate*, *individualize*, *etc.* were not retained for the same reason. For instance, although *accuse* may seem a relevant candidate term, in the corpus it is the noun form *accused* (as in *The accused was sentenced to life prison*) that occurs extremely frequently, whereas verb forms appear only 8 times. Similarly, *enumerated* and *individualized* occur in the corpus as adjectives and seldom as verbs.

Finally, some candidate terms were not included because they did not meet the criteria mentioned at the beginning of the section. This is the case of Portuguese candidate terms such as *auferir* (to earn money or a salary), *constar* (to be in), *resultar* (to result from), and the case of English candidate terms such as *characterize*, *justify* and *relate*. For instance, *auferir* is not a term because it does not have a meaning specifically related to the subject field of law nor does it specifically relate to the judgment scenario. Similarly, *relate* is not a valid term because the analysis of its concordances revealed that *relate* does not have a meaning specifically related to the subject field of law nor does its behaviour in the corpus indicate a different usage when compared to general language.

4.3.3. Sense distinctions

Circumscribing the meaning of terms is a task that inevitably accompanied the validation of candidate terms as it is one of the means for verifying if candidate terms meet the first criterion mentioned in section 4.3.2 (the candidate term has a meaning related to the subject field). Nonetheless, in this stage of the methodology we were interested in examining the meanings of the selected lexical items in the corpus so as to distinguish specialized meanings and exclude general ones, if there were any. We also followed the idea according to which “meanings are discovered in clusters of instances that share enough common features to justify being treated as a coherent ‘meaning group’” (Atkins et al. 2003: 334 citing Hanks (2000) and Kilgarriff (1997)).

In order to accomplish this task, the behaviour of the selected lexical items was studied by means of the concordance tool AntConc (Anthony 2006). For instance, consider the concordances of the verb *to satisfy* in Figure 25.

1	Accordingly, s. 6(4) fails to	satisfy	s. 1 of the Charter and is unconstitutional.
2	Clause 12 of the agreement	satisfies	all requirements under the Civil Code
3	the evidence must also	"satisfy	the rules of evidence under Canadian law
4	accused's momentary lapse of attention	satisfies	requirements of offence of dangerous
5	But for s. 7 to be	satisfied	each of them must be met in substance
6	that, provided the bands could	satisfy	the Crown that a transfer of funds for
7	of the offence unless Crown counsel	satisfies	you beyond a reasonable doubt that he is
8	Plaintiff has	satisfied	the Court that despite her many deviations
9	before them is whether the Crown has	satisfied	them beyond a reasonable doubt that the
10	no way to know how the trial judge	satisfied	himself that the complainant was a

Figure 25. Concordances of the verb *to satisfy*

We can observe that in the concordances [1-5] the verb *to satisfy* displays two arguments whereas in the concordances [6-10] it displays three. In fact, the concordances reveal not only a difference in the number of arguments but also in the semantic nature of the arguments. In concordances [1-5], the first argument of the verb refers to inanimate entities: *section, clause, evidence, lapse of attention*. In contrast, in concordances [6-10], the first argument of *satisfy* is animate: *the bands, Crown counsel, plaintiff, the Crown, the trial judge*. Even though the first argument is the syntactic subject of the verb in all concordances [1-10], the semantic nature of the argument differs. What is more, in concordances [1-5] the second argument of the verb denotes inanimate entities: *section, requirements, rules of evidence*, whereas in concordances [6-10] the second argument denotes animate entities: *the Crown, you, the Court, them, himself*. Syntactically, the arguments are the objects of the verb, but in the first half of the concordances they correspond to direct objects of the verb and in the second half they correspond to indirect objects. Finally, in concordances [6-10] *satisfy* is followed by an additional argument referring to situations that linguistically occur as *that*-clauses (*that a transfer of funds..., that he is..., that despite her many deviations..., etc.*).

Due to the differences in the number of arguments and in the semantic nature of these, we proceeded to attribute two separate meanings to the verb *to satisfy*. The first meaning seems to be related to the idea of compliance (*satisfy*₁), whereas the second seems to be related to the idea of convincing someone about something (*satisfy*₂). Although the verb *to satisfy* in the meaning of convincing someone about something is also used in the general language, in the corpus its behaviour is specialized in that it only occurs with terms denoting legal entities and concepts (e.g. [7] *Crown counsel satisfies you beyond a reasonable doubt*). In addition, the action of convincing someone about something is extremely relevant in the judgments.

Another example of the importance of genre-knowledge to the separation of specialized meanings is the Portuguese verb *acordar* (to agree) which occurs in very specific moments in the macrostructure of judgments (cf. section 4.1.2). Consider the following five contexts of the verb:

[1] *Decisão Texto Integral:*

Acordam no Supremo Tribunal de Justiça:

I. Relatório

AA, por si e em representação de seu filho menor BB, intentou, a 7 de Janeiro de 2003, a presente acção declarativa, com processo ordinário, contra COMPANHIA DE SEGUROS CC, pedindo que seja condenada a pagar-lhes: - 494.476,32, a título de danos causados à vítima DD; (STJ-dez2009-1)

Translation:

Full Textual Decision:

The judges of the Supreme Court **agree** that:

I.Relatório

AA, representing himself and his minor son BB, filed the present action on January 7th 2003 with ordinary process against the COMPANHIA DE SEGUROS CC and asked that the latter be sentenced to pay them: - 494.476,32 for the damages caused to the victim DD;

[2] *Termos em que, decidindo: Acordam* os deste Supremo 3^a Secção - em não conhecer do presente recurso por existir circunstância que obsta ao conhecimento do mesmo, uma vez que ainda não foi proferida decisão nas instâncias que conhecesse da questão suscitada. (STJ-dez2009-20)

Translation:

The judges decided that: The judges of the 3rd Section of the Supreme Court **agreed** not to grant the present appeal due to an impending circumstance as no decision based on the matter was reached by lower courts.

[3] *Nos termos expostos **acordam** conceder parcialmente a revista do Autor e negar a revista da Ré.* (STJ-jul2009-20)

Translation:

For these reasons, we **agree** to partially grant the authors' appeal and deny the defendant's appeal.

[4] *Os AA. e a R. **acordaram** que as portas da moradia seriam em castanho maciço, apresentando a porta de entrada da moradia fendas e algumas portas dos armários estão empenadas.* (STJ-nov2009-15)

Translation:

AA. and R. **agreed** that the doors of the house would be in solid brown, as the entrance door had slits and some cupboard doors are warped.

[5] *Por virtude dessa demora, o Autor e a Ré **haviam acordado** remeter aos segurados, logo que as propostas eram recebidas nas instalações da Ré, uma carta acusando a recepção das propostas e a sua aceitação.* (STJ-jul2009-22)

Translation:

By virtue of this delay, the Author and the Defendant had **agreed** to refer to the insured as soon as the proposals were received on the premises of the Defendant, a letter acknowledging receipt of proposal and acceptance.

When used at the beginning [1] of the corpus texts, *acordar* is used to express the fact that the group of judges agree with the factual description that is about the follow, i.e. with the *Relatório* section of the judgment. When used at the end [2] [3] of the corpus texts, *acordar* refers to the decision reached by a group of judges, i.e. the last section of the judgments called *Decisão*. This is no ordinary decision, but one which has a performative character, because judges are not only expressing their agreement on the decision but they are also giving a verdict that will have legal consequences for the parties in the case. However, in the contexts [4] and [5], *acordar* refers to an oral agreement that the parties in the suit made with each other. For this reason, *acordar* seems to have the meaning of

making an oral agreement. In this kind of situations, the presence of two separate meanings were verified by applying the following tests based on Mel'čuk et al. (1995):

1. The cooccurents of the meanings of the lexical item cannot be combined because this leads to an unacceptable sentence. The cooccurents from contexts [2] and [3] of *acordar* can be combined with each other but not with the cooccurents from contexts [4] and [5].

acordar em não conhecer do presente recurso
acordar conceder parcialmente a revista
acordar em não conhecer do presente recurso ou conceder parcialmente a revista

acordar em não conhecer do presente recurso
acordar que as portas da moradia seriam em castanho maciço
 **acordar em não conhecer do presente recurso ou que as portas da moradia seriam em castanho maciço*

2. The derivatives of the lexical item are different for each of its meaning. The noun derivative of the first meaning of *acordar* is *acórdão*, whereas the noun derivative of the second meaning of *acordar* is *acordo*.

acordar que as portas da moradia seriam em castanho maciço
acordo sobre as portas da moradia seriam em castanho maciço
 **acórdão sobre as portas da moradia seriam em castanho maciço*

acordar em não conhecer do presente recurso
acórdão do presente recurso
 **acordo do presente recurso*

3. Paradigmatic relations to other lexical items are different. For instance, the verb *discordar* is the antonym of the second meaning of *acordar* only.

acordar conceder parcialmente a revista
 **discordar conceder parcialmente a revista*

acordar que as portas da moradia seriam em castanho maciço
discordar que as portas da moradia seriam em castanho maciço

4.3.4. Selection of contexts

For each validated term, we select twenty contexts illustrating how the term is used in the corpus texts. Contexts provide the information necessary for the following stages of the methodology: identification of actantial structures (section 4.3.5), frame identification (section 4.3.6), and annotation of the linguistic behaviour of terms (section 4.3.8). As the corpus constituted for each language is sufficiently large (approximately 2,500,000 forms), it was possible to collect a representative variety of term behaviour patterns and a wide variety of term related information. The paragraphs below provide several types of data that were privileged when selecting contexts.

- **Simple and clear attestations of target terms.** Contexts were selected when all participants in the meaning of terms were expressed. The first three of the set of twenty contexts typically correspond to simple and clear attestations of terms. They were also taken from distinct corpus texts.

*violate*₁

*Section 25(8) does not **violate** s. 15 of the Charter.*

- **Cooccurents.** Contexts were selected when they illustrated as many as possible left and right cooccurents of target terms. The cooccurents can be mandatory or optional participants in the meaning of the terms. The mandatory participants correspond to the actantial structures of the verbs (section 4.3.5). Only the most frequent patterns were retained. For instance, the context of *prove*₁ below illustrates four different cooccurents: *the Crown, its case, "beyond a reasonable doubt"* and *at trial*. These cooccurents are very frequent.

*prove*₁

The standard applied by an appellate court, namely that the evidence against an accused is so overwhelming that conviction is inevitable or would invariably result,

is a substantially higher one than the requirement that the Crown prove its case "beyond a reasonable doubt" at trial.

impugn₁

For example, the respondent seeks to impugn Mr. Kong's credibility by pointing to his inability to accurately describe his injuries in a manner consistent with the medical records.

- **Linguistic behaviour of cooccurrents.** When terms did not display a wide variety of left and right cooccurrents, contexts were selected on the basis of the patterns that cooccurrents exhibited. It may be relevant for the description of target terms to account for the possibilities of the cooccurrents being single or multi-word terms. What is more, even though the research only focuses on specialized verbs for the time being, it may develop and include the description of noun terms in the future. The patterns of the linguistic behaviour of the verbs cooccurrents may be useful for that task.

adduce₁

*In its re-examination of Marissa Bowles, the Crown **adduced** evidence of her prior consistent statements.*

*The respondent intends to file a second motion to **adduce** fresh evidence.*

*Therefore, when an accused **adduces** straddle evidence, that evidence need not prove his or her blood alcohol level at the time of interception.*

- **Syntactic patterns.** Contexts were selected when they contained different syntactic patterns of the terms. In the first sentence below, *acquit* is followed by an object without any other complement, whereas in the last two sentences the verb displays a complement headed by different prepositions after the object. The first three contexts of the set of twenty can illustrate this kind of information.

*acquit*₁

*He excluded the evidence and **acquitted** the accused.*

*The judge **acquitted** him of murder but convicted him of manslaughter.*

*After hearing his alibi evidence, the trial judge **acquitted** him on both counts.*

- **Morphological and semantic derivatives.** Contexts were selected when they contained morphological and semantic derivatives of target terms. Term derivatives are interesting because they may hold a lexical relation with target terms. As mentioned, even though the research only focuses on specialized verbs for the time being, it may develop and include the description of other parts of speech terms in the future. Term derivatives that evoke the same frame as target terms can be grouped together into the same frame.

*infringe*₁

*Although s. 329 of the Canada Elections Act **infringes** freedom of expression, this **infringement** is justified under s. 1 of the Charter.*

- **Synonyms and near-synonyms.** Contexts were selected when synonyms, near-synonyms or synonymic expressions of the target terms were present, because they may help understand the meaning of the terms and because they can be same-frame-evoking terms.

*appeal*₁

*The determination of the judge is final and may not be **appealed** or **judicially reviewed**.*

*infringe*₁

*As stated earlier, A.C.'s argument that ss. 25(8) and 25(9) **infringe** the Charter is grounded in the contention that they **fail to respect** the mature minors' "deeply rooted" right to decide their own medical care.*

- **Antonyms.** Contexts were selected when antonyms were present, because some antonyms may be same-frame-evoking terms.

*concur*₁

*L'Heureux-Dubé J. **dissented** in Cook, and McLachlin J. **concurred** in her reasons.*

*acquit*₁

*The judge **acquitted** him of murder but **convicted** him of manslaughter.*

- **Other paradigmatic relations.** Contexts were selected when terms holding other types of paradigmatic relations with target terms such as hyperonymy were present. Paradigmatically related terms may help better circumscribe specific meanings of target terms, i.e. they may provide clues about the frames evoked by target terms.

*acquit*₁

*The accused was **acquitted** at trial and the **verdict** was overturned on appeal.*

- **Subject field information.** Contexts were selected when they contained information related to the subject field. This information may be useful to understand the frames evoked by target terms.

*acquit*₁

*A person who is **acquitted** of an indictable offence other than by reason of a verdict of not criminally responsible on account of mental disorder and whose acquittal is set aside by the court of appeal may appeal to the Supreme Court of Canada.*

4.3.5. Actantial structures

Actantial structures are representations used to describe the number and organization of the actants of terms and, in certain theoretical frameworks, their role with regard to them. Semantic actants are obligatory participants in the meaning of terms and, as such, they are assumed to correspond to core elements of the frames evoked by terms (the identification and description of frames will be dealt with in the following section). Actantial structures roughly correspond to a canonical list of actants and, although FrameNet only indirectly

provides this kind of information, we decided to include it so as account for the way FEs are profiled specifically in each term. It will be shown that some terms may display core FEs alternations that are not necessarily applicable to all terms in a frame. Thus, actantial structures correspond to the abstract level of description of terms right before the most abstract level of frame description.

Actantial structures were identified based on the analysis of the contexts in which target terms appear. Consider the following contexts of the term *violate*₂:

[1] *The searches of the accused did not violate s. 8 of the Charter.*

[2] *The issue was whether such use violated s. 8 of the Charter.*

[3] *An unwanted blood transfusion violates what Chaoulli describes as the fundamental value of "bodily integrity free from state interference" (para. 122).*

[4] *Did the agency violate via's right to procedural fairness?*

[5] *As to the second, we agree that the Crown violated its Charter obligations of disclosure.*

[6] *I conclude that the IRPA unjustifiably violates s. 7 of the Charter by allowing the issuance of a certificate of inadmissibility based on secret material without providing for independent agent at the stage of judicial review to better protect the named person's interests.*

The term *violate*₂ has two obligatory participants or actants: one that typically corresponds to the syntactic subject of the verb, and another that typically corresponds to the syntactic object of the verb. *Search, use, blood transfusion, agency Crown* and *IRPA* are examples of the linguistic occurrences of the first actant of *violate*₂. *S., what Chaoulli describes as the fundamental value of "bodily integrity free from state interference", right* and *obligations* are examples of the linguistic occurrences of the second actant.

Although the occurrences of the first actant of *violate*₂ are typically the syntactic subject of the verb, they can be divided into two different groups due to their distinct semantic nature and be given two different labels: ACT and PROTAGONIST. The label ACT refers to an action or behaviour, whereas the label PROTAGONIST refers to a volitional or, in FrameNet’s terminology, “sentient” agent. But the actants that receive these labels are not simultaneously used. It is either an ACT or a PROTAGONIST that violate the law. Given that someone (PROTAGONIST) is necessarily the doer of an action or behaviour (ACT), these two roles correspond to a metonymic alternation in which one part of the PROTAGONIST, its behaviour, is taken for the whole. No such distinction can be made concerning the linguistic occurrences of the second actant of the term *violate*₂, as they all refer to something that is established in the Law. For all these reasons, the actantial structure of the term *violate*₂ can be represented as below.

*violate*₂, vt

actantial structure: ACT or PROTAGONIST ~ LAW

Labelling of actants

As actants are assumed to correspond to core FEs, the labels attributed to them attempt to depict the participants in the scenarios evoked by terms. To assist us in the task of labelling the actants, a list of the frames described in FrameNet that are related to the subject field of law was compiled (Appendix 7) and some of the labels proposed there were adopted (e.g. ACT, PROTAGONIST, LAW). When no candidate label was found, labels were created based on the typical occurrences of the actants. In any case, the labels should help users quickly grasp the participants in the meaning of terms. Consider the following examples of labels:

- a. **JUDGE**: somebody who makes a decision after the case is tried. It can be the official who directs and presides over the trial (*judge*), the group of officials who preside over the trial (*court*), or the group of individuals who observe the

trial and ultimately attempt to come to a verdict (*jury*). JUDGE is one of the actants of the term *acquit*₁ and a core FE of frames such as [Verdict].

[Verdict]

*acquit*₁, vt: JUDGE ~ DEFENDANT of CHARGES

The judge (JUDGE) *acquitted him of murder but convicted him of manslaughter.*

- b. **DEFENDANT**: somebody who is charged with an offense and, therefore, has to be tried by the JUDGE (cf. above). In a criminal case the DEFENDANT is the person accused of a crime, whereas in a civil case the DEFENDANT is the person being sued by the plaintiff. DEFENDANT is one of the actants of *acquit*₁ and a core FE of frames such as [Verdict].

[Verdict]

*acquit*₁, vt: JUDGE ~ DEFENDANT of CHARGES

The judge acquitted him (DEFENDANT) of murder but convicted him of manslaughter.

- c. **CHARGES**: the type of act that is not permissible according to the law of society and of which the defendant is accused. CHARGES is one of the actants of *acquit*₁ and a core FE of frames such as [Verdict].

[Verdict]

*acquit*₁, vt: JUDGE ~ DEFENDANT of CHARGES

The judge acquitted him of murder (CHARGES) but convicted him of manslaughter.

- d. **LAW1** and **LAW2**: the rules or norms that regulate activities or states of affairs within a jurisdiction. These labels were used to describe verbs evoking a frame in which Supreme Courts interpret the law and verify if it is being followed or not. The labels refer to two sets of written rules or norms that should comply with each other. LAW1 and LAW2 are the actants of terms like *infringe*₁ and *violate*₁ and the core FEs of frames such as [Constitutionality].

[Constitutionality]

*infringe*₁, vt: LAW1 ~ LAW2

The legislation (LAW1) *does not infringe s. 2(b) or 15 of the Canadian Charter of Rights and Freedoms* (LAW2).

[Constitutionality]

*violate*₁, vt: LAW1 ~ LAW2

Part 2 of the Act (LAW1) *does not violate s. 15 of the Charter* (LAW2).

- e. **IRREGULARITY**: The *Black Law's Dictionary – Free online edition* (henceforth, *BLD online*) defines *irregularity* as a “violation or nonobservance of established rules and practices [...] defect in practical proceedings, or the mode of conducting an action or defense [...] The doing or not doing that, in the conduct of a suit at law, which, conformably with the practice of the court, ought or ought not to be done”. Irregularity is a core FE in frames such as Remedy, in which verbs are regularly followed by objects denoting negative events. This label reflects the “strongly negative prosody” of some verbs, which is described in Atkins et al. (2003), in Stubs (1976), and in Xiao and Mcenery (2006). Irregularity is one of the actants of terms such as *allege*₁ and *impugn*₁ and the core FE of frames such as [Contesting], [Irregularity] and [Make an Error].

[Contesting]

*allege*₁, vt: ARGUER ~ IRREGULARITY

Mr. Singh alleges no other error (IRREGULARITY) in principle and, in my view, understandably so.

Appendix 8 lists some of the labels we used to describe the actantial structure of terms. As actants are assumed to correspond to core FEs, the labels provided in Appendix 8 can be found in the column called “Frame Elements”. The appendix also includes the labels used to describe circumstants or non-core FEs (optional participants in the meaning of terms). Non-core FEs will be dealt with in section 4.3.8 (annotation of contexts).

4.3.6. Frame description

The identification of the frames that the selected terms evoke proceeded in two parts: 1) the grouping together of terms into frames, and 2) the description of the frames that group together a given set of terms. In order to group together the selected terms into frames, we compared the actantial structures of the selected terms for each language separately. Terms with similar actantial structures were considered same-frame-evoking candidates. Then, we applied the criteria set out in the FrameNet methodology (Ruppenhofer et al. 2010) to confirm or refute whether two or more terms evoked the same frame.

According to the FrameNet methodology (Ruppenhofer et al. 2010), LUs that evoke the same frame have the same number of syntactically prominent FEs and the semantic nature of the FEs is similar. Also, according to the FrameNet methodology, the LUs should profile the FEs in the same way unlike *buy* and *sell* which profile the frame [Commerce] in two different ways. It should follow that terms that have identical actantial structures very likely evoke the same frame and that the actants of the terms that are grouped together into the same frame should correspond to the core FEs in the frame.

For example, *comply*₁, *infringe*₁, *satisfy*₁ and *violate*₁ have exactly the same number of actants and the labels attributed to each actant are the same. From Table 18 it can be observed that the semantic nature of the actants of the terms is the same because LAW1 and LAW2 refer to two types of written law in all contexts of the verbs. The semantic resemblance of the actants is such that the linguistic realizations of the actant labelled LAW2 relate to constitutional rights (*Canadian Charter of Rights and Freedoms*) across the contexts of the four verbs.

Table 18. *comply*₁, *infringe*₁, *satisfy*₁ and *violate*₁ evoke the [Constitutionality] frame

LAW1	Terms	LAW2
amendment, legislature, policy, provision	<i>comply</i> ₁	act, Canadian Charter of Rights and Freedoms, decision, guarantee, regulation, requirement
<i>The focus in this case is whether the presumptive sentencing provisions (LAW1) comply with the requirements of the Charter (LAW2).</i>		
act, law, legislation, measure, paragraph, power, principle, prohibition, provision, section, unavailability	<i>infringe</i> ₁	ability, Charter, freedom, guarantee, liberty, protection, right, rule, security
<i>Section 20 (LAW1) clearly infringes the guarantee of freedom of expression (LAW2).</i>		
charge, clause, common law, decision, evidence, form, Four Books Appeal, regulation, section	<i>satisfy</i> ₁	element, principle, prong, rule, requirement, review, section, stage, standard, test
<i>Accordingly, s. 6(4) (LAW1) fails to satisfy s. 1 of the Charter (LAW2) and is unconstitutional.</i>		
admission, decision, discretion, law, legislation, measure, part, policy, procedure, provision, rule, section	<i>violate</i> ₁	Charter, Geneva Conventions, letter of the law, principle, right
<i>Part 2 of the Act (LAW1) does not violate s. 15 of the Charter (LAW2).</i>		

For all these reasons, we can group together the verbs into the same frame and describe it as a scenario in which some kind of law is assessed against a higher law which most often is the Constitution. This frame, which we decided to call [Constitutionality], contains two core FEs (LAW1 and LAW2) which the verbs *comply*₁, *infringe*₁, *satisfy*₁ and *violate*₁ profile in a similar way, i.e. it is LAW1 that needs to be in agreement with LAW2 and not the other way round.

However, the verbs *to violate* and *to infringe* are polysemous and to each of their specialized meaning corresponds a distinct frame. From Table 19 it can be observed that the terms *violate*₂ and *infringe*₂ have the same number of actants as *comply*₁, *infringe*₁, *satisfy*₁ and *violate*₁ but the semantic nature of the actants is different. In fact, the actantial

structure of *violate*₂ and *infringe*₂ is composed of two actants: a PROTAGONIST or an ACT and the LAW.

Table 19. *comply*₂, *exceed*₁, *infringe*₁, and *violate*₁ evoke the [Compliance] frame

PROTAGONIST	ACT	~	LAW
bidder, body, city, counterpart, CRA, firm, issuer, judge, offender, officer, official, Mr. Khosa, person, respondent, SAAQ, SLC, Telus	conduct, detention, transaction	<i>comply</i> ₂	condition, fairness, law, letter, oath of office, obligation, order, provision, regulation, requirement, rule, section, sentence, term
<i>Mr. Khosa</i> (PROTAGONIST) had <i>complied</i> with all provisions of his conditional sentence (LAW).			
adjudicator, agency, body, Court of Appeal, he, judge, Longueuil, Smith J.A., VPA	action, blood alcohol concentration, delay, interference, purpose	<i>exceed</i> ₁	authority, bound, function, guideline, jurisdiction, limit, mandate, power, scope, threshold
<i>The Court of Appeal</i> (PROTAGONIST) <i>exceeded</i> the limits of appellate review (LAW).			
child, owner, police, SPCUM, state	action, copy, detention, order, roadblock, unavailability, use	<i>infringe</i> ₂	copyright, freedom, law, liberty, patent, provision, right, rule, section, security
<i>The HRT</i> found that by rejecting it, <i>the SPCUM</i> (PROTAGONIST) had <i>infringed</i> s. 18.2 of the Charter (LAW).			
agency, authority, BNS, city, counsel, Crown, government, IRPA	action, change, detention, search, suppression, transfusion, use	<i>violate</i> ₂	agreement, charter, duty, law, principle, provision, obligation, order, right, section, undertaking
<i>The searches of the accused</i> (ACT) did not <i>violate</i> s. 8 of the Charter (LAW).			

As mentioned in section 4.3.5, the label ACT refers to an action or behaviour, whereas the label PROTAGONIST refers to a volitional or, in FrameNet's terminology, "sentient" agent. However, the actants that receive these labels are not simultaneously used: it is either an ACT or a PROTAGONIST that *violate* or *infringe* the law. Thus, although the linguistic realizations of the actant LAW of the terms *violate*₂ and *infringe*₂ are comparable to the linguistic realizations of the actant LAW2 of the terms *violate*₁ and *infringe*₁, the linguistic realizations of the actant PROTAGONIST and ACT are not comparable to LAW1 because they denote radically different entities. In addition, terms like *comply*₂, *exceed*₁

have the same number and type of actants as *violate*₂ and *infringe*₂ (and not as *violate*₁ and *infringe*₁), this indicating that we are indeed dealing with two different clusters of instances that share enough common features to justify being treated as separate “meaning groups” (Atkins et al. 2003: 334 citing Hanks (2000) and Kilgarrieff (1997)).

For all these reasons, we believe that the terms *comply*₂, *exceed*₁, *infringe*₁, and *violate*₁ evoke a frame in which a PROTAGONIST or his/her behaviour (ACT) complies or not with the LAW. This frame called [Compliance] contains two core FEs: the first one can be expressed as ACT or as PROTAGONIST, the second one is only expressed by entities denoting the LAW. Finally, all four terms profile the core FEs in the same way: it is the PROTAGONIST or the ACT that complies, violates, exceeds or infringes the LAW and not the other way round.

4.3.7. Data encoding

All data elements described in the previous sections were encoded in a database called DiCoInfo that includes several dictionaries. The data was encoded by means of the XML Editor called oXygen that stores it in the webserver eXist. oXygen is a freely available tool for students and researchers at the Université de Montréal that offers a number of features for editing XML documents. One of the advantages of this tool is that it allows documents to be checked for proper XML form as well as validated against a schema. The data encoding model is strongly inspired by that of the DiCoInfo (L’Homme 2008), the first dictionary of the collection, but it also makes adaptations to the specific requirements of the project.

The DiCoInfo encoding model comprises the following layers of information: term entry, grammatical information, definition, domain, actantial structure, variants, synonyms, linguistic occurrences of the actants, lexical relations, contexts, annotated contexts,

equivalents and additional information. Although the encoding schema of DiCoInfo is written in French for all dictionaries, their online versions are localized. The layers of the encoding model follow a schema valid for all term entries. Some of the layers contain sublayers that also follow a predefined schema.

```

<structure-actancielle>configure:
  <role nom="Agent">
    <tt>user 1</tt>
  </role>
  <lexie-ref/>
  <role nom="Patient">
    <tt>hardware 1</tt>
    <tt>software 1</tt>
  </role>
</structure-actancielle>

```

Figure 26. Encoding schema in DiCoInfo

For example, in DiCoInfo the layer called *actantial structure* contains a layer called *semantic role (role)* and inside this layer there is another one called *typical term (tt)* (Figure 26). In order to encode the data related to the frames that the terms evoke, we needed to include a layer of information called *frame* between *term entry* and *grammatical information*. The tag *frame* includes the following sublayers: *frame definition* and *frame elements* (Figure 27). The sublayer *frame elements* (FE) is subdivided into *core* and *non-core*. Each core and non-core frame element is also attributed a *typical term*. The core FEs correspond to the mandatory participants in the frame which are identified based on the analysis of the verbs that profile the frame. The non-core FEs are optional participants in the frame and are identified when the contexts of the terms are annotated. We will refer to the annotation of the contexts in the following section.


```

<lexie numero-acceptation="1" statut="0" xml:id="_acquit1">
  <frame nom="Verdict">
    <frame-definition/>
    <frame-elements>
      <core>
        <FE nom="">
          <tt/>
        </FE >
        <FE nom="">
          <tt/>
        </FE >
      </core>
      <non-core>
        <FE nom="">
          <tt/>
        </FE >
      </non-core>
    </frame-elements>
  </frame>
</grammatical-information>vt</grammatical-information>

```

Figure 27. The frame layer included in the encoding model

Some of the information layers of DiCoInfo were not used, because they were not relevant for the objectives of the research. This is the case of the information layers *feminine*, *variants* and *lexical relations*. Thus, the encoding model that was used in the research focused on the following items of information: entry, frame, grammatical information, definition, domain, actantial structure, linguistic occurrences of the actants, contexts, annotated contexts, equivalentents and additional information. The information stored in the .xml files was then made available on a webpage called *JuriDiCo* which will be described in Chapter 5.

4.3.8. Annotation of contexts

Once the actantial structure of a given term is defined by means of frame-evoking labels, contexts were annotated so as to describe the linguistic behaviour of the terms. The annotation followed the four-layer annotation model of DiCoInfo (L'Homme 2008) but, as in the data encoding model, some adaptations had to be made. The first one concerned the substitution of the labels *Participant*, *Actant* and *Circumstant* for *FE*, *core* and *non-core*, respectively, to annotate FEs. Also, FEs corresponding to complex terms were sometimes treated differently due to specificities of the terminology of the domain. We describe these and other minor modifications throughout this section.

The annotation model contains the following layers of information: 1) target term; 2) core and non-core FEs; 3) syntactic functions and syntactic groups of FEs; and 4) linguistic occurrences of FEs.

Target terms

In each context a single instance of the term was annotated, even if two occurrences of the term were in the same context. The target term was placed between the tags: `<lexie-att>infringe</lexie-att>`. If the term was inflected, the lemma was entered as the value of the attribute lemma: `<lexie-att lemme="infringe">infringes</lexie-att>`. If the term was accompanied by an auxiliary verb, this one was entered in a new tag, but in this case it was registered as an auxiliary attribute value: `<lexie-att auxiliaire="be">had been</lexie-att>` `<lexie-att lemme="infringe">infringed</lexie-att>`. In contrast with DiCoInfo, compound auxiliary verbs, such as *had been* as in *had been infringed*, were entered in only one new tag instead of two tags.

If the term was in the main clause, all FEs including subordinate clauses were annotated:

After hearing his alibi evidence, the trial judge acquitted him on both counts, stating as follows (at p. 813): It is quite apparent that perjury has been committed in this Court room.

If the term appeared in a subordinate clause, only the FEs appearing in that subordinate clause were annotated:

For example, in Cr. A. 112/50, Yosifov v. Attorney-General, 5 P.D. 481, the court held that a legal prohibition on the practice of bigamy did not infringe the freedom of religion of a Jewish man who was a member of a particular community, because that practice was not mandatory according to the Jewish religion.

Core and non-core FEs

The second part of the annotation model accounts for the behaviour of the terms in context, namely by describing the mandatory as well as the optional participants in their meaning. The annotation of the FEs appears between the tags and `<FE>` `</FE>`. These tags contain two mandatory attributes: *type* and *role*. The value of the attribute *type* can be “core” or “non-core”. The value of the attribute *role* can vary considerably as it corresponds to the semantic labels described in Appendix 8.

*The accused was **acquitted** at trial and the verdict was overturned on appeal.*

`<FE type="Core" role="Defendant">`
The accused
`</FE>`
was acquitted
`<FE type="Non-core" role="Place">`
at trial
`</FE>`
and the verdict was overturned on appeal.

Figure 28. Annotation of core and non-core FEs

In the context provided in Figure 28 two FEs were annotated: *the accused* and *at trial*. The first one is annotated as core because it is a mandatory participant in the frame

evoked by the target term *acquit*₁, whereas the second one is annotated as non-core because it only situates the event in place. These two labels are described in Appendix 8 in which more illustrative examples of their use can be found.

In some contexts, a non-core FE may be embedded in a core FE. For instance, in the context of *conclude*₁ below the non-core FE BASIS (double underline) is embedded in the core FE DECISION which takes the form of a that-clause. Similarly, in the context of *concluir*₁, the non-core FE CASE (double underline) is embedded in the core FE DECISION. In this kind of situations, only the core FE DECISION is annotated.

*conclude*₁

*The trial judge correctly **concluded** that on the basis of the jury's verdict, he must find facts consistent with the jury's rejection of both self-defence and intent for murder (DECISION).*

*concluir*₁

*O questionado aresto **concluiu** que, in casu, a transferência do autor para a Ilha Graciosa acarretava-lhe prejuízos sérios (DECISION).*

Translation:

The decision that is being contested **concluded** that, in that case, the transfer of the plaintiff to the Graciosa Island caused him serious damages (DECISION).

In some other contexts, a core FE is embedded in another core FE. For instance, *declarar*₁ evokes a frame which contains three core FEs: COURT, ISSUE and EFFECT. In the majority of cases, all three core FEs are instantiated in each context of the verb. However, in the context below, the core FE ISSUE, *do art. 2.º do CC*, is a modifier of the core FE EFFECT *a inconstitucionalidade*. In this kind of situations, only the FE that corresponds to the head of the NP is annotated.

*declarar*₁

*Como é sabido, o Tribunal Constitucional, no Acórdão 743/96, **declarou a inconstitucionalidade do art. 2.º do CC na parte em que este atribuía força aos tribunais para emitir leis (doutrina que tinha força obrigatória geral), competência que os tribunais não podiam ter, uma vez que tal competência cabe ao poder legislativo.***

Translation:

As it is known, the Constitutional Court, in the 743/96 judgment, **declared the inconstitutionality of s. 2 of the CC** in the part in which the former granted courts the power to enact laws (a doctrine that was generally enforceable), a power that the courts could not exercise because it pertains to the legislative power.

Similarly, *impose*₁ evokes a frame in which three FEs are mandatory: JUDGE or LAW, DUTY and PROTAGONIST. In most cases, all three FEs are instantiated in each context of the term, but in the context below the core FE DUTY is split in two parts, i.e. *an obligation* and *to disclose material which...*, by the core FE PROTAGONIST *on the Crown*:

*impose*₁

*The law cannot **impose an obligation on the Crown to disclose material which it does not have or cannot obtain**: R. v. Stinchcombe, [1995] 1 S.C.R. 754.*

Again, in this kind of situations, only the FE that corresponds to the head of the NP is annotated.

Syntactic functions of the FEs

The syntactic annotation of the FEs appears between the tags `<syntactic-function>` `</syntactic-function>`. These tags contain a mandatory attribute called *name* that describes the type of syntactic function. Instead of using FrameNet's complex system of labels of syntactic functions, the simpler set of labels that is used in the annotation of contexts in DiCoInfo was adopted: "Subject" (Figure 29), "Object" (Figure 29), "Complement" (Figure 29), "Modifier" (Figure 30), "Head" (Figure 31) and "Indirect Link" (Figure 31).

```

The judge acquitted him of murder.
<FE type="Core" role="Judge">
  <syntactic-function name="Subject">
    The judge
  </syntactic-function>
</FE>
<lexie-att lemme="acquit">acquitted</lexie-att>
<FE type="Core" role="Defendant">
  <syntactic-function name="Object">
    him
  </syntactic-function>
</FE>
<FE type="Core" role="Charges">
  <syntactic-function name="Complement">
    of murder
  </syntactic-function>
</FE>

```

Figure 29. Annotation of the syntactic functions “Subject”, “Object” and “Complement”

```

Documents to be adduced as fresh evidence can be filed only if subject to sealing order.
<FE type="Core" role="Evidence">
  <syntactic-function name="Head">
    Documents
  </syntactic-function>
</FE>
<lexie-att auxiliary="be">to be</lexie-att> <lexie-att lemme="adduce">adduced</lexie-att>
as fresh evidence can be filed only if subject to sealing order.

```

Figure 30. Annotation of the syntactic function “Head”

```

It is fundamental to our system of justice that the rules of evidence should permit the judge to get at the
truth and properly determine the issues.
It is fundamental to our system of justice that the rules of evidence should permit
<FE type="Core" role="Judge">
  <syntactic-function name="Indirect link">
    the judge
  </syntactic-function>
</FE>
to get at the truth and
<FE type="Core" role="Judge">
  <syntactic-function name="Modifier">
    properly
  </syntactic-function>
</FE>
<lexie-att lemme="determine">determine</lexie-att>
the issues.

```

Figure 31. Annotation of the syntactic functions “Indirect link” and “Modifier”

Sometimes the target term shares a syntactic link with modal verbs such as *can*, *must*, *may*, *should*, etc. In these cases, the FEs were annotated as having a direct syntactic link with the target term (Figure 32).

```

The accused should be acquitted.
<FE type="Core" role="Defendant">
  <syntactic-function name="Subject">
    The accused
  </syntactic-function>
</FE>
should <lexie-att auxiliaire="be">be</lexie-att>
<lexie-att lemme="acquit">acquitted</lexie-att>

```

Figure 32. Annotation of target terms accompanied by modal verbs

In some other contexts a given FE may not share any syntactic link with the target term because the target term is preceded by other verbs. In this case, the FE was annotated as "Indirect Link" (Figure 33). Appendix 9 and Appendix 10 list the most recurrent examples of indirect links between target terms and FEs.

```

The respondent seeks to impugn Mr. Kong's credibility.
<FE type="Core" role="Respondent">
  <syntactic-function name="Indirect link">
    The respondent
  </syntactic-function>
</FE>
seeks to <lexie-att>impugn</lexie-att>
<FE type="Core" role="Defendant">
  <syntactic-function name="Object">
    Mr. Kong's credibility
  </syntactic-function>
</FE>

```

Figure 33. Annotation of FEs that do not share a direct syntactic link with the target term

Syntactic groups of the FEs

Syntactic groups appear between the tags `<syntactic-group>` `</syntactic-group>`. Subject pronouns (*you, we, they*, etc.) are annotated as NP (Noun Phrases), whereas object pronouns (*him, her*, etc.) are annotated as Pro (Pronouns) (Figure 34).

```

He acquitted him of murder.
<FE type="Core" role="Judge">
  <syntactic-function name="Subject">
    <syntactic-group name="NP">
      He
    </syntactic-group>
  </syntactic-function>
</FE>
acquitted
<FE type="Core" role="Defendant">
  <syntactic-function name="Object">
    <syntactic-group name="Pro">
      him
    </syntactic-group>
  </syntactic-function>
</FE>
of murder.

```

Figure 34. Annotation of subject pronouns and object pronouns

FEs that correspond to the syntactic complements of verbs may be introduced by connectors (Figure 35). In this situation, they are encoded as Clause (clauses) and the whole group is annotated as an occurrence.

```

In particular, where a party has made an allegation of recent fabrication, the opposing party can rebut the allegation
<FE type="Core" role="Means">
  <syntactic-function name="Complement">
    <syntactic-group name="Clause">
      by introducing prior statements made before the alleged fabrication arose, that are consistent with the testimony at trial
    </syntactic-group>
  </syntactic-function>
</FE>

```

Figure 35. Annotation of complements introduced by connectors

FEs that correspond to prepositional complements are annotated as PP (Prepositional Phrase) and the preposition is encoded in the attribute *preposition* (Figure 36). If the preposition is an idiomatic expression, the entire expression is encoded (Figure 37).

*On the other hand, reverse onus provisions have not always failed the s. 11 analysis when they were **impugned** under s. 11(d) of the Charter guaranteeing the presumption of innocence.*

*On the other hand, reverse onus provisions have not always failed the s. 11 analysis when they were **impugned***

```
<FE type="Core" role="Basis">
  <syntactic-function name="Complement">
    <syntactic-group name="SP" preposition="under">
      under s. 11(d) of the Charter guaranteeing the presumption of innocence
    </syntactic-group>
  </syntactic-function>
</FE>
```

Figure 36. Annotation of complements introduced by simple prepositions

*On the basis of the R. children's evidence, all three accused were **committed** for trial on all charges against them.*

```
<FE type="Core" role="Basis">
  <syntactic-function name="Complement">
    <syntactic-group name="SP" preposition="on the basis of">
      On the basis of the R. children's evidence
    </syntactic-group>
  </syntactic-function>
</FE>
```

*all three accused were **committed** for trial on all charges against them.*

Figure 37. Annotation of complements introduced by compound prepositions

FEs that correspond to adverbs or to adverbial phrases are annotated as AdvP (Figure 38 and Figure 39).

*That was the issue on which Ms. Bowles had been subjected to an extensive cross-examination which seriously **impugned** the reliability of her evidence.*

That was the issue on which Ms. Bowles had been subjected to an extensive cross-examination which
 <FE type="Non-Core" role="Manner">
 <syntactic-function name="Modifier">
 <syntactic-group name="AdvP">
 seriously
 </syntactic-group>
 </syntactic-function>
 </FE>
***impugned** the reliability of her evidence.*

Figure 38. Annotation of adverbs

*If the police, as strangers to the undertaking, have grounds, they can **apply** for a search warrant under s.487 of the Criminal Code, in the ordinary way.*

If the police, as strangers to the undertaking, have grounds, they can apply for a search warrant under s.487 of the Criminal Code,
 <FE type="Non-Core" role="Manner">
 <syntactic-function name="Modifier">
 <syntactic-group name="PP" preposition="in">
 in the ordinary way
 </syntactic-group>
 </syntactic-function>
 </FE>

Figure 39. Annotation of adverbial phrases

Linguistic occurrences of the FEs

The linguistic occurrences of the FEs are given between the tags <occurrence> </occurrence>. If the linguistic occurrence of the FE is inflected, the lemma of the FE is encoded in the optional attribute <occurrence lemma="judge">judges</occurrence>. The linguistic occurrences are most often the head of noun phrases. When they correspond to non-compositional terms, only the head of the noun phrase is annotated. For instance, only the head of the noun phrases such as *hearing judge, neglect of duty, identity theft* were annotated (Figure 40).

```

<FE type="Core" role="Judge">
  <syntactic-function name="Object">
    <syntactic-group name="NP">
      the hearing <occurrence>judge</occurrence>
    </syntactic-group>
  </syntactic-function>
</FE>

```

Figure 40. Annotation of NPs containing non-compositional terms

Also, if the syntactic head of the FE is a word like *all of*, *amount of*, *kind of*, *a number of*, *a series of*, etc. only the complement of the NP is marked as the occurrence (Figure 41).

```

<FE type="Core" role="Evidence">
  <syntactic-function name="Object">
    <syntactic-group name="NP">
      all of the <occurrence>evidence</occurrence>
    </syntactic-group>
  </syntactic-function>
</FE>

```

Figure 41. Annotation of NPs containing determiners and qualifiers

However, there are some situations in which the entire NP is annotated. First, if the NP corresponds to a compositional term such as *break and enter*, *free will*, *good faith*, the whole term is annotated (Figure 42). Second, if the syntactic head is a proper noun (e.g. *Mr. Kong*), the proper noun is annotated as the occurrence. Finally, if the syntactic head corresponds to a title (e.g. *Minister of Justice*, *Attorney General*), the title is annotated as the occurrence (Figure 43).

```

<FE type="Core" role="Crime">
  <syntactic-function name="Object">
    <syntactic-group name="NP">
      that <occurrence>break and enter</occurrence>
    </syntactic-group>
  </syntactic-function>
</FE>

```

Figure 42. Annotation of NPs containing compositional terms

```

<FE type="Core" role="Protagonist">
  <syntactic-function name="Object">
    <syntactic-group name="NP">
      <occurrence>Minister of Justice</occurrence>
    </syntactic-group>
  </syntactic-function>
</FE>

```

Figure 43. Annotation of NPs containing titles

In some situations, the linguistic realizations of the FEs take the form of abbreviations whose lemmas are difficult to identify because the judges writing the decisions deliberately keep anonymous the parties involved in the legal suit. For instance, in the context *Os AA não se conformaram e interuseram recurso de apelação* (Eng. The AAs were not satisfied and filed an appeal) it is not clear whether the lemma of *AA* corresponds to the name of the parties or to the terms *arguido* (Eng. defendant), *autor* (Eng. defendant) or *recorrente* (Eng. defendant). In such cases, the linguistic realization of the FE was annotated without a lemma.

When the FE takes the form of a pronoun and its antecedent is in the context, the pronoun and its antecedent were annotated and a reference kept the link between the two. The antecedent was encoded between the tags `<antecedent>` `</antecedent>` which contain

the indication of the reference. The tags `<antecedent-value>` and `</antecedent-value>` contain the attribute *lemma* used to indicate the head of the antecedent (Figure 44).

```

It will apply to the common law, however, only insofar as the common law is the basis of some governmental action which, it is alleged, infringes a guaranteed right or freedom.

It will apply to the common law, however, only insofar as the common law is
<antecedent xml:id="infringe-1-ref1">
  <antecedent-value lemma="action">the basis of some governmental action</antecedent-value>
</antecedent>
<FE type="Core" role="Act">
  <syntactic-function nom="Subject">
    <syntactic-group nom="Pro">
      <occurrence ref="infringe-1-ref1" lemma="which">which</occurrence>
    </syntactic-group>
  </syntactic-function>
</FE>
it is alleged,
<lexie-att lemma="infringe">infringes</lexie-att>
a guaranteed right or freedom.

```

Figure 44. Annotation of antecedents

The description of the semantic role and syntactic information are attached to the pronoun. The occurrences of the antecedents were given in the tag *lemma* even if they were not inflected, so that the antecedent appears in the annotation summary tables. The *ref* attribute and the attribute *xml:id* indicate the link between the pronoun and its antecedent. By convention, the reference is indicated as follows: lexical item, sense number, reference rang in the contexts (e.g. *infringe-1-ref1*).

4.3.9. Data validation

Although the stages of the work described since the beginning of the chapter allowed for the acquisition of knowledge concerning the characteristics of judgments and legal concepts, it was sometimes necessary to consult legal experts as well as documentation resources to confirm or refute the analysis and the interpretation of the data.

The first time an expert was consulted occurred when the corpus was built and a significant difference in the length of the Portuguese and Canadian texts was identified (section 4.1.4). In order to understand the reason underlying such a difference, we appealed to the macrostructure of the texts as well as to the legal principles that Portuguese and Canadian judges have to follow when writing a judgment. We then asked the Canadian legal expert, Patrick Forget, Professor at the Université du Québec à Montréal if the principle of *ratio decidendi* (the application of precedents) could justify the fact that the Canadian texts were twice as long as the Portuguese texts. Professor Forget explained to us that “in common law case law there is usually a discussion on the precedents that applies to the case at hand as well as on the meaning of those precedents (the *ratio decidendi*) far more elaborated than in the civil law jurisdictions”, that “historically, the doctrinal tradition was less developed in common law jurisdictions than in the civil jurisdictions”, and that “today most scholars will acknowledge that the SCC judges consider themselves as being some sort of (surrogate) professors of law”. This kind of information seemed to indicate that, when compared to Portuguese judges, Canadian judges had to and were allowed to discuss a lot more matters in their decisions, which could very well be the reason why Canadian texts are twice as long as Portuguese texts.

The second time we consulted an expert occurred when we were distinguishing the meanings of the verbs that we had selected and we wanted to clarify a given meaning that was completely new to us. For instance, the Portuguese verb *absolver* evokes three different scenarios: in the first one, the judge decides that the defendant is not guilty of the crime he is charged (*absolver do crime*); in the second one, the judge decides that the defendant does not have to do what the author of the petition requested (*absolver do pedido*); and, in the third one, the judge decides that the defendant does not have to be tried because there is some sort of irregularity in the case (*absolver da instância*). Whereas the first scenario is known even to a layperson, the last two are not. Thus, despite sound corpus evidence that we were dealing with three different meanings, we wanted to make sure that

the first meaning was related to Criminal Law, the second one to Civil Law and the last one to Civil Procedure Law. This kind of information was confirmed by the retired judge, Avelino Correia da Costa, and by the PhD law student, Christian Martins de Aquino.

Finally, we consulted experts to validate the choice of labels that we used to describe the actantial structures of the terms and that ultimately correspond to the labels of the FEs. A document including a brief on the project as well as the term descriptions was elaborated in Portuguese. Appendix 11 provides an example of the documents studied together with the judge, Avelino Correia da Costa. Conversations were recorded and stored with his verbal permission. The expert was given the descriptions of terms containing labels for situations or contexts (“Context”), in which the participants may play roles (“Actantial structure”). For each sense distinction three examples of the term in context were included. The experts was asked: 1) whether he agreed with the number of senses described; 2) whether he agreed with the labels used to describe the information; and 3) whether he had a suggestion to improve descriptions. Minor modifications were made by taking into account the opinion of the expert.

As mentioned, some stages of the methodology superimpose on other stages and data validation was no exception to this. In fact, apart from the consultation with experts we also used reference resources throughout the research to confirm or refute the analysis of the data. For instance, we consulted monolingual dictionaries such as the *BLD online* (2012), the *Dicionario Juridico* (Prata 2005 and Prata et al. 2010) as well as multilingual databases such as the *Multilingual Legal Dictionary* (Vancouver Community College 2009), *Termium* (2012). We also used legal documents such as the *Supreme Court Act*, the *Portuguese Code of Penal Procedure*, the *Portuguese Code of Civil Procedure* as well as articles and books written by scholars that are cited when necessary.

4.3.10. Assignment of equivalents

Candidate equivalents were assigned by matching the frame labels attributed to the Portuguese and English terms. In order to accomplish this task, we asked the computational linguist, Benoît Robichaud, who works in the OLST, to program search queries that group together those terms that contain the same frame label in their descriptions and that present this data in tables such as Table 20.

Table 20. The [Compliance] frame groups together candidate equivalents

		Compliance [index]					
		infringe.2.en	violate.2.en	violar.2.pt	comply.2.en	cumprir.1.pt	exceed.1.en
<u>Core Elements</u>	Act	7	11	5	3		4
	Law	20	23	24	19	18	16
	Protagonist	6	9	17	17	15	12
<u>Non Core Elements</u>	Condition	1					1
	Criterion	1					
	Manner	2	2	3	2	2	2
	Means		3				
	Mode						5
	Reason	1	1	1		1	
	Text						1
	Time				1	2	1

Portuguese terms and English terms with the same frame label were given the status of candidate equivalents and, as a result, they were studied closely. Sometimes more than one candidate equivalent existed for a given term. For example, Table 20 illustrates that the [Compliance] frame groups together several candidate pairs of equivalents: 1) *comply*₂ and

*cumprir*₁; 2) *exceed*₁ and *violar*₂; 3) *infringe*₂ and *violar*₂; 4) *violate*₂ and *violar*₂. For this reason, it was necessary to examine if the candidate equivalents were full equivalents and if they were not full equivalents it was necessary to understand what differentiated the verbs in the pair. This way, the differences observed could provide an explanation on why a given verb in one language is a partial equivalent of a verb in another language.

We remind the reader that, in this research, frames were assumed to be “interlingual representations” that can group together not only terms in one language but also across languages (Boas 2005). For this reason, the fact that two terms in different languages evoked the same frame was considered an indication of the presence of an equivalence relationship that needed to be confirmed or refuted as linguistic and domain anisomorphism may involve interlingual differences.

In order to assign the equivalents, we compared the terms in the two languages by taking into account the criteria set out below.

1. **The way the verbs evoke the frame.** Here, we want to understand if the verbs had the same profiles. If verbs in one language corresponded to the opposites of verbs in another language, they could profile the frame in a negative or positive way. In this case, only candidate equivalents that profiled one of these possibilities were retained. For example, *exceed*₁, *comply*₁, *cumprir*₁, *infringe*₂, *violar*₂ and *violate*₂ were attributed the same frame label, i.e. [Compliance] (Table 21). These verbs evoke a conceptual scenario, in which somebody or somebody’s behaviour does or does not comply with the law. Therefore, they can be split into two groups because there are two different kinds of profiles: the verbs that refer to the action of complying with the law (*comply*₁, *cumprir*₁) and the verbs that refer to the action of not complying with the law (*exceed*₁, *infringe*₂, *violar*₂ and *violate*₂). The following criteria 2, 3 and 4 were applied for

each group of verbs separately, because we considered that the verbs in the first group were opposites of the verbs in the second group and, as a result, they could not be full equivalents.

2. The actantial structures of the verbs. After selecting the relevant candidate equivalents, we proceeded to examine their actantial structures, namely the number and nature of the actants. Consider, for instance, the first group of verbs that refer to the action of complying with the law (*comply*₁ and *cumprir*₁). These verbs do not have identical actantial structures because the English verb admits the PROTAGONIST/ACT alternation whereas the Portuguese verb only occurs with terms denoting a PROTAGONIST. This is an indication that the verbs are not full equivalents because whenever *comply*₁ occurs with terms denoting an ACT, it may not be easily translated into Portuguese by means of *cumprir*₁. As for the verbs that express the idea of not complying with the law (*exceed*₁, *infringe*₂, *violar*₂ and *violate*₂), it can be observed from Table 21 that the four verbs have exactly the same number of actants which correspond to the admissible FEs: PROTAGONIST or ACT and LAW. In addition, they all admit that the first actant of the verbs, the one that typically functions as the syntactic subject of the verbs, refers to either a PROTAGONIST (the person who does not comply with the law) or to an ACT (the behaviour or action necessarily carried out by somebody and that does not comply the law). Even if the application of this criterion did not reveal any difference between the four verbs, we continued to examine them in more detail by means of criteria 3 and 4.

3. The linguistic realizations of the FEs. The linguistic realizations of the actants that correspond, by implication, to the core FEs were analyzed so as to confirm or refute whether the nature of the verbs' actants is entirely identical. For instance, we can observe from Table 21 that there is no difference concerning

the semantic nature of the terms that instantiate the FEs PROTAGONIST and ACT. In contrast, we can observe that the terms denoting the FE LAW in the contexts of the verb *exceed*₁ are slightly different from the terms denoting the FE LAW in the contexts of the verbs *infringe*₂, *violar*₂ and *violate*₂. Whereas, the linguistic realizations of the FE LAW in the contexts of the verbs *infringe*₂, *violar*₂ and *violate*₂ refer to principles and norms established in the written law, the linguistic realizations of the FE LAW in the contexts of the verb *exceed*₁ refer to the scope and limit of the principles and norms established in the written law. This difference leads us to consider *exceed*₁ as a less suitable equivalent for *violar*₂ when compared to the other candidate equivalents *infringe*₂ and *violate*₂ that have fully met the criteria applied up to this point.

4. **The syntactic patterns of the verbs.** Finally, it was necessary to verify if there was any significant difference between the syntactic patterns of the verbs. Major differences between the syntactic patterns of the verbs, such as the lack of coincidence of the syntactic patterns of two or more actants of a verb, can raise translation challenges and may indicate that we are not dealing with full equivalents. From Table 21, we can observe that the actants of *infringe*₂, *violate*₂ and *violar*₂ have at least one syntactic pattern in common.

For all these reasons, we considered *comply*₂ and *cumprir*₁ as well as *exceed*₁ and *violar*₂ as partial equivalents, *infringe*₂ and *violar*₂ as full equivalents and *violate*₂ and *violar*₂ as full equivalents.

Table 21. The pairs of candidate equivalents grouped together into the frame [Compliance]

Frame:					
Compliance					
Definition:					
A PROTAGONIST or his/her behaviour (ACT) complies or not with the LAW. This frame contains two core FEs. The first one can be expressed as Act or as PROTAGONIST, where ACT is a metonymy of PROTAGONIST. The second core FE is the LAW, often the Constitution but not limited to it.					
Core FEs					
PROTAGONIST – The PROTAGONIST can be anyone: the accused or the accuser (criminal suit), the petitioner or the respondent (civil suit) and even the judge.					
ACT – The PROTAGONIST's behaviour is in or out of compliance with the LAW.					
LAW – Usually written, LAW refers to the norms established by a group of legal experts so as to guide human behaviour.					
Non-core FEs:					
BASIS, CONDITION, MANNER, MEANS, REASON, TIME					
Contexts:					
<i>Mr. Khosa had complied with all provisions of his conditional sentence.</i>					
<i>The Court of Appeal exceeded the limits of appellate review and unduly extended the scope of fiduciary obligations.</i>					
<i>The HRT found that by rejecting it on that basis, the SPCUM had infringed s. 18.2 of the Charter.</i>					
<i>The searches of the accused did not violate s. 8 of the Charter.</i>					
<i>Ora, perante tal quadro factual, é evidente e incontroverso que a A. cumpriu o ónus probatório que sobre si recaía quanto à demonstração da existência de um dano efectivo e ressarcível.</i>					
<i>Tudo ponderado, o recorrente não violou o princípio da leal colaboração.</i>					
	PROTAGONIST	or	ACT	Terms	LAW
English	bidder, body, city, counterpart, CRA, firm, issuer, judge, offender, officer, official, Mr. Khosa, person, respondent, SAAQ, SLC, Telus		conduct, detention, transaction	<i>comply</i> ₂	condition, fairness, law, letter, oath of office, obligation, order, provision, regulation, requirement, rule, section, sentence, term
	Subject (NP) Indirect link (NP)		Subject (NP)		Complement (PP-with)
	adjudicator, agency, body, Court of Appeal, he, judge, Longueuil, Smith J.A., VPA		action, blood alcohol concentration, delay, interference, purpose	<i>exceed</i> ₁	authority, bound, function, guideline, jurisdiction, limit, mandate, power, scope, threshold
	Subject (NP)		Subject (NP)		Object (NP)
	SPCUM, child, police, owner, it {its generic version of plavix,}, state		Roadblock, which {some governmental action}, copy, detention, order, use	<i>infringe</i> ₂	right, section, freedom, copyright, law, patent, liberty, security, provision
	Indirect link (NP) Subject (NP)		Subject (NP) Subject (Pro)		Object (NP) Subject (NP)

	Agency, authority, BNS, City, counsel, Crown, government, IRPA	action, change, detention, search, supression, transfusion, use	<i>violate₂</i>	agreement, Charter, duty, law, obligation, order, principle, provision, right, section, undertaking
	Subject (NP)	Subject (NP)		Object (NP) Indirect link (NP)
Portuguese	autor, apelante, fracção, réu, senhor		<i>cumprir₁</i>	contratado, contrato, dever, disposto, exigência, obrigação, ônus, ordem, prestação, procedimento, regra, requisito, responsabilidade
	Subject (NP) Indirect link (NP)			Object (NP)
	recorrent, autor, ré, recorrida, autora, clube, exequente, arguido, trabalhador, sinistrado, um{ambos o condutores}, outro{ambos os condutores}	conduta, pretensão, ela {a omissão ora arguida}, atividade	<i>violar₂</i>	regra, dever, norma, princípio, costume, exclusividade, regulamento, titulo, lei, direito, obrigação, disposto, artigo
	Subject (NP) Objet (NP)	Subject (NP) Complement (PP -com)		Objet (NP)

5. Results

In the preceding chapter we proposed a methodology for selecting and describing specialized verbs as well as for assigning their equivalents. In this chapter, we present the results and draw considerations on the three main units of analysis: the terms, the frames and the equivalents. This chapter should reflect the semasiological, bottom-up and bilingual approach of the research. Thus, we start by focusing on the 200 terms that we selected from an automatically extracted list of candidate terms (section 5.1.). This first part is subdivided in two parts in which we describe the Portuguese terms (section 5.1.1.) and the English terms observed (section 5.1.2.). Then, in the second part of the chapter, we give details on the frames that were identified, on their participants, on the number of terms that they can group together as well as on the relations between the terms grouped in the frames (section 5.2). As we consider frames as interlingual representations, the second part of the chapter is not divided into a Portuguese and an English section. In this subchapter, more English examples than Portuguese ones are provided for the reason of convenience for the reader. Finally, we describe the equivalents that were assigned (section 5.3) and present the current state of the bilingual lexical resource JuriDiCo (section 5.4). At the end of each sub-chapter the results obtained are discussed.

5.1. Terms observed

This sub-chapter presents the results concerning the selection and validation of terms. The first part concentrates on the Portuguese terms (section 5.1.1.) whereas the second part concentrates on the English terms (section 5.1.2). Each part presents the candidate terms that were eliminated as well as the candidate terms that were selected based on what was described in the second part of chapter 4. At the end of the sub-chapter we discuss the results obtained (section 5.1.3).

5.1.1. Portuguese terms

Candidate terms were selected based on the criteria set out in section 2.3.2 as well as in section 4.2.2. We selected 75 verbs of the first 114 candidate terms proposed by TermoStat (Drouin 2003). As some verbs have more than one specialized meaning, the verbs that we selected correspond to 100 terms (Appendix 14). The following sections present the candidate terms that we eliminated and the candidate terms that we retained as well as a classification of the two.

5.1.1.1. Eliminated candidate terms

About one third (34.2%) of the Portuguese candidate terms were not retained, i.e. 39 out of the first 114 candidate terms automatically extracted by TermoStat did not meet the validation criteria set out in the research. Appendix 12 lists the eliminated candidate terms along with their rank in the list elaborated by TermoStat, their frequency and specificity.

As mentioned in chapter 4, there are two reasons why 34.2% of the Portuguese candidate terms were eliminated. Firstly, some candidate terms correspond to erroneous part of speech tagging due to part of speech ambiguities. For example, the Portuguese candidate term *aludir* (to refer to) most often occurs in the corpus as an adjective deriving from the past participle of the verb *aludir*:

*Tal sistema veio, então, com o **aludido** DL 39/95, a ser substituído pelo da oralidade mitigada, preconizado por Franz Klein, assim se permitindo um amplo recurso sobre a matéria de facto. (STJ 115/1997.S.1)*

Translation:

The aforementioned Decree-Law 39/95 then replaced this system by a more oral one advocated by Franz Klein, thus allowing for a broad appeal of facts.

As *aludir* seldom occurs as a verb form, it was immediately excluded, i.e. we did not proceed to apply the criteria for the validation of terms. While examining the

concordances of the candidate terms, we identified eight types of part of speech ambiguities that led to the exclusion of the following 15 candidate terms, i.e. 38.5% of the eliminated candidate terms and 13.1% of the first 114 candidate terms:

1. Ambiguity between the first person singular of the present tense of the verb and the gerund of another verb, e.g. *Tendo em conta os princípios... / Tendo concluído as respectivas alegações...* (Eng. Taking into account the principles... / having finalized the respective allegations). This is the case of the candidate term *tender*.
2. Ambiguity between the first person singular of the present tense of the verb and the derivative noun, e.g. *Eu documento os acontecimentos / um documento* (Eng. I register the events / a document). The noun is very frequent, whereas the verb form is not. This is the case of the candidate terms *apensar*, *documentar* and *objectar*.
3. Ambiguity between the first person singular of the present tense of the verb and the derivative adjective, e.g. *Eu atento a tudo / comportamento atento* (Eng. I pay attention to everything / careful behaviour). The adjective is very frequent, whereas the verb form is not. This is the case of the candidate term *atentar*.
4. Ambiguity between the third person singular of the present tense of the verb and the derivative noun, e.g. *O documento data de 200 / A data do documento* (Eng. The document dates back to 2000 / The date of the document). The noun is very frequent, whereas the verb form is not. This is the case of the candidate terms *datar* and *morar*.
5. Ambiguity between the third person singular of the present tense of the verb and the derivative adjective, e.g. *Ele fixa a data / A data fixa* (Eng. He sets up a day / The fixed date). The adjective is very frequent, whereas the verb form is not. This is the case of the candidate terms *atentar* and *fixar*.

6. Ambiguity between the past participle of the verb and the derivative noun, e.g. *O conflito **terá resultado** numa guerra / O **resultado** do jogo* (Eng. The conflict may have resulted in a war / The result of the match). The noun is very frequent, whereas the verb form is not. This is the case of the candidate term *resultar*.
7. Ambiguity between the past participle of the verb and the derivative adjective, e.g. *Ele **tinha anotado** a morada / O código **anotado*** (Eng. He had written down the address / The annotated code). The adjective is very frequent, whereas the verb form is not. This is the case of the candidate terms *aludir, anotar, contravertir, locar* and *ocorrer*.
8. Ambiguity between the infinitive form of the verb and the noun e.g. *...para o jornal **titular** o artigo. / O **titular** do prédio* (Eng. ...so as to give a title to the article / The owner of the building). The noun is very frequent, whereas the verb form is not. This is the case of the candidate term *titular*.

Secondly, some candidate terms were not selected because they did not meet any of the criteria set out in section 2.3.2 as well as in section 4.2.2. Thus, 62% of the eliminated candidate terms (the remaining 24 verbs of the 39 listed in Appendix 12) and 21% of the first 114 candidate terms do not have a meaning that relates to the subject field of law, in general, and to what the macro-scenario of a judgment involves, in particular. What is more, neither their actants nor their morphological derivatives are terms of the subject field of law, in general, or of the judgments, in particular. Finally, they do not establish paradigmatic relations to other valid terms.

For instance, *dever* (must) and *pagar* (to pay) have a high specificity score (53 and 42, respectively) as well as an extremely high frequency (5130 and 2000, respectively) but they do not meet the validation criteria. Although the former conveys the idea of obligation which is a relevant concept in the subject field of law, it is an auxiliary modal verb that

gives information on the function of the verb that follows it. Because it does not have an autonomous lexical meaning per se or any morphological derivatives, we decided to not retain this verb. As for *pagar*, this verb does not have a meaning that relates to the subject field of law, in general, and to what the macro-scenario of a judgment involves, in particular, although the outcomes of judgments may consist in a punishment in form of remuneration. The linguistic occurrences of the actants of this verb can vary to the extent that no relevant patterns of terms related to the law and to the judgments are identifiable. For these reasons, the verb was not retained.

5.1.1.2. Retained candidate terms

All selected verbs have a meaning that is related to the subject field of the law, namely to what happens in the judgments, and the linguistic occurrences of their actants typically correspond to legal terms (Appendix 14). However, some terms are not morphologically and semantically related to other terms of the subject field, and some terms do not have paradigmatic relations to other terms of the subject field. Therefore, the Portuguese terms that we selected can be grouped into three categories: the first category contains verbs that meet all four criteria (section 5.1.1.2.1); the second one contains verbs that do not meet the criterion of morphological derivation (section 5.1.1.2.2); and the last category groups together verbs that do not establish paradigmatic relations to other terms (section 5.1.1.2.3).

5.1.1.2.1. Verbs that meet all four criteria

The vast majority of terms, i.e. 84% of the Portuguese terms, meet all four criteria set out in chapter 4. Some selected terms relate to the subject field of law in general such as *estatuir*₁ (to enact) and *violar*₁ (to violate), but for the most part the selected terms are specific to what happens in a judgment. As the subject field of law is very broad we relied on the general characteristics of legal discourse as well as on the specificities of the judgments as

a legal genre set out in the first part of chapter 4 to apply the first validation criterion (meaning related to the subject field).

Thus, the selected terms can correspond to performative verbs (Austin 1962) such as the verdictive verbs (Trosborg 1995) *absolver*₁ (to acquit) and *condenar*₁ (to sentence) that are typical of what happens in a judgment and, by implication, related to the subject field of law as well. They can correspond to argumentation-related verbs such as *alegar*₁ (to allege) and *assentar*_{1a} (to base) due to the mandatory role of argumentation that the parties in the lawsuit as well as the judges have to provide. The selected terms can also correspond to those actions that mandatorily occur in a given moment of the judgment such as *acordar*₁ (to agree) and *concluir*₁ (to conclude). For instance, the former marks the beginning of the thematic part of the judgment which is always initiated by the sentence “Acordam no Supremo Tribunal de Justiça” meaning that the STJ judges agree with the factual description and history of the case that follows it. The latter typically marks the ending of the syllogism developed in the previous parts of the judgment and evokes the court’s decision, which can be favourable or unfavourable.

5.1.1.2.2. *Verbs without morphological derivatives*

We did not find any morphological derivatives of the verbs *conferir*, *impender*, *incorrer*, *intentar*, *propugnar* and *pugnar* in reference works such as Prata (2005) and Prata et al. (2010) or in the corpus. Nevertheless, these verbs were selected because they meet the other three criteria and because we considered that they were relevant in the judgments. These verbs correspond to 6% of the total amount of selected terms.

For instance, *pugnar* is a verb that denotes an action in which somebody, the accused or the accuser (in a criminal suit), the petitioner or the respondent (in a civil suit), asks the court to redress some wrong, i.e. it evokes the [Petition] frame. Consider the following contexts of the verb *pugnar*:

[1] *A A. pugna pela manutenção do decidido pelas instâncias.*

Translation:

The A. requests that the court's decision stays.

[2] *O autor pugna pela fixação das mesmas importâncias indemnizatórias já alegadas na apelação.*

Translation:

The petitioner requests the settlement of the same compensation amounts that were sought in the appeal.

[3] *Na contra-motivação apresentada a demandante CC pugna pela improcedência do recurso.*

Translation:

In the reasons adduced the petitioner CC requests that the appeal does not proceed.

In these three sentences, one of the parties in the case, the petitioner, states exactly what s/he wants to obtain from the law suit. It is based on the petition or claim that the verdict will be issued. Literally, the verb *pugnar* means to fight for something. In the judgments from which these contexts were extracted, the judge, and author of these sentences in which the verb occurs, means by this verb that the petitioner is metaphorically fighting for a given outcome. The [Petition] frame is a relevant frame in the macro-scenario of a Supreme Court judgment as the court has to render a verdict on exactly what was asked. The [Petition] frame typically relates to the *relatório* section of Portuguese judgements, in which the facts of the process, the matters of law and what is requested by the parties are discussed. For all these reasons, we decided to retain the verb *pugnar* even if it does not have any morphological derivatives that are terms themselves.

5.1.1.2.3. Verbs without paradigmatic relations

We did not find any relevant synonyms or antonyms of the verbs *aditar*, *aplicar*, *deduzir*, *exarar*, *exercer*, *imputar*, *interpor*, *relevar*, *sindicar* and *transitar* in reference works such

as Prata (2005) and Prata et al. (2010) or in the corpus. Nevertheless, these verbs were selected because they meet all other criteria and because we considered that they were relevant in the judgments. These verbs correspond to 10% of the total amount of selected terms.

For instance, the contexts below show that *exarar* means to formally write a decision. In the context of the judgments issued by the STJ, the action of *exarar* is typically carried out by somebody with the authority to write an official document such as a legal opinion or a court's decision.

[1] *A Ex.ma Magistrada do Ministério Público neste Supremo **exarou** douto «parecer», no qual propugnou pela procedência da revista.*

Translation:

The Crown prosecutor drew up an opinion in which he requested that the appeal proceeds.

[2] *Após o julgamento, **foi exarada** sentença que, julgando a acção parcialmente procedente, decidiu: a) declarar a ilicitude do despedimento do autor, condenando a ré a reconhecer essa ilicitude;*

Translation:

After the trial, the judge drew up a sentence determining the partial proceeding of the action in which he decided to declare illegal the petitioner's dismissal and commit the defendant to acknowledge that illegality;

Although this verb has general language synonyms such as *escrever* (to write) and *lavar* (to draw up), we did not find any synonym that is accepted as a term of the subject field of law. What is more, even the general synonyms *escrever* and *lavar* cannot always replace or be replaced by *exarar* because their actants are different (*A criança escreveu o texto* but **A criança exarou o texto*). As the use of this verb seems to be specialized we decided to retain it.

5.1.2. English terms

We selected 84 verbs of the first 110 candidate terms proposed by TermoStat (Drouin 2003). As some verbs have more than one specialized meaning, the verbs that we selected correspond to 100 terms (Appendix 15). The following sections present the candidate terms that were eliminated and the candidate terms that were retained as well as a classification of both.

5.1.2.1. Eliminated candidate terms

About one fourth (23.6%) of the English candidate terms were not retained, i.e. 26 out of the first 110 candidate terms extracted by TermoStat did not meet the validation criteria set out in the research. Appendix 13 lists the eliminated candidate terms along with their rank in the list of candidate terms, their frequency and specificity.

As mentioned in chapter 4, there are two reasons why 23.6% of the English candidate terms were eliminated. Firstly, some candidate terms correspond to erroneous part of speech tagging due to part of speech ambiguities. For example, although *accuse* may seem a relevant candidate term, in the corpus it is the noun form *accused* (as in “The accused was sentenced to life prison.”) that occurs extremely frequently, whereas verb forms appear only eight times. As the candidate term *accuse* seldom occurs as a verb form, it was immediately excluded, i.e. we did not proceed to apply the criteria for the validation of terms.

While examining the concordances of the candidate terms, we identified five types of part of speech ambiguities that led to the exclusion of the following 13 candidate terms, i.e. 50% of the eliminated candidate terms and 11.8% of the first 110 candidate terms:

1. Ambiguity between the past form of the verb and the derivative adjective, e.g. *Each of these levels of government **were enumerated** in ss. 91 / an **enumerated** or analogous ground.* The adjective is very frequent, whereas the verb form is not. This is the case of the candidate terms *enumerate, generalize, individualize, limit, protect, relate.*
2. Ambiguity between the past form of the verb and the derivative noun, e.g. *He **accused** him of committing murder / The **accused** confessed to robberies.* The noun is very frequent, whereas the verb form is not. This is the case of the candidate term *accuse.*
3. Ambiguity between the present form of the verb and the derivative noun, e.g. *Experts also **conduct** post-offence tests / The criminal **conduct** should be sanctioned.* The noun is very frequent, whereas the verb form is not. This is the case of the candidate terms *conduct, limit, premise, result and sniff.*
4. Ambiguity between the present form of the verb and the derivative adjective, e.g. ***Absent** any clear indication in the statute / The complainant had been **absent** from work.* The adjective is very frequent, whereas the verb form is not. This is the case of the candidate terms *absent.*
5. Ambiguity between the gerund form of the verb and the derivative adjective, e.g. *Citizens have a duty to divulge to the police any information that they may have pertaining to the commission of a crime / ... to obtain information pertaining to unnamed persons.* The adjective is very frequent, whereas the verb form is not. This is the case of the candidate term *pertain.*

Secondly, some candidate terms were not included because they did not meet any of the criteria set out in section 2.3.2 as well as in section 4.2.2. Therefore, 50% of the eliminated candidate terms (the remaining 13 verbs of the 26 listed in Appendix 13) and 11, 8% of the first 110 candidate terms do not have do not have a meaning that relates to the

subject field of law, in general, and to what the macro-scenario of a judgment involves, in particular. What is more, neither their actants nor their morphological derivatives are terms of the subject field of law, in general, or of the judgments, in particular. Finally, they do not establish paradigmatic relations to other valid terms.

For instance, *to deduct* has a high specificity score (67) and a high frequency (115), but its meaning is not specific to the subject field of law, in general, and to what the macro-scenario of a judgment involves, in particular. Consider the following sentences that illustrate this verb:

[1] *He **deducted** the interest on the loan claiming that the borrowed money now represented his investment in the law firm.*

[2] *In calculating his income, he **deducted** \$81,655 as a Canadian exploration expense in 1992, and an additional \$14,854 in 1994, reducing his pool accordingly.*

In these sentences that are representative of what we observed in the concordances of *to deduct*, the verb conveys the idea of taking away a sum of money. This meaning seems to relate more to the subject field of finances than to the subject field of law. For this reason, we decided to not retain the candidate term *deduct*.

5.1.2.2. Retained candidate terms

All verbs that we selected have a meaning that is related to the subject field of the law, namely to what happens in the judgments, and their actants typically correspond to legal terms (Appendix 15). However, some terms are not morphologically and semantically related to other terms of the subject field, and some terms do not have paradigmatic relations to other terms of the subject field. Therefore, the English terms that we selected can be grouped into three categories. The first one contains verbs that meet all four criteria

(section 5.1.1.2.1); the second one contains verbs that do not meet the criterion of morphological derivation (section 5.1.1.2.2); and the last category groups together verbs that do not establish paradigmatic relations to other terms (section 5.1.1.2.2).

5.1.2.2.1. Verbs that meet all four criteria

The vast majority of terms, i.e. 84% of the English terms, meet all four criteria set out in chapter 4. Some selected terms relate to the subject field of law in general such as *to enact* and *to violate*, but for the most part the selected terms are specific to what happens in a judgment. As the subject field of law is very broad we relied on the general characteristics of legal discourse as well as on the specificities of the judgments as a legal genre set out in the first part of chapter 4 to apply the first validation criterion (meaning related to the subject field).

This way, the selected terms can correspond to performative verbs such as the verdictive verbs *to acquit* and *to convict* that are at the typical of what happens in a judgment and, by implication, related to the subject field of law as well. They can correspond to argumentation-related verbs such as *to allege* and *to argue* due to the mandatory role of argumentation that the parties in the law suit as well as the judges have to provide. The selected terms can also correspond to those actions that mandatorily occur in a given moment of the judgment such as *to conclude* which evokes either the *ratio decidendi*, the reason for the decision, or the “Conclusion”.

5.1.2.2.2. Verbs without morphological derivatives

We did not find any morphological derivatives of the verbs *to adduce*, *to confer*, *to contend*, *to deem*, *to engage*, *to exceed*, *to render*, *to seek* and *to uphold* in reference works such as *BLD online* nor were they found in the corpus. These verbs correspond to 9% of the total number of verbs that we selected.

For instance, in the English corpus *to render* is a verb that denotes an action in which a judge or a court hearing a case transmits a decision declaring who wins the law suit. This verb typically evokes the last part of the judgment or the “Conclusion”, in which the judges express their decision. Consider the following contexts of the verb *to render*:

[1] *The Superior Court rendered judgment in that action in 2003 ([2003] R.J.Q. 1189).*

[2] *The Commissioner, it is important to keep in mind, is not a tribunal. She does not, strictly speaking, render a decision.*

Sentences [1] and [2] indicate who and who does not have the authority to render a judicial decision, i.e. the Superior Court can render a judicial decision but the Commissioner cannot. So, although we did not find any terms that are morphological derivatives of and semantically related to the verb *to render*, the behaviour of it in the corpus revealed that the nature of its actants as well as its meaning are highly specialized. For all these reasons, we decided to retain this candidate term.

5.1.2.2.3. *Verbs without paradigmatic relations*

We did not find any relevant synonyms or antonyms of the verbs *to adduce*, *to apply*, *to constitute*, *to disclose*, *to presume* and *to proceed* in reference works such as the *BLD online* or in the corpus. Nevertheless, these verbs were selected because they meet all other criteria and because we considered that they were relevant in the judgments. These verbs correspond to 6% of the total number of verbs that we selected.

For instance, the verb *to adduce* evokes the idea of presenting evidence. The *BLD online* explains that it “is used particularly with reference to evidence”. In the English

corpus, the action of *adducing* is typically carried out by the parties in the lawsuit and never by the judge. Consider the following examples:

[1] *The respondent intends to file a second motion to adduce fresh evidence.*

[2] *In its re-examination of Marissa Bowles, the Crown adduced evidence of her prior consistent statements.*

Although this verb has general language synonyms such as *to present*, we did not find any synonym that is used as a term in the specialist field. In fact the general language synonyms such as *to present* cannot always replace or be replaced by *to adduce* because the nature of their actants is different (*The defendant presented the defense of misidentification* but * *The defendant adduced the defense of misidentification*). For all these reasons, we decided to retain this verb because we considered that its use is specialized.

5.1.3. Discussion

In this sub-chapter we presented the results concerning the selection and validation of the Portuguese and English terms. We explained that some candidate terms in the two languages were eliminated either because they corresponded to part of speech ambiguities or because they did not meet the validation criteria. The selection and validation of terms turned out to be one of the most challenging tasks carried out in this research for two main reasons.

Firstly, the identification of terms is a problematic task in itself because there is no clear-cut and controversy-free definition of what is a term. In this research, we considered a term as a kind of lexical unit whose meaning is related to a given subject field, but we found that what does and does not relate to a subject field was not always self-evident. In fact, many if not most of the verbs that we selected correspond to seemingly general

language words such as *to base*, *to conclude* and *to consider* that acquire a specialized meaning due to the functions they serve in the genre of texts that we studied. This situation reflects the idea of the proximity of the legal terminology with the general lexicon because law and language have a particularly intimate relationship as described in the literature on legal discourse (Chapter 2, section 2.1).

In this respect, we can confirm the hypothesis according to which the extralinguistic characteristics of genres are of assistance in the task of term selection. For instance, the parties involved in a lawsuit have to present arguments in their defence and judges, as well, have to provide argumentation for their decisions. As we learned that the argumentation the parties have to provide is mandatory and that it happens in different moments of the judgments, we decided to select the seemingly general language verbs, such as *to base*, *to conclude* and *to consider*, because they assume a special relevance in the corpus. What is more, the task of term selection itself also allows for a better characterization of the corpus texts. In fact, as the aforementioned verbs have a high specificity score and as they were selected in this study, we learn that judgments as a legal genre are argumentative type of texts.

The second reason why the selection and validation of terms was a challenging task lies in the set of validation criteria that we used. Although we believe the results show that they were of great assistance, we were not always able to apply all criteria, namely the criterion of morphological derivation and the criterion of paradigmatic relations. For instance, the Portuguese terms *aditar*, *aplicar*, *deduzir*, *exarar*, *exercer*, *imputar*, *interpor*, *relevar*, *sindicar* and *transitar* as well as the English terms *to adduce*, *to confer*, *to contend*, *to deem*, *to engage*, *to exceed*, *to render*, *to seek* and *to uphold* do not have morphological derivatives that are terms themselves, but we decided to include them because we considered them relevant in the judgments and provided reasons for that. This leads us to

draw some considerations on the application of the criteria (L'Homme 2004) to legal corpora like the one we used.

Firstly, although L'Homme (2004) argues that the first criterion (meaning related to the subject field) may not apply well to predicative units, we found that it applied well to the verbs that we studied considering that the characteristics of the legal genre as well as of legal discourse provide hints on the specialized meaning of some verbs. Secondly, we thought that the application of the four criteria was not always possible but that most of them were and that the first criterion was the most determining one, i.e. the specialized meaning of a given candidate term could be verified if we were able to prove their relevance in the specialized texts. Thus, we argue for a more relaxed application of the criteria proposed by L'Homme (2004) in the corpus used in this research, namely for the acceptability of three out of the four criteria, as well as for the primacy of criterion number one.

The fact that we did not succeed to apply the aforementioned criteria allows us to draw considerations on the findings of Lorente (2007) according to which the nature and degree of the connection between verbs and a noun term is the main criterion for identifying verbs that convey specialized knowledge. Lorente (2007) argues that when there is a lexical relation between a given verb and a noun term relevant in the specialized field such as morphological derivation or a paradigmatic relation, the verb belongs to the category of quasiterminological verbs. When there is no morphological relation between the verb and a relevant term in the specialized field but the verb's internal argument is a term, then the verb belongs to the category of phraseological verbs. When there is no connection between the verb and a noun term but there is a relevant term in the construction of the verb (other than its internal argument), the verb belongs to the category of the verbs of logical relations. In order to be specialized knowledge units, verbs have to relate with at least a noun term because noun terms are prototypical terms and their strong referential

properties allow for a direct usage in the representation of specialized knowledge. Only quasiterminological verbs and phraseological verbs should be included in terminological resources.

According to this, the verbs that we selected that do not have morphological derivatives and that do not establish paradigmatic relations to other terms could be considered phraseological verbs (*to adduce, to confer, to contend, to deem, to engage, to exceed, to render, to seek* and *to uphold*). For Lorente (2007), phraseological verbs are verbs that when isolated their meaning is no different than the meaning they have in non-specialized contexts. However, when they are included in syntagmatic units such as *to adduce evidence, to confer jurisdiction* in which they co-occur with, at least, one terminological unit playing the syntactic role of subject or object, then they acquire a specialized value and can be said to belong to “specialized phraseological units”. However, our results show that the verbs that we selected that have morphological derivatives and that establish paradigmatic relations to other terms are verbs that when isolated their meaning is also no different than the meaning they have in non-specialized contexts (*to argue, to conclude, to constitute*).

For this reason, we believe that the classification proposed by Lorente does not apply particularly well to the verbs that we selected. What is more, we believe that the terms that we selected do not lend themselves well to any classification that accounts for the nature or degree of specialization of the verbs. We did not observe either what Lerat (2002a) states when he argues that the stricter the argument selection, the higher the probabilities of verbs being specialized.

Other observations that can be drawn regarding the selection of terms relate to the term extractor tool that was used as well as to the number of terms that were selected. TermoStat performed better in the extraction of English candidate terms than in the

extraction of Portuguese terms because only 23.6% of the English candidate terms were eliminated against 34.2% of the Portuguese candidate terms. We believe that the main reason for this lies in the fact that Portuguese verbs are highly inflected compared to English verbs and, as a result, Portuguese verb forms lend themselves more to ambiguities than English ones.

Finally, we consider the number of terms that were selected for each language sufficient for the research purposes and the corpus large enough to gather ample information on the selected terms. As it will be mentioned in the following sections, the total of 200 terms allowed us to identify a significant number of frames that can group together a greater or smaller number of terms as well as 165 pairs of equivalents. It will be shown that some of the frames that were identified only contain one specialized verb, but other verbs as well as nouns, adjectives and adverbs could probably be added were the research to be further developed.

5.2. Frames observed

Semantic frames, or conceptual scenarios, constitute the theoretical and methodological means that we used to describe the extralinguistic information associated to the specialized verbs selected from one specific kind of judicial decisions of Portugal and of Canada. Each specialized verb in one of its meanings (also called *term*) is said to evoke a frame. Each frame was assigned a label, a definition, a list of the mandatory and optional participants or FEs, and a list of the terms that evoke the conceptual scenario. We grouped together the 200 selected terms into 76 frames.

In this sub-chapter, we present the number of terms that a frame can group together and provide an example of a frame that groups together a large number of frames (section 5.2.1). Then, we describe the nature of the relation between terms grouped together into the

same frame, i.e. synonymy, near synonymy, antonymy (section 5.2.2). As the results show that some FEs are recurrent across frames we observe that they typically correspond to the most important participants in the judgments and make distinctions between them (section 5.2.3). Finally, we discuss the results (section 5.2.4).

5.2.1. Number of terms grouped together into the frames

The frames that we identified can contain only one term or they can group together several terms. 64% of the frames group together one or two terms. In fact, 35 frames group together only one term, 14 frames group together two terms and 5 frames group together three terms. Almost half of the frames (46%) group together one term and almost two thirds of the frames (64%) group together one or two terms. 96% of the frames can group up to six terms. There are only 3 frames that group together over six terms: [Argumentation], [Granting] and [Regulations]. The latter is the frame that groups together the greatest number of terms (14). Table 22 illustrates the frame called [Regulations].

The description of the frame [Regulations] defines this conceptual scenario as one in which a given legal document constitutes or constrains a given matter. The mandatory conceptual participants, or core FEs, are LAW and ISSUE. The FE LAW is defined as a written legal document that has the force of law or will have the force of law once enacted to arrange and regulate a set of issues. Typically, the terms that instantiate the FE LAW meaning “a written legal document that has the force of law” are *Constitution*, *jurisprudence* whereas the terms that instantiate the FE LAW meaning “a written legal document that will have the force of law once enacted” are *bill* and *legislature*. Then, all the non-core FEs that can be found in the contexts of the terms that evoke this frame are listed. The contexts of the terms aim at illustrating the most typical use and meaning of the terms in the corpus. They also correspond to the information category that aims to illustrate both the conceptual scenario evoked by the terms and their use in context.

The second half of the frame description enumerates all terms that evoke the frame, e.g. *codify*₁, *establish*₁, *govern*₁, *mandate*₁. The actantial structure of the verbs is signalled by means of the slots in form of columns on the left and on the right side of the verbs. The terms that typically occur as actants of the verbs are listed under the core FE labels and below them one can find the syntactic patterns that they admit.

Table 22. The [Regulations] frame

Frame:	Regulations
Definition:	Written legal documents (LAW) constitute or constrain certain matters (ISSUE).
Core FEs	LAW – Written legal documents that have the force of law (e.g. Constitution, jurisprudence) or will have the force of law once enacted (e.g. bill, legislature). They arrange and regulate a set of Issues. ISSUE – It refers to what is required or forbidden by LAW but also to rights, responsibilities and principles that are defined in the LAW.
Non-core FEs:	CASE, CONDITION, MANNER, MEANS, MODE, TEXT
Contexts:	<p><i>Section 3(1)(a) codifies the foreign aspect of double criminality by requiring that the offence upon which extradition is requested be criminal in the requesting state and carry the specified penalty.</i></p> <p><i>Article 416 establishes a principle of equal partition of the patrimony between the spouses upon dissolution of the marriage.</i></p> <p><i>Section 84(2) governs the release of foreign nationals.</i></p> <p><i>The Legal Rights provisions of the Charter neither mandate nor prohibit specific conduct by Canadian officials.</i></p> <p><i>The Government may, by regulation, prescribe additional hiring requirements for police officers and special constables.</i></p> <p><i>Section 146(2)(a) provides that a statement will be inadmissible unless it is voluntary.</i></p> <p><i>The Act respecting administrative justice recognizes certain legal principles, such as the duty of fairness and respect for basic procedural safeguards.</i></p> <p><i>O artigo 13º da Lei Fundamental consigna: 1. Todos os cidadãos têm a mesma dignidade social e são iguais perante a lei.</i></p> <p><i>O artº 56º nº 2 do C. P. Civil determina que no caso de execução por dívida provida de garantia real sobre bens de terceiro a execução seguirá directamente contra esse terceiro se se quiser fazer valer a dita garantia.</i></p> <p><i>As normas que disciplinam a interpretação da declaração negocial são, pois, igualmente válidas para a interpretação de uma sentença.</i></p> <p><i>O nº2 do art.808º do Código Civil estabelece que “A perda do interesse na prestação é apreciada objectivamente”.</i></p> <p><i>Para além deles, estatui o artigo 69.º n.º1, que: “As crianças têm direito à protecção da sociedade</i></p>

<p><i>e do Estado, com vista ao seu desenvolvimento integral... "</i> <i>Em sentido idêntico estipula o art. 66º do C.P.Civil que são da competência dos tribunais judiciais as causas que não sejam atribuídas a outra ordem jurisdicional.</i> <i>Ademais, a Constituição prescreve também gozarem os salários de garantias especiais, nos termos da lei (artigo 59º, nº 3).</i></p>			
	LAW	Terms	ISSUE
English	article, chapter, legislature, provision, section	<i>codify</i> ₁	aspect, case law, criterion, doctrine, immunity, principle, right, standard, test
	Subject, NP		Object, NP
	article, court, bill, Charter of the French language, section, act, New Brunswick Human Rights Code, Criminal Code, Code, text, case law, jurisprudence, law, legislature, Ridge v. Baldwin and Nicholson	<i>establish</i> ₁	principle, rule, framework, criterion, test, scheme, duty, presumption, confine, system, right, discretion, limit, power
	Subject, NP		Object, NP Complement, that-clause
	Charter, Financial Administration Act, law, Local Authorities Election Act, Miranda, progeny, provision, regulation, rule, section, statute	<i>govern</i> ₁	action, administration, admissibility, conduct, determination, disposition, joinder, management, proceedings, promotion, release, relation
	Subject, NP		Object, NP
	act, Charter, Constitution, Convention, law, provision, section, standard	<i>mandate</i> ₁	approach, assessment, compliance, conduct, dismissal, floor, form, holding, inquiry, requirement, rules, use
	Subject, NP		Object, NP
	administrative body, City, court, Government, Governor in Council, judge, law, Parliament, section, state, statute, standard	<i>prescribe</i> ₁	approach, consequence, dismissal, limit, offence, period, procedure, requirement, rule, violation
	Subject, NP		Object, NP
	Taxation Act, Labour Relations Act, section, rule, Automobile Insurance Act, act, agreement, Charter, legislature, law, article, Parliament	<i>provide</i> ₁	case, freedom, statement, disqualification, relief, introduction, appeal, partition, compensation, rehabilitation, factor, possibility, protection, procedure, benefit
	Subject, NP		Object, NP Complement, that-clause
act, article, British Columbia Court of Appeal, Canada Transportation Act, court, doctrine, equity, jurisprudence, law, liability scheme, principle, provision, Rail Code, remedy, standard	<i>recognize</i> ₁	ability, burden, difference, distinction, duty, free will, judgment, obligation, presumption, principle, right	
Subject, NP		Object, NP	

Portuguese	artigo, lei, lei preambular, notário, propósito legal, relação	<i>consignar</i> ₁	agravamento, direito, modalidade, possibilidade, prazo, regra
	Subject, NP		Object, NP Complement, that-clause
	artigo, constituição, decreto-lei, juiz de instrução criminal, legislador, lei, preceito, regra	<i>determinar</i> ₁	caso, cominação, competência, obrigatoriedade, transcrição, valor probatório
	Subject, NP		Object, NP Complement, that-clause
	Código do Trabalho, diploma, disposição, empregador, norma, regime, regra	<i>disciplinar</i> ₁	Acidentes de Trabalho, actividade, contrato, despedimento, exploração, Grelha de Comutação, indemnização, interpretação, extinção, recurso, regime, relação, trabalho, uso
	Subject, NP		Object, NP
	artigo, código, constituição, disposição, lei, nº, normativo	<i>estabelecer</i> ₁	agravamento, momento, obrigatoriedade, presunção, princípio, regra
	Subject, NP		Object, NP Complement, that-clause
	artigo, número, ECD, EDFP, Convenção Europeia dos Direitos do Homem, lei, disposição, diploma, norma	<i>estatuir</i> ₁	linha da força, regime, consequencia, distinção, sentido, base, princípio
	Subject, NP		Object, NP Complement, that-clause
	álnea, artigo, lei, número	<i>estipular</i> ₁	modo, prazo
	Subject, NP		Object, NP Complement, that-clause
	artigo, cláusula, Código, Constituição, diploma, disposto, número, lei, redacção	<i>prescrever</i> ₁	conversão, forma, princípio, tempo
	Subject, NP		Object, NP Complement, that-clause

5.2.2. The relations between the terms grouped into the frames

Frames can group together semantically related terms whenever these have the same number and the same kind of core FEs. The following sections illustrate frames grouping together synonym, near synonym and opposite terms.

5.2.2.1. Frames grouping together synonyms

Frames can group together certain synonym and near-synonym terms. For instance, the frame [Proof] illustrated in Table 23 groups together the English terms *establish*₂ and *prove*₁.

Table 23. The frame [Proof] groups together synonym terms

Frame:		
Proof		
Definition:		
An ARGUER has to provide a PROOF, i.e. a logically sufficient reason for assenting to the truth of a proposition or argument advanced.		
Core FEs:		
ARGUER – It can refer to the accuser or to the defendant (criminal suit), to the petitioner or to the respondent (civil suit). It is a type of PROTAGONIST in that the ARGUER has the specific right and duty to present their ARGUMENT(s) in different moments of the judgment macro-scenario. PROOF – The logically sufficient reason for assenting to the truth of a proposition or argument advanced.		
Non-core FEs:		
BASIS, CASE, MANNER, MEANS, MODE, PURPOSE, TIME		
Contexts:		
<i>This in turn means that the accused need not definitely establish that he or she is not a slow eliminator of alcohol.</i>		
<i>The Crown had proven culpable homicide beyond a reasonable doubt (s. 222(5) Cr. C.).</i>		
<i>Julgou, todavia, que o pedido de indemnização não podia proceder, porque a Autora não alegou, nem demonstrou quaisquer prejuízos sofridos em virtude da ilícita denúncia da Ré.</i>		
<i>18. Verifica-se o seguinte: - O réu provou que celebrou contrato de arrendamento verbal de edificação destinada a oficina de automóveis para pinturas e bate-chapas.</i>		
ARGUER	Terms	PROOF
accused, Amos, claimant, Crown, defendant, employee, plaintiff	<i>establish</i> ₂	burden, compliance, causation, conduct, degree, element, entitlement, infringement, injury, innocence, link, mens rea, occurrence, requisite, suspicion
Subject, NP		Object, NP Complement, that-clause
accused, company, Crown, defendant, employer, plaintiff	<i>prove</i> ₁	absence, case, element, factor, homicide, negligence, participation
Subject, NP		Object, NP Complement, that-clause

We can observe that both terms evoke the same scenario in which somebody has to provide a logically sufficient reason for assenting to the truth of a proposition or argument advanced. Thus, conceptually the terms *establish*₂ and *prove*₁ require two core FEs: an ARGUER and a PROOF. These core FEs correspond to the actants of the verbs and these are frequently expressed in the corpus. We can also observe that the linguistic realizations of the actants denote the same kind of entities, i.e. they have the same semantic nature, and they occur in the English corpus with the same syntactic patterns.

Finally, the comparison of the annotated contexts of *establish*₂ and *prove*₁ reveals that there are many different non-core FEs in the contexts of *establish*₂ whereas MANNER is the only non-core FE present in the contexts of *prove*₁ and it occurs very frequently in them. Nevertheless, although the contexts of *establish*₂ contain several non-core FEs, MANNER is present in them too. Basically, these two terms seem to be very identical in meaning.

To further test the synonymy relation between the verbs, we can easily replace one by the other in the following contexts extracted from the corpus without changing their meaning:

establish₂

[1] *In such a case, the cause of action is not complete until the plaintiff can **establish** that the conviction was in fact wrongful.*

*In such a case, the cause of action is not complete until the plaintiff can **prove** that the conviction was in fact wrongful.*

[2] *This in turn means that the accused need not definitely **establish** that he or she is not a slow eliminator of alcohol.*

*This in turn means that the accused need not definitely **prove** that he or she is not a slow eliminator of alcohol.*

[3] *The Crown must also **establish** that the powers were used in a way that met the standard of what is reasonably necessary in light of the totality of the circumstances.*

*The Crown must also **prove** that the powers were used in a way that met the standard of what is reasonably necessary in light of the totality of the circumstances.*

prove₁

[1] *It must be made crystal clear to the jury that the burden never shifts from the Crown to **prove** every element of the offence beyond a reasonable doubt.*

*It must be made crystal clear to the jury that the burden never shifts from the Crown to **establish** every element of the offence beyond a reasonable doubt.*

[2] *The third element of the tort requires a plaintiff to **prove** an absence of reasonable and probable cause for initiating the prosecution.*

*The third element of the tort requires a plaintiff to **establish** an absence of reasonable and probable cause for initiating the prosecution.*

[3] *I agree with the appellant that for s. 231(5) to raise murder from second degree to first degree the Crown must **prove** that the killing occurred as part of a continuing series of events constituting a single transaction that establishes not only the killing but also the distinct offence of unlawful confinement.*

*I agree with the appellant that for s. 231(5) to raise murder from second degree to first degree the Crown must **establish** that the killing occurred as part of a continuing series of events constituting a single transaction that establishes not only the killing but also the distinct offence of unlawful confinement.*

For all these reasons, the terms *establish*₂ and *prove*₁ can be considered synonyms.

5.2.2.2. Frames grouping together near-synonyms

Frames can also group together near-synonym terms. For instance, the [Remedy] frame illustrated in Table 24 groups together the English terms *amend*₁, *remedy*₁ and *resolve*₁. We can observe that these terms evoke the same scenario in which somebody with the power or authority provides the means by which the wrong is prevented or redressed. Thus, conceptually the terms *amend*₁, *remedy*₁ and *resolve*₁ require two core FEs: a REMEDY PROVIDER who redresses the wrong and a REMEDY REQUIRING with which a negative semantic prosody is often associated. Each of the terms also profiles the two core FEs, i.e.

the core FEs correspond to the actants of the verbs and they are frequently expressed in the corpus.

Table 24. The [Remedy] frame grouping together near synonym terms

Frame:		
Remedy		
Definition:		
Somebody with the power or authority (REMEDY PROVIDER) provides the means by which the wrong (REMEDY REQUIRING) is prevented or redressed.		
Core FEs:		
REMEDY PROVIDER - Somebody with the power or authority provides the means by which the wrong is prevented or redressed.		
REMEDY REQUIRING – The issue that requires a remedy. This FE usually has a negative affective prosody.		
Non-core FEs:		
BASIS, CRITERION, MANNER, MODE, TIME		
Contexts:		
<i>In 2000, the Company amended the Plan text in order to introduce a DC component.</i>		
<i>Accordingly, the curative proviso cannot remedy this error.</i>		
<i>This Court can resolve the legal issue presently before it without expressing an opinion on this point.</i>		
REMEDY PROVIDER	Terms	REMEDY REQUIRING
Alberta, company, council, court, employer, government, judgment, Mr. Breslaw, Mr. Marcotte, party	<i>amend</i> ₁	by-law, Canada Pension Plan, conclusion, paragraph, plan text, pleading, provision, regulation, statement, term, trust
Subject, NP		Object, NP
arbitrator, court, curative proviso, decree, legislation, legislature, Ontario Human Rights Code, parliament, person, Title Three	<i>remedy</i> ₁	abuse, consequence, deficiency, discrimination, effect, error, legislation, infirmity, omission, prejudice, reduction, state of affairs, violation
Subject, NP		Object, NP
I, Deschamps J., court, decision, immunity, judge, jury, rule	<i>resolve</i> ₁	appeal, case, conflict, difficulty, impasse, issue, motion, question
Subject, NP		Object, NP

The actants of the verbs are instantiated in the corpus by means of terms that syntactically relate to the verbs in a similar way, i.e. the actants have the same syntactic patterns. However, the linguistic realizations of the actants have a semantic prosody that

can be very negative in the contexts of *remedy*₁, less negative in the contexts of *resolve*₁ and neutral in the contexts of *amend*₁.

The degree of synonymy that these verbs establish with each other in this frame can be examined by replacing one by the other in their contexts:

amend₁

[1] *In May 2003, Alberta **amended** the regulations to make a photograph mandatory for all driver's licences.*

*In May 2003, Alberta **remedied** the regulations to make a photograph mandatory for all driver's licences.*

In May 2003, Alberta **resolved the regulations to make a photograph mandatory for all driver's licences.*

[2] *In 2000, the Company **amended** the Plan text in order to introduce a DC component.*

** In 2000, the Company **resolved** the Plan text in order to introduce a DC component.*

** In 2000, the Company **remedied** the Plan text in order to introduce a DC component.*

remedy₁

[1] *The general objective of Title Three is to **remedy** this deficiency by establishing specific rules for determining the international jurisdiction of Quebec authorities.*

*The general objective of Title Three is to **resolve** this deficiency by establishing specific rules for determining the international jurisdiction of Quebec authorities.*

** The general objective of Title Three is to **amend** this deficiency by establishing specific rules for determining the international jurisdiction of Quebec authorities.*

[2] *I, therefore, conclude that, in criminal cases, courts have a residual discretion to **remedy** an abuse of the court's process but only in the "clearest of cases".*

** I, therefore, conclude that, in criminal cases, courts have a residual discretion to **resolve** an abuse of the court's process but only in the "clearest of cases".*

** I, therefore, conclude that, in criminal cases, courts have a residual discretion to **amend** an abuse of the court's process but only in the "clearest of cases".*

resolve₁

[1] *This Court can **resolve** the legal issue presently before it without expressing an opinion on this point.*

*This Court can **remedy** the legal issue presently before it without expressing an opinion on this point.*

** This Court can **amend** the legal issue presently before it without expressing an opinion on this point.*

[2] *I would therefore **resolve** this appeal on the basis of Harrer, Terry, Schreiber and Cook.*

** I would therefore **remedy** this appeal on the basis of Harrer, Terry, Schreiber and Cook.*

** I would therefore **amend** this appeal on the basis of Harrer, Terry, Schreiber and Cook.*

The terms *remedy₁* and *resolve₁* are only interchangeable when the verb's syntactic object corresponds to the terms *abuse, case, conflict, consequence, deficiency, discrimination, effect, error, impasse, issue, legislation, infirmity, omission, prejudice, reduction, state of affairs, violation*. The terms *amend₁* and *remedy₁* are only interchangeable when the verb's syntactic object corresponds to the terms *legislation, provision* and *regulation*. The terms *amend₁* and *resolve₁* are never interchangeable. For all these reasons, *remedy₁* and *resolve₁* and *amend₁* and *remedy₁* are near-synonyms whereas *amend₁* and *resolve₁* do not qualify as synonyms.

5.2.2.3. Frames grouping together opposite terms

Frames can also group together opposite terms. For instance, the frame [Validity] of proceeding illustrated in Table 25 groups together the Portuguese intransitive verbs *improceder₁* and *proceder₁*. This frame describes a scenario in which an application to a court of justice is valid or invalid. The verb *improceder₁* profiles the invalidity of the Proceeding, whereas the verb *proceder₁* profiles the validity of it. As the only difference between *improceder₁* and *proceder₁* consists in a negative/positive contrast against which the proceeding is validated or not, they can be considered opposite terms.

Table 25. The frame [Validity of proceeding] groups together antonym terms

Frame:	
Validity of proceeding	
Definition:	
The assessment roll made up by the court that the PROCEEDING is regular and valid.	
Core FEs:	
PROCEEDING – Any application to a court of justice	
Non-core FEs:	
BASIS, CONDITION, CRITERION, MANNER, PLACE	
Contexts:	
<i>O recurso improcede na totalidade.</i> <i>A acção procedeu integralmente na 1ª instância, com a condenação dos réus nos termos peticionados.</i>	
PROCEEDING	Terms
acção, alegação, argumento, conclusão, excepção, omissão, pedido, pretensão, recurso, revista	<i>improceder₁</i>
Subject, NP	
acção, apelação, argumentação, crime, conclusão, exceção, pedido, recurso, revista	<i>proceder₁</i>
Subject, NP	

5.2.3. Recurrent Frame Elements

Although some FE labels are frame-specific, most of them were used to describe the participants in several frames (cf. Appendix 8). As some FEs are recurrent across frames, this indicates that they correspond to participants that play an important role in the judgments. The most recurrent FEs are ARGUER, COURT, IRREGULARITY, ISSUE, JUDGE, LAW and PROTAGONIST. The following sections describe each of them based on the observation of the frames in which they play a mandatory role.

5.2.3.1. ARGUER and PROTAGONIST

The actions denoted by the verbs that we selected are carried out by two main kinds of participants: those that do not have legal authority (ARGUER and PROTAGONIST) and those that have it (JUDGE and COURT). The participants that do not have legal authority, i.e. that

are not responsible for applying the law, can be subdivided into two types: the ARGUER and the PROTAGONIST.

Parties in a case are called upon to explain why they are accusing someone, being accused by someone, appealing a decision, i.e. they have *to argue their case*. Providing arguments is both a right and a duty of the parties. When judges write a decision, they often have to summarize the history of the case and refer to the argumentation provided by the parties in different moments of the lawsuit. They also have to provide arguments for the analysis they make of the lawsuit, for the sources of law they choose to use to base their decision as well as for the decision they reach. Whenever the parties and the judges provide arguments for the aforementioned reasons they assume the role of ARGUER.

The ARGUER is one of the core FEs of the frames [Argumentation], [Contesting], [Proof] and [Evidence]. It can refer to the accuser or to the defendant (in a criminal suit), to the petitioner or to the respondent (in a civil suit) and even to the judge. Table 26 lists all the linguistic realizations of the core FE ARGUER in the English corpus. As it can be observed from the number in brackets, the terms that instantiate the role of the ARGUER are most often: *Crown*, *appellant*, *accused*, *plaintiff*, and *respondent*. However, the ARGUER can also be instantiated by terms denoting a different specialized nature such as *court* and *judge*. Whereas the PROTAGONIST is anyone who plays a given role, i.e. the role of the accused or of the accuser (criminal suit), the role of the petitioner or of the respondent (civil suit) and even the role of the judge, the ARGUER is a PROTAGONIST who plays the specific role of providing argumentation support. The ARGUER has the right and duty to present arguments so as to keep the role of PROTAGONIST in different moments of the lawsuit. Therefore, the ARGUER is a type of PROTAGONIST and the PROTAGONIST becomes the ARGUER at certain moments of the lawsuit.

Table 26. Linguistic realizations of the core FE ARGUER in the English corpus

<i>Arguer</i>	
adduce.1.en	(10) : crown, appellant,
allege.1.en	(6) : accused, plaintiff, respondent,
argue.1.en	(5) : party,
assert.1.en	(4) : he, attorney general,
base.1.en	(3) : defendant, employer, they, city, counsel, government, court, judge,
contend.1.en	(2) : company, claimant, defence, mr. singh, via, association, bell canada, attorney general of canada, band, tribunal, crtc, majority, apotex,
cross-examine.1.en	(1) : dr. muroff, person, prosecution, seller, wal-mart, amos, employee, complainant, mr. charkaoui, northrop overseas, representative, transat, united states, attorney general of ontario, committee, debentureholder, lang j.a., mr. almrei, ms. bruker, patricia, bank, colleague, family, lebel j., police officer, she, wife, offender, monarch, mr. beaudry, officer, union, vpa, detainee, insurer, minister, prosecutor, rochon j.a., sergeant beaudry, state, alberta, amicus curiae, applicant, attorney general of british columbia, authority, commissioner, mr. blackman, zastowny, nova scotia court of appeal, agency, arbitrator, armstrong j.a., chief justice, court of appeal, cronk j.a. , dickson j. i, martin j.a., rowles j.a., sexton j.a. , desjardins j.a., sexton j.a.,
rebut.1.en	
rely.1.en	
state.1.en	
submit.1.en	

The PROTAGONIST is the core FE of several frames: [Authorization], [Compensation], [Compliance], [Crime], [Duty], [Granting], [Law applicability], [Order], [Petition], [Proceeding] and [Right]. Table 27 illustrates all the linguistic realizations of the core FE PROTAGONIST in the English corpus. As it can be observed from Table 27, the PROTAGONIST is most often a *person*, a *judge*, the *Crown* and the *accused*. In contrast with the ARGUER, which more often corresponds to the parties in the lawsuit than to the judge judging the case, the instantiations of PROTAGONIST are more varied. Another difference between the ARGUER and the PROTAGONIST relates to the possibility of the PROTAGONIST undergoing actions in some of the frames, whereas the ARGUER is always responsible for carrying out the action evoked in the frames. Consider the following examples:

Table 27. Linguistic realizations of the core FE PROTAGONIST in the English corpus

<i>Protagonist</i>	
apply.2.en	(9) : person,
apply.3.en	(8) : judge,
assert.3.en	(7) : crown, accused,
authorize.1.en	(6) : appellant,
comit.1.en	(5) : court, city, he, party, respondent,
comit.2.en	(4) : agency, employer,
comply.2.en	(3) : arbitrator, him, canada, firm, individual, employee, body,
confer.1.en	(2) : parliament, member, child, police, state, bns, counsel, government, official, anyone, they, officer, witness, her, via, province, slc,
deprive.1.en	(1) : cvmm, lieutenant governor in council, société, csis, owner, spcum, authority, irpa, alliance, attorney general, citizen, complainant, privacy commissioner, samson, trustee, administrator, crtc, legislature, defendant, mr. dinardo, mr. last, police chief, police officer, suspect, stranger, fugitive, mr. bjelland, you, domtar, worker, euro-excellence, h.l., one, sanofi, company, jury, licensee, minister, mr. khadr, survivor, them, canadian radio-television and telecommunication commision, kci, double n, kerry, licensor, media, minor, sureway, work, bidder, counterpart, cra, issuer, offender, mr. khosa, saaq, telus, claimant, mr. keays, mr. singh, provider, union, corporation, minister of justice, wal-mart, defence, detainee, ermineskin, resident, association, creditor, federal court, supplier, adjudicator, court of appeal, longueuil, smith j.a., vpa,
disclose.1.en	
engage.1.en	
entitle.1.en	
exceed.1.en	
exercise.1.en	
grant.1.en	
infringe.2.en	
mitigate.1.en	
order.1.en	
permit.1.en	
preclude.1.en	
prohibit.1.en	
violate.2.en	

[1] *The respondents* (ARGUER) **contend** that the order being sought should not be granted

[2] *Mr. Khosa* (PROTAGONIST) **had complied** with all provisions of his conditional sentence.

[3] In such a situation, the rule generally **prohibits** *the judge* (PROTAGONIST) from ordering the disclosure of such information and **authorizes** *witnesses* (PROTAGONIST) to refuse to answer certain questions if their answers might tend to identify the informer.

Example [1] illustrates that the ARGUER is typically the external argument of the verbs grouped together into the frames of [Argumentation], [Argumentation basis], [Contesting], [Proof] and [Evidence]. Example [2] illustrates that the PROTAGONIST, like the ARGUER, can be the external argument of the verbs grouped together into certain frames (e.g. [Compliance]), but example [3] illustrates that it can also be the object of the verbs grouped together into other frames (e.g. [Authorization]).

5.2.3.2. COURT and JUDGE

As mentioned, the actions denoted by the verbs that we selected are carried out by two main kinds of participants: those who do not have legal authority (ARGUER and PROTAGONIST) and those who have it (JUDGE and COURT). The participants that have legal authority, i.e. that are responsible for applying the law, can be subdivided into two types: the JUDGE and the COURT. These two participants differ in that the FE COURT typically includes the FE JUDGE but the other way round is not always true. The JUDGE can be the official who directs and presides over the hearing and determination of cases (*judge*), the group of officials duly constituted for the hearing and determination of cases (*court*), or the group of individuals who observe the trial and ultimately attempt to come to a verdict (*jury*). In contrast, the COURT refers to the official who directs and presides over the hearing and determination of cases (*judge*), but most often it refers to the tribunal duly constituted for the hearing and determination of cases (*court*).

COURT is a core FE in frames such as [Appellate procedure], [Decision], [Investigating], [Make an error], [Petition] and [Proceeding]. Table 28 shows the linguistic instantiations of COURT in the English corpus. When compared to Table 29 that illustrates the linguistic instantiations of JUDGE in the same corpus, we can observe that *court* is the term that most often instantiates the FE COURT, whereas *judge* is the term that most often instantiates the FE JUDGE. We can also observe that the Table 28 does not include terms like *jury*, *agency* and *arbitrator* which can be found in Table 29.

Table 28. Linguistic realizations of the core FE COURT in the English corpus

<i>Court</i>	
affirm.1.en	(8) : court,
apply.3.en	(6) : judge,
dismiss.1.en	(5) : i, court of appeal,
err.1.en	(3) : we,
quash.1.en	(2) : superior court, federal court of appeal, tribunal, majority,
remit.1.en	(1) : corriveau j., sexton j. a., agency, arbitrator, board of enquiry, citt, minister, scrt, tax
scrutinize.1.en	court, berger j.a., justice, courville j., federal court, morin j.a., nova scotia supreme
uphold.1.en	court, rodgers, smith prov. ct. j., commission, party, one, review, crt, lamer j., ontario
	court of appeal, u.s. supreme court, gower j.,

In the Portuguese corpus, the FE COURT is sometimes replaced by the metonymic FE Decision, which refers both to the decision reached by the COURT and the text issued by it:

[1] *E é por ter fundamentado a decisão recorrida em factos que não resultaram provados que, no dizer da recorrente, a Relação (COURT) incorre no vício da apontada nulidade.*

[2] *O douto acórdão recorrido (DECISION) ao julgar, como julgou, aplicando ao caso dos autos o citado art.º 397.º do Código do Trabalho incorreu na aludida inconstitucionalidade por ofensa do preceito constitucional previsto no art.º 53.º da CPR;*

JUDGE is the core FE in frames such as [Apply law], [Conclusion], [Law interpretation], [Procedure of the judge]. As mentioned, the judge can either be a single entity or a collective one. We can observe from Table 29 that the term that most often instantiates the FE JUDGE is *judge*, followed by *court*, *I* and *jury*.

Table 29. Linguistic realizations of the core FE JUDGE in the English corpus

<i>Judge</i>	
acquit.1.en	(13) : judge,
apply.1.en	(10) : court,
comit.2.en	(8) : i,
conclude.1.en	(6) : jury,
concur.1.en	(5) : court of appeal,
convict.1.en	(4) : he, we,
determine.2.en	(3) : majority, agency, arbitrator,
infer.1.en	(2) : ontario court of appeal, colleague,
instruct.1.en	(1) : mclachlin j., pelletier j.a., rosenberg j.a., charron j., forget, goudge j.a., low j.a.,
interpret.1.en	mackenzie j.a., morissette jj.a., customs, expert, federal court, government, laskin j.a.,
order.1.en	decision maker, quebec court of appeal, they, commissioner, manitoba court of appeal,
proceed.2a.en	quebec superior court, superior court, british columbia court of appeal, divisional court,
render.1.en	judge beaulieu, ryan j.a., one, crtc, giroux j.a., tribunal, federal court of appeal, she,
review.1.en	charge, garrow b., conrad j.a., doyon j.a., justice ryan, minister, kyle j., slatter j.a.,

Whereas the first and second person pronouns (*I, we, he*) as well as the names of the judges often instantiate the FE JUDGE in the English corpus, we can observe from Table 30 that this does not apply in the Portuguese corpus. The terms that most frequently instantiate the FE JUDGE in the Portuguese corpus are *tribunal* (court), *juiz* (judge) and *acordão* (decision / judgment). As with COURT, in the Portuguese corpus the FE JUDGE can be replaced by the metonymic DECISION.

Table 30. Linguistic realizations of the core FE JUDGE in the Portuguese corpus

<i>Judge</i>	
absolver.1.pt	(15) : tribunal,
absolver.2.pt	(7) : juiz, relação,
absolver.3.pt	(5) : acórdão,
aferir.1.pt	(4) : tribunal da relação,
aplicar.1.pt	(3) : stj, sentença, relação do porto,
aplicar.3.pt	(2) : decisão, instância, julgador, relator,
apreciar.1.pt	(1) : supremo, plenário, m.mo juiz, relação de coimbra, tribunal da relação de coimbra,
atender.1.pt	aresto, m.ma juíza, mm ^a juiz, supremo tribunal de justiça, círculo judicial de faro,
concluir.1.pt	desembargador relator, meritíssimo juiz de instrução, relação de Évora, senhora
condenar.1.pt	desembargadora, tribunal de primeira instância, venerando tribunal da relação de
declarar.2.pt	lisboa, despacho, ex.mo senhor presidente do supremo tribunal de justiça, ex.mo
determinar.2.pt	vice-presidente do conselho superior da magistratura, julgamento, tribunal da relação
julgar.1.pt	do porto, relação de lisboa, tribunal constitucional, vossa ex.a, colectivo, juízo,
ponderar.1.pt	magistrado, mmo juiz, veredicto, m. ma juíza, tribunal colectivo,
proceder.2.pt	
proferir.1.pt	

5.2.3.3. IRREGULARITY, ISSUE and LAW

There are three other participants that proved to be very productive across frames: IRREGULARITY, ISSUE and LAW. Corpus observation allowed us to differentiate between the three.

IRREGULARITY is the core FE in frames such as [Contesting] and [Irregularity]. The *BLD online* defines the term *irregularity* on which the FE label was inspired as follows:

Violation or nonobservance of established rules and practices. The want of adherence to some prescribed rule or mode of proceeding; consisting either in omitting to do something that is necessary for the due and orderly conducting of a suit, or doing it in an unseasonable time or improper manner. 1 Tidd, Pr. 512. And see *McCain v. Des Moines*, 174 U. S. 168, 19 Sup. Ct. 644, 43 L. Ed. 936; *Emeric v. Al-varado*, 64 Cal. 529, 2 Pac. 418; *Hall v. Mun-ger*, 5 Lans. (N. Y.) 113; *Corn Exch. Bank v. Blye*, 119 N. Y. 414. 23 N. E. S05; *Salter v. Hilgen*, 40 Wis. 365; *Turrill v. Walker*, 4 Mich. 1S3.

“Irregularity” is the technical term for every defect in practical proceedings, or the mode of conducting an action or defense, as distinguishable from defects In pleadings. 3 Chit. Gen. Pr. 509. The doing or not doing that, in the conduct of a suit at law, which, conformably with the practice of the court, ought or ought not to be done. Doe ex dem. Cooper v. Ilarter, 2 Ind. 252. In canon law. Any impediment which prevents a man from taking holy orders.

Thus, the core FE IRREGULARITY has a negative semantic prosody in that it presupposes some kind of “violation or nonobservance of established rules [...], a defect in practical proceedings”. As it can be observed from Table 31 and Table 32, the majority of terms that instantiate this FE show a negative affective meaning: *error*, *punishment*, *nulidade*, *violação*, etc.

Table 31. Linguistic realizations of the core FE IRREGULARITY in the English corpus

<i>Irregularity</i>	
<p>allege.1.en constitute.1.en impugn.1.en mitigate.1.en rebut.1.en</p>	<p>(2) : reason, evidence, error, punishment, (1) : accuracy, communication, conduct, credibility, finding, integrity, interview, lawfulness, order, principle, proceeding, reliability, statement, validity, argument, allegation, conclusion, fact, notion, proposition, presumption, abuse, basis, breach, discrimination, encroachment, expression, fault, infringement, intrusion, issue, limit, obligation, offence, perpetuation, consequence, culpability, damage, disadvantage, duty, effect, impact, jeopardy, obstacle, seriousness, unfairness, act, cause, violation, that-clause,</p>

The comparison of Table 31 and Table 32 also reveals that this negative affective meaning is more evident in the occurrences of the FE IRREGULARITY in the Portuguese corpus than in the English corpus. However, the analysis of the English verbs and their cooccurents reveals that the negative prosody manifests itself in two different ways in the English corpus. Compare the contexts of *constitute*₁ and *impugn*₁:

Table 32. Linguistic realizations of the core FE IRREGULARITY in the Portuguese corpus

<i>Irregularity</i>	
absolver.3.pt	(8) : nulidade,
arguir.1.pt	(6) : violação,
configurar.1.pt	(4) : facto, abuso, vicio,
constituir.1.pt	(3) : excepção, fundamento, crime, erro, inconstitucionalidade, omissão,
consubstanciar.1.pt	ilegalidade,
impugnar.2.pt	(2) : ilegitimidade, incompetência, dano, factualidade, causa, prática, excesso,
imputar.1.pt	(1) : culpa, ineptidão, acórdão, assinatura, condenação, decisão, decisão de facto,
incorrer.2.pt	despedimento, documento, entendimento, letra, matéria de facto, parte, prova,
invocar.1.pt	valor, versão, alteração, caso, circunstância, resolução, exposto, razão, desvio,
padecer.2.pt	fraude, injustiça, inobservância, limite, restrição, sofrimento, absurdo,
	agravamento, desobediência, motivo, roubo, acidente, acusação, apreciação,
	incumprimento, ocorrência, responsabilidade, conflito, ilícito, lesão, ofensa,
	presunção, situação, ausência, irregularidade, desproporcionalidade, ilicitude,
	in correcção, inadequação, invalidade,

constitute₁

[1] *The admission of Ms. Haghnegahdar's post-hypnosis testimony **constitutes** an error of law.*

[2] *Terminating employment on the basis of age **constitutes** prima facie discrimination under the Code.*

impugn₁

[3] *That was the issue on which Ms. Bowles had been subjected to an extensive cross-examination which seriously **impugned** the reliability of her evidence.*

[4] *For example, the respondent seeks to **impugn** Mr. Kong's credibility by pointing to his inability to accurately describe his injuries in a manner consistent with the medical records.*

In sentences [1] and [2] the verb *to constitute* does not necessarily set up an expectation that what follows is negative, but one of its arguments denotes concepts that have a negative affective meaning. In contrast, the arguments of the verb *to impugn* do not denote a negative affective meaning by themselves, but the verb sets up the negative prosody.

Issue is another recurrent FE across frames. This label was created to designate a broad category of concepts that include a matter that is in dispute or that needs to be assessed or investigated by the JUDGE or by the COURT. It can also refer to what is required or forbidden by law such as rights, responsibilities and principles that are defined in the law. We remind the reader that macrostructure of the Canadian judgments includes one part called “Issues”. After stating the facts of the case, the judge should identify the “Issues” to be addressed, i.e. the arguments on which the analysis and the *ratio decidendi* (the reasons for the decision) will be based. In contrast with the FE IRREGULARITY, the FE ISSUE does not necessarily have a negative semantic prosody.

Table 33. Linguistic realizations of the core FE ISSUE in the English corpus

<i>Issue</i>	
arise.1.en assess.1.en constitute.1.en deem.1.en determine.1.en disclose.1.en engage.2.en govern.1.en instruct.1.en mandate.1.en prescribe.1.en recognize.1.en review.1.en scrutinize.1.en warrant.1.en	(7) : evidence, (5) : issue, (4) : case, right, use, error, conduct, (3) : principle, sentence, (2) : administration, degree, form, matter, admission, ban, compliance, law, limit, obligation, violation, credibility, question, duty, presumption, assessment, decision, jurisprudence, provision, section, protection, inquiry, approach, dismissal, requirement, admissibility, (1) : content, detention, framework, intention, level, punishment, standard, status, advantage, cause, factor, identity, indication, information, note, robbery, threat, authorization, breach, policy, presence, privilege, tax, applicability, demeanour, effect, impact, importance, injury, means, objective, reliability, seriousness, truthfulness, validity, worth, cause of action, conflict, contract, dispute, immunity, remedy, order, plebiscite, category, manner, part, statute, submission, constitution, discrepancy, inconsistency, potential, award, committal, conviction, exception, elimination, interference, intervention, mandating, pursuit, result, sanction, trial, benner, discretion, exercise, investigation, negligence, statement, technique, article, expertise, interest, security, situation, floor, holding, rules, ability, burden, difference, distinction, free will, judgment, application, concept, defence, element, reasoning, consequence, offence, period, procedure, rule, fact, instruction, legitimacy, motive, quality, reason, unfolding, prop, action, determination, disposition, joinder, management, proceedings, promotion, release, relation,

Table 33 illustrates that the semantic prosody of Issue can either be positive (*right, principle*), neutral (*issue, case*) or negative (*error, violation*). This FE is mandatory in frames such as [Judging], [Investigating], [Irregularity], [Issues] and [Regulations]. An ISSUE that always has a negative affective meaning is necessarily an IRREGULARITY, which means that the ISSUE is the generic concept of IRREGULARITY.

LAW is the core FE in frames such as [Apply law], [Authorization], [Compliance], [Granting], [Law applicability], [Order] and [Regulations]. Usually written, LAW refers to the norms established by a group of legal experts so as to guide human behaviour. The *BLD online* defines *law* as follows:

1. That which is laid down, ordained, or established. A rule or method according to which phenomena or actions coexist or follow each other. 2. A system of principles and rules of human conduct, being the aggregate of those commandments and principles which are either prescribed or recognized by the governing power in an organized jural society as its will in relation to the conduct of the members of such society, and which it undertakes to maintain and sanction and to use as the criteria of the actions of such members. “Law” is a solemn expression of legislative will. It orders and permits and forbids. It announces rewards and punishments. Its provisions generally relate not to solitary or singular cases, but to what passes in the ordinary course of affairs. Civ. Code La. arts. 1. 2. “Law,” without an article, properly implies a science or system of principles or rules of human conduct, answering to the Latin “jus;” as when it is spoken of as a subject of study or practice. In this sense, it includes the decisions of courts of justice, as well as acts of the legislature. The judgment of a competent court, until reversed or otherwise superseded, is law, as much as any statute. Indeed, it may happen that a statute may be passed in violation of law, that is, of the fundamental law or constitution of a state; that it is the prerogative of courts in such cases to declare it void, or, in other words, to declare it not to be law. Rurrill. 3. A rule of civil conduct prescribed by the supreme power in a state. 1 Steph. Comm. 25; Civ. Code Dak.

We underlined in this definition frames that we identified in the research and that, according to the *BLD online*, are related to the concept of law. The first underlined sentence, i.e. *It orders and permits and forbids*, evokes two frames that correspond to the functions of Law: [Order] and [Authorization]. The verb *to order* evokes the [Order] frame and the verbs *to permit* and *to forbid* evoke the [Authorization] frame. The verbs *to order* and *to permit* are part of the terms retained in this research. The second underlined

sentence, i.e. *It announces rewards and punishments*, evokes the [Granting] and the [Verdict] frames. The FE LAW is mandatory in the frames [Order] and [Authorization] and the FE JUDGE, the representative of LAW, is mandatory in the frames [Granting] and [Verdict].

Also underlined in the definition is the idea that the law includes the decisions of courts of justice, as well as acts of the legislature. Although we mentioned in the first part of chapter 4 that the decisions of courts of justice have a more important weight on the determinations of Canadian judges, we can observe from the comparison between Table 34 and Tabela 35 that the decisions of courts of justice occur as instantiations of the FE LAW in both the English and Portuguese corpora (e.g. *decision* and *decisão*).

Table 34. Linguistic realizations of the core FE LAW in the English corpus

<i>Law</i>	
apply.1.en	(21) : section,
apply.2.en	(16) : provision,
assert.2.en	(15) : law,
authorize.1.en	(12) : rule,
comply.1.en	(9) : act, charter,
comply.2.en	(8) : legislation,
confer.1.en	(7) : court, principle, regulation, standard,
deprive.1.en	(6) : parliament, statute,
enact.1.en	(5) : judge, legislature, amendment,
entitle.1.en	(4) : right, decision, agreement, constitution, doctrine, requirement, article,
exceed.1.en	(3) : common law, power, order,
govern.1.en	(2) : code, measure, freedom, guarantee, liberty, security, copyright, policy, obligation,
grant.1.en	presumption, test, remedy, charge, evidence, city, state,
impose.1.en	(1) : civil code of québec, commissioner, contract, government of canada, minister of justice,
infringe.1.en	plan, quebec superior court, statutory scheme, paragraph, prohibition, unavailability, ability,
infringe.2.en	protection, patent, admission, discretion, part, procedure, geneva conventions, letter of the
interpret.1.en	law, duty, undertaking, curative proviso, ait, chapter, faa, indian act, school trustee statutes
mandate.1.en	amendment act, tax, clause, form, four books appeal, element, prong, review, stage, canada
permit.1.en	elections act, bylaw, new brunswick human rights code, absence of evidence, british columbia
preclude.1.en	family relations act, contravention, i, issue estoppel, subsection, claim, declaration, refusal,
prescribe.1.en	court of appeal, court of queen's bench, federal court, minister, case law, grant, purpose,
prohibit.1.en	reason, scheme, convention, alberta, hcda, british columbia court of appeal, canada
recognize.1.en	transportation act, equity, jurisprudence, liability scheme, rail code, canadian charter of rights
satisfy.1.en	and freedoms, condition, fairness, letter, oath of office, sentence, term, arbitrator, indictment,
violate.1.en	proceeding, licence, administrative body, government, governor in council, authority, bound,
violate.2.en	function, guideline, jurisdiction, limit, mandate, scope, threshold, financial administration act,
	local authorities election act, miranda, progeny,

Tabela 35. Linguistic realizations of the core FE LAW in the Portuguese corpus

<i>Law</i>	
aditar.1.pt	(8) : lei,
aplicar.1.pt	(6) : artigo, disposto,
aplicar.2.pt	(5) : norma,
conceder.1.pt	(3) : regime, regulamento, acórdão, cláusula, tribunal, regra, diploma,
conferir.1.pt	(2) : direito, contrato, decisão, deliberação, relação, desembargador, principio, dever,
cumprir.1.pt	obrigação,
disciplinar.1.pt	(1) : legislação, normativo, preceito, direito holandês, acordo, acto normativo do
estatuir.1.pt	conselho da união europeia, convenção, despacho, órgão, qualificação, aresto,
outorgar.2.pt	instância, presunção, sentença, entendimento, separação, titulo, vertido, costume,
prescrever.1.pt	exclusividade, titulo, código do trabalho, disposição, empregador, concordata,
vincular.1.pt	contrato promessa, procuração, alteração, decreto-lei, 1ª instância, centro distrital da
violar.1.pt	segurança social de braga, supremo tribunal de justiça, tribunal da relação do porto,
violar.2.pt	contratado, exigência, ónus, ordem, prestação, procedimento, requisito,
	responsabilidade, código, constituição, número, redacção,

5.2.4. Discussion

In this sub-chapter, we mentioned that, in most cases, a frame groups together one to six terms and we provided the example of the [Regulations] frame that groups together fourteen terms, the greatest number of terms grouped together into a frame. Then, we described some cases of synonymy, near synonymy and antonymy between terms that were grouped together into the same frame. Finally, we characterized the FEs that are recurrent across frames and explained their role in the judgments.

We believe that the main reason why there is such a high number of frames that group together only one term lies in the fact that we did not describe all terms of the subject field. As the methodology followed a bottom-up approach, terms were described first and only then were they grouped into frames. We also decided to study 100 terms for each language only. If the number of terms described were higher, the number of frames grouping together only one term would probably be lower. In addition, as we only analyzed

verbs and as frames can include terms that belong to other parts of speech, the frames that have already been defined could very probably be further enriched.

In chapter 2 (section 2.1.), we mentioned that legal language is said to be normative in that it is related to norm creation. Indeed, the frames that were identified support this idea. Firstly, the frame that grouped together the greatest number of terms is the frame [Regulations], a scenario in which the law guides the human behaviour. This indicates that this frame is particularly relevant in the corpus texts. Secondly, we also identified other frames related to the idea of norm creation such as [Apply law], [Authorization], and [Order] in which the LAW or its representative in the judgments, the JUDGE, create or apply the norms. Again, we confirm the hypothesis according to which knowledge about the characteristics of legal discourse as well as about judgments as a legal genre are helpful for identifying and describing the frames.

At the same time, the frames that were identified proved to be useful for understanding the most relevant participants in the macro-scenario of judgments. As in the theory of the classes of objects (Chodkiewicz and Gross 2005), the FEs correspond to classes of entities that are specific to the conceptual scenarios. Whenever the arguments of the verbs denoted different classes of entities, they were assigned different meanings by integrating a different frame. For instance, we find the verb *to establish* in two different frames: in the frame [Regulations] (Table 22) *to establish* corresponds to the term *establish*₁ and in the frame [Proof] (Table 23) it corresponds to the term *establish*₂. In the context of the former, the verb evokes a scenario in which the LAW regulates an ISSUE because its arguments denote entities associated with these two categories. In the context of the latter, the verb evokes a scenario in which an ARGUER has to provide a logically sufficient reason for assenting the truth of a proposition, i.e. the [Proof]. The entities associated with these two categories are necessarily different from those associated with

LAW and ISSUE. For all these reasons, we believe that semantic frames were a very good means to account for the polysemy in legal language.

Semantic frames also proved to be a useful apparatus for identifying semantic relations between terms. Terms that were grouped together into the same frame necessarily have in common the fact that they evoke the same conceptual scenario, but the way the terms perspectivize the scenario may vary. This variation can be identified by analyzing how the participants in the frame are instantiated in the contexts of each term. So, as Freixa and Lorente (2006) who use a different but compatible methodology, we were able to identify near synonyms such as *remedy*₁ and *resolve*₁ that have the same number and nature of actants but that are interchangeable only when their syntactic object corresponds to terms with a negative semantic prosody such as *abuse*, *conflict* and *deficiency*.

Finally, we used an annotation methodology based on FrameNet (Ruppenhofer et al. 2010) as well as on L'Homme (2008) that allowed us to formalize the semantic and syntactic properties of the specialized verbs grouped into the frames. These properties proved to be useful for the identification of the semantic relations between the verbs as well as for the identification of the equivalents to which we will refer at the end of the following sub-chapter.

5.3. Equivalents observed

The methodology we developed allowed us to identify 165 pairs of candidate equivalents among the 200 Portuguese and English terms that were grouped together into 76 frames. 33 out of the 76 frames (i.e. 43%) group together terms that are candidate equivalents (Appendix 16 lists the frames grouping together candidate equivalents). We observed two degrees of equivalence: full equivalence and partial equivalence. 117 pairs of equivalents (71%) not only evoke the same conceptual scenario but the actantial structures of the verbs,

the linguistic realizations of the actants and their syntactic patterns are similar. These were considered full equivalents. 48 pairs of equivalents (29%) do not entirely meet these criteria and were considered partial equivalents.

This sub-chapter is organized as follows. Section 5.3.1. describes the full equivalents that we observed. Section 5.3.2. describes the partial equivalents. Finally, section 5.3.3. discusses the results obtained and confirms and refutes some of the principles presented in the state of the art.

5.3.1. Full equivalents

Candidate equivalents were given the “full equivalence” status when the comparison of the descriptions of each pair of verbs revealed no differences in: 1) the actantial structures of the verbs; 2) the linguistic realizations of the actants in the contexts; and 3) the syntactic patterns of the verbs. 117 out of the 165 pairs of equivalents (71%) that we observed can be considered full equivalents (cf. Appendix 17). For example, *amend*₂ and *revogar*₂ were grouped into a frame called [Law changes] (Table 36).

Not only do these verbs evoke the same conceptual scenario, but the way they evoke the conceptual scenario is the same. They both refer to the action of formally changing the text of a written law so as to better it. The action that *amend*₂ and *revogar*₂ denote is necessarily carried out by a new law or by somebody with power to alter the law. Both verbs have the same actantial structure composed of two actants and both their actantial structure allows for the alternation between NEW LAW and LEGISLATOR as one of the core FEs. Although the types of laws differ from one legal system to another, the linguistic realizations of NEW LAW, LEGISLATOR and OLD LAW are comparable and equivalent in the English and Portuguese contexts.

Table 36. *amend*₂ and *revogar*₂: full equivalents

Frame:				
Law changes				
Definition:				
This frame describes a formal change to the text of a written law so as to better it.				
Core FEs:				
NEW LAW – The formal change to an existing law, usually an act or bill.				
LEGISLATOR – Person with power to legislate and alter laws.				
OLD LAW – The law that is formally changed.				
Non-core FEs:				
MANNER, MEANS, PURPOSE, TIME				
Contexts:				
<i>In 1993, the Quebec legislature amended ss. 72 and 73 CFL to comply with this Court's decision. The federal government enacted the MBOA, which amended 68 pieces of legislation. Considera-se que a norma constitucional revogou os preceitos daquele Decreto-Lei que, eventualmente, impedissem essa interpretação. Como vimos, o legislador revogou expressamente o artigo 40.º (excepto quanto ao cultivo) do Decreto-lei n.º 15/93, de 22 de Janeiro com a Lei n.º 30/2000, de 29.11.</i>				
	NEW LAW	LEGISLATOR	Terms	OLD LAW
English	act, bill, legislation, provision, section	legislature, parliament	<i>amend</i> ₂	act, Bankruptcy Act, Budget Measures Act, Charter of The French Language, Criminal Code, Controlled Drugs and Substances Act, Excise Tax Act, Income Tax Act, Labour Relations Act, law, Local Authorities Election Act, legislation, Modernization of Benefits and Obligations Act, Official Languages Act, section, Workers' Compensation Amendment Act
	Subject, NP	Subject, NP		Object, NP
Portuguese	artigo, código de trabalho, decreto decreto-lei, norma, portaria, regulamento	legislador	<i>revogar</i> ₂	artigo, decreto, lei, portaria, preceito, regulamento
	Subject, NP	Subject, NP		Object, NP

From Table 36 we can observe that the linguistic realizations of the FE OLD LAW seem more varied in the English corpus than in the Portuguese corpus because most of them correspond to the names of the acts that were amended. We remind the reader that in the annotation model that we followed (cf. Chapter 4, section 4.3.8) proper names were annotated fully and not only the head of the NP. In the Portuguese corpus, the linguistic

realizations of the FE OLD LAW do not take the form of proper nouns and, as a result, only the head of the NP was annotated. Interestingly, in the contexts of the Portuguese verb *revogar*, terms like *artigo* are usually followed by a number which was not annotated as part of the realization. The numbers of the *artigos* can cause the referent of the term *artigo* to vary considerably. This indicates that both in the English corpus and in the Portuguese corpus the FE OLD LAW refers to written laws or part of them. Therefore, the linguistic realizations of the actants of the two verbs evoke the same kind of entities and most of them are even equivalents. Consider the following example:

amend₂

section ~ section

revogar₂

artigo ~ artigo

As the terms *section* and *artigo* are equivalent, *to amend a section* and *revogar um artigo* are completely interchangeable in a translation context, i.e. we can translate *to amend a section* by *revogar um artigo* and we can also translate *revogar um artigo* by *to amend a section*.

Finally, the comparison of the syntactic patterns also revealed that the valence of the two verbs is similar. NEW LAW and LEGISLATOR typically take the form of NPs and occur as the syntactic subject of the verbs. OLD LAW typically takes the form of an NP and occurs as the syntactic object of the verbs. We remind the reader that, when compared to the other criteria, the analysis of the syntactic patterns of the verbs serves mainly as a confirming or refuting criterion for the validation of the equivalence relation established between two terms. Only when major differences between the syntactic patterns of the verbs are identified does this criterion refute the possibility of full equivalence. For instance, a major difference in the syntactic patterns of the verbs can consist in the lack of coincidence of the syntactic patterns of two or more actants of a verb.

The application of the aforementioned criteria revealed that some verb pairs can display minor differences but still be considered full equivalents. These differences can relate to metonymic alternations of one of the core FEs that are admitted in one of the languages but not in the other as well as to small differences in the syntactic patterns.

For instance, some verbs admit a metonymic alternation of one of the core FEs such as the alternation between JUDGE and DECISION as well as between COURT and DECISION as mentioned in section 5.2.1.2. The comparison of *apply*₁ and *aplicar*₁ revealed this kind of difference.

apply₁

*A number of other differences relate to rules that a judge can **apply** to a young person.*

aplicar₁

*Ao desconsiderar este aspecto, o tribunal a quo **aplicou** incorrectamente a lei, nomeadamente o art.º 24.º da Lei do Contrato Individual de Trabalho.*

Translation:

By disregarding this aspect, the court applied the law incorrectly, namely section 24 of the *Lei do Contrato Individual de Trabalho*.

*Ao assim não entender, o acórdão recorrido interpreta e **aplica** mal ao caso dos autos, o disposto nas Bases XXXVI, n.º 2 e XXXVII, n.º 1, anexas ao Dec-lei 294/97, de 24 de Outubro;*

Translation:

As it did not deem it in that way, the appealed decision interprets and applies incorrectly to the case the Basis XXXVI, s. 2 and e XXXVII, s.1 annexed in the Decree-Law 294/97 of October the 24th

Whereas, in the contexts of *apply*₁ the core FE JUDGE is always instantiated by terms denoting this entity which was described in section 5.2.1.2, in the contexts of *aplicar*₁ it can be instantiated by terms denoting that same entity (context [2]) or by terms denoting the DECISION reached by the JUDGE (context [3]). We considered this kind of difference

between the English and Portuguese verbs as a minor difference and we described it in the frame so as to provide the users with as many details as possible on the use of the terms.

Another difference that total equivalents can display concerns the syntactic patterns of the verbs. Some verbs in one language have a syntactic pattern that is not admitted in the other language. Consider the contexts of *argue*₁, *alegar*₁ and *propugnar*₁ ([Argumentation] frame) given below:

argue₁

*The accused also **argued** that his acquittal for obstructing justice should be accepted as fresh evidence in his appeal of the aggravated assault conviction.*

alegar₁

*Naqueles autos, o A. **alegou** que a Ré, BB, lhe solicitou o empréstimo da quantia de 15.000,00.*

Translation:

In those case files, the A. argued that the defendant, BB, asked him a loan of 15,000,00.

propugnar₁

*Por último, na contestação que apresentou, a ré P..., invocou a prescrição dos créditos reclamados pela autora e **propugnou** pela sua absolvição.*

Translation:

Finally, in the objections that the defendant P... presented, she invoked the limitation of the credits that the author is claiming and she argued that she should be acquitted.

Whereas *argue*₁ is typically followed by a that-clause and its equivalent *alegar*₁ admits it too, the same is not valid for *propugnar*₁ which is typically followed by a PP. Nevertheless, *propugnar*₁ is easily translated by *argue*₁ and vice versa:

propugnar₁

*Por último, na contestação que apresentou, a ré P..., invocou a prescrição dos créditos reclamados pela autora e **propugnou** pela sua absolvição.*

Translation:

Finally, in the statement of defence that the defendant P. presented, she pled the limitation of the credits that the author was claiming and she **argued** that she should be acquitted.

argue₁

*The accused also **argued** that his acquittal for obstructing justice should be accepted as fresh evidence in his appeal of the aggravated assault conviction.*

Translation:

No recurso que interpôs da condenação por assalto à mão armada, o arguido **propugnou** pela aceitação da prova da sua absolvição do crime de obstrução da justiça.

As this is the only difference observed between *argue₁* and *propugnar₁*, they were given “full equivalence” status. As this kind of information may be relevant for translation purposes, we provide the users of the resource with it by means of tables with a summary of the semantic and syntactic annotation.

5.3.2. Partial equivalents

Candidate equivalents were given the “partial equivalence” status when the comparison of the descriptions of each verb pair revealed differences in: 1) the actantial structures of the verbs; 2) the linguistic realizations of the core FEs in the contexts; and 3) the syntactic patterns of the verbs. 48 out of the 165 pairs of equivalents (29%) that we observed were considered partial equivalents because: the verbs do not have the same number of actants; the semantic nature of the actants differs; and/or their syntactic patterns are considerably different.

5.3.1.1. Differences in the number of actants

About 8% of the total number of equivalent pairs (i.e. 13 out of the 165 pairs of equivalents) and about 27% of the total number of partial equivalents were given the partial equivalence status because the comparison of the actantial structures of the verbs revealed that some verbs do not have the same number of actants. For instance, *remit*₁ and *transitar*₂ evoke the same conceptual scenario in which a court transfers a case or a matter to another court for further consideration or decision (Table 37). However, the court from which a case or a matter is transferred (COURT1) is never instantiated in the Portuguese corpus, although it is conceptually mandatory because a case or a matter cannot be transferred to a different court (COURT2) if it wasn't already in a previous one (COURT1).

As the entity responsible for the action of transfer is never expressed, the Portuguese verb is intransitive whereas the English verb is transitive. As a result, the translation of these verbs may raise translation difficulties. For instance, when translating *transitar*₂ into English, the translator will necessarily have to use a term that denotes COURT1 because COURT1 is one of the actants of the equivalent *remit*₁. However, as COURT1 is never expressed in the Portuguese contexts, the translator will not know which term they should use. They will have to examine the text and guess which entity performs the action or simply choose an English term so as to fill in the mandatory slot of the English verb:

transitar₂

Transitam para o juízo de família e menores de Estarreja, à data da instalação do mesmo, os processos que, nesta área, se encontrem pendentes nos tribunais das comarcas de Estarreja e Ovar.

Translation:

? The court **remitted** the cases pending in the municipal tribunals of Estarreja e Ovar to the Family Court of Estarreja.

Table 37. The frame [Case transfer] groups together the partial equivalents *remit*₁ and *transitar*₂

Frame:				
Case transfer				
Definition:				
A court (COURT1) transfers a case or a matter (CASE) to another court (COURT2) for further consideration or decision.				
Core FEs:				
COURT1 – The Court from which the CASE is transferred.				
CASE – The CASE that is transferred from one court to another.				
COURT2– The Court to which the CASE is transferred, usually an appellate court or a specialized court.				
Non-core FEs:				
BASIS, PURPOSE, REASON, TIME				
Contexts:				
<i>Accordingly, we would allow the appeal on this point with costs throughout, and remit the matter to the Federal Court of Appeal for consideration of the two remaining issues.</i>				
<i>Transitam para o juízo de família e menores de Estarreja, à data da instalação do mesmo, os processos que, nesta área, se encontrem pendentes nos tribunais das comarcas de Estarreja e Ovar.</i>				
	COURT1	Terms	CASE	COURT2
English	court, Court of Appeal, I, Sexton J. A., we	<i>remit</i> ₁	case, issue, matter	Agency, arbitrator, Board of Enquiry, Canadian International Trade Tribunal, Federal Court of Appeal, judge, minister, Claims Resolution Tribunal, Superior Court, Tax Court
	Subject, NP		Object, NP	Complement, PP
Portuguese	-----	<i>transitar</i> ₂	processo	Comarca de Lisboa, juízo
			Subject, NP	Complement, PP

Because *remit*₁ and *transitar*₂ do not have the same number of actants and because this raises translation problems, they were considered partial equivalents. In fact, some of the equivalents pairs that display differences in the number of actants correspond to situations in which one of the verbs is transitive whereas the other is intransitive such as the one illustrated in Table 37, but this is not always the case. Consider, for instance, *apply*₄ and *interpor*₁ in the Appellate procedure frame illustrated in Table 38.

Table 38. The frame [Appellate procedure] groups together the partial equivalents *remit*₁ and *transitar*₂

Frame:				
Appellate procedure				
Definition:				
The APPELLANT, a party who is not satisfied with a former decision, files an APPEAL or proceeding for review to a COURT, usually a higher court. If the proceeding for review is valid and follows the rules of appellate procedure, the APPEAL arises.				
Core FEs:				
APPELLANT – The party who is not satisfied with a former decision and who files the Appeal. APPEAL – A proceeding for review of a former decision. COURT – A judicial tribunal that hears appeals.				
Non-core FEs:				
DEADLINE MANNER, MEANS, REASON, TIME				
Contexts:				
<i>The Union applied for judicial review of the arbitrator's decision.</i> <i>Os AA não se conformaram e interpuseram recurso de apelação.</i>				
	APPELLANT	Terms	APPEAL	COURT
English	employer, Foundation, individual, person, Province of New Brunswick, they, Union	<i>apply</i> ₄	judicial review, review	-----
	Subject, NP		Object, NP	
Portuguese	arguido, assistente, executado, Ministério Público, réu, sociedade	<i>interpor</i> ₁	agravo, apelação, recurso, revista	Relação, tribunal
	Subject, NP		Object, NP	Complement, PP

These verbs evoke a conceptual scenario in which a party who is not satisfied with a former decision files an appeal to a court. However, the court to which the appeal is filed (COURT) is never instantiated in the English corpus, although it is conceptually mandatory because this procedure is directed at a court. In contrast, this FE is extremely frequent in the context of *interpor*₁. Therefore, *apply*₄ and *interpor*₁ were considered partial equivalents because they do not have the same number of actants. Again, the translator will be confronted with a kind of anisomorphism that requires a careful analysis of the text in which the terms occur so as to make a decision.

The following pairs of verbs are partial equivalents because they do not have the same number of actants: *apply*₃ and *deduzir*₁, *apply*₄ and *interpor*₁, *convict*₁ and *aplicar*₃, *convict*₁ and *condenar*₁, *discharge*₁ and *absolver*₁, *err*₁ and *incorrer*₂, *proceed*_{2a} and *proceder*₂, *remit*₁ and *transitar*₂, *rebut*₁ and *arguir*₁, *rebut*₁ and *impugnar*₂, *rebut*₁ and *invocar*₁, *request*₁ and *requerer*₁, *seek*₁ and *requerer*₁.

5.3.1.2. Differences in the nature of the actants

About 16% of the total number of equivalent pairs (i.e. 27 out of the 165 pairs of equivalents) and about 56% of the total number of partial equivalents were given the partial equivalence status because the comparison of the actantial structures of the verbs revealed that the nature of the actants differs from one verb to another. The nature of the actants does not entirely coincide due to: 1) metonymies; 2) different semantic preference; and 3) different semantic prosody.

5.3.1.2.1. Metonymies

About 4% of the total number of equivalent pairs (i.e. 7 out of the 165 pairs of equivalents) and about 15% of the total number of partial equivalents were given the partial equivalence status because the comparison of the descriptions revealed that one of the verbs in the equivalent pair allows for the metonymy of one of the actants, whereas the other does not.

Consider, for instance, *apply*₂, *aplicar*₂ and *vincular*₁ in the [Law applicability] frame illustrated in Table 39. This frame describes a scenario in which certain pieces of written law (LAW) guide a specific matter (CASE) or a certain human behaviour (PROTAGONIST) while other pieces of written law guide another. Therefore, the frame [Law applicability] contains two slots which correspond to three core FEs: the core FE LAW corresponds to one of the slots, CASE and PROTAGONIST correspond to another. This means that the latter can alternate depending on whether LAW applies to a matter or to a person.

Table 39. The [Law applicability] frame groups together the partial equivalents *apply*₂, *aplicar*₂ and *vincular*₁

Frame:				
Law applicability				
Definition:				
Certain pieces of written LAW guide certain matters of the society (CASE) or certain human behaviour (PROTAGONIST) while other pieces of written law guide another.				
Core FEs:				
LAW – Usually written, LAW refers to the norms established by a group of legal experts so as to guide human behaviour.				
CASE – The situation or matter to which the LAW is applied.				
PROTAGONIST – The PROTAGONIST can be anyone: the accused or the accuser (criminal suit), the petitioner or the respondent (civil suit) and even the judge.				
Non-core FEs:				
CRITERION, MANNER, REASON				
Contexts:				
<i>Therefore, while the Act applies mainly to public sector employers, it also applies to some private sector employers.</i>				
<i>In McGuigan, the Court held that s. 21 of the Criminal Code applies to s. 85(1) (pp. 307-8).</i>				
<i>A todos os contratos celebrados no âmbito das presentes condições aplica-se o Direito Holandês.</i>				
<i>Como decorre do n.º 3 do artigo 414º do Código de Processo Penal, a decisão que admita o recurso não vincula o tribunal superior.</i>				
	LAW	Terms	CASE	PROTAGONIST
English	act, AIT, amendment, chapter, Charter, doctrine, FAA, Indian Act, law, legislation, provision, regulation, rule, section, standard	<i>apply</i> ₂	action, assessment, case, contract, dispute, product, relation, royalty, section, trade, trial	appellant, employer, official, person
	Subject, NP		Complement, PP	Complement, PP
Portuguese	direito holandês, disposto, regime, regulamento	<i>aplicar</i> ₂	actividade, contrato, ordem, plano	-----
	Subject, NP		Complement, PP	
	acórdão, acordo, acto, normativo do conselho da união europeia, cláusula, contrato, convenção, decisão, deliberação, despacho, norma, órgão, qualificação, relação	<i>vincular</i> ₁	-----	aderente, autor, cônjuge, contraente, empregador, estado, juiz, jurisdição, parte, recorrente, réu, signatário, sociedade, terceiro, trabalhador, tribunal, tribunal da relação
Subject, NP			Object, NP	

This frame groups together one English term and two Portuguese terms, but each of them profiles the core FEs in a different way. The term *apply*₂ profiles the three core FEs across contexts, i.e. in some of its contexts the verb profiles the FE LAW together with the FE CASE, whereas in some others it profiles the FE LAW together with the FE PROTAGONIST. In contrast, the Portuguese equivalent *aplicar*₂ profiles the core FEs LAW together with the FE CASE, and the other Portuguese equivalent *vincular*₁ profiles the core FEs LAW and PROTAGONIST. As a result, the terms are not interchangeable in all contexts.

In order to correctly translate *apply*₂ into Portuguese one has to analyze the nature of its actants. If the verb's actants denote concepts related to that of CASE, *apply*₂ should be translated as *aplicar*₂. If its cooccurents denotes concepts related to that of PROTAGONIST, *apply*₂ should be translated as *vincular*₁. In contrast, both *aplicar*₂ and *vincular*₁ can always be translated as *apply*₂ because the latter can be used in the same contexts of the former.

The following pairs of verb are partial equivalents for similar reasons: *apply*₂ and *aplicar*₂, *apply*₂ and *vincular*₁, *apply*₃ and *deduzir*₁, *comply*₂ and *cumprir*₁, *consider*₂ and *declarar*₂, *dismiss*₁ and *revogar*₁, *quash*₁ and *negar*₁.

5.3.1.2.2. *Semantic preference*

About 8% of the total number of equivalent pairs (i.e. 15 out of the 165 pairs of equivalents) and about 27% of the total number of partial equivalents were given the partial equivalence status because the comparison of the descriptions revealed that one of the verbs in the equivalent pair more strongly combines with a given set of linguistic realizations than the verb in the other language.

For instance, *commit*₁, *engage*₁, *incorrer*₁ and *praticar*₁ were grouped together into the frame [Crime] illustrated in Table 40. This frame describes a scenario in which somebody does something that is prohibited by law.

Table 40. The terms *commit*₁ and *praticar*₁ in the frame [Crime] are partial equivalents

Frame:			
Crime			
Definition:			
A PROTAGONIST does something that is prohibited by law (CRIME).			
Core FEs:			
PROTAGONIST – The PROTAGONIST can be anyone: the accused or the accuser (criminal suit), the petitioner or the respondent (civil suit) and even the judge. CRIME – Conduct or behaviour that is prohibited by law.			
Non-core FEs:			
CRITERION, MANNER, MEANS, PLACE, REASON, TIME			
Contexts:			
<i>It did not appear that a stranger could have committed the murder.</i> <i>H.L. became addicted to alcohol, had emotional difficulties, and engaged in criminal conduct.</i> <i>Por o mais, ficou sobejamente provado que o arguido incorreu na prática dos crimes pelos quais foi condenado - todos no espaço de cerca de 1 mês e meio, mais precisamente entre 011/05/2008 e 19/06/2008 -, única e exclusivamente para conseguir custear o consumo de cocaína e heroína.</i> <i>Os arguidos não praticaram os crimes pelos quais foram condenados, onde não haver, como não há, prejuízo sofrido pela assistente nem étimo fundante.</i>			
	PROTAGONIST	Terms	CRIME
English	accused, appellant, defendant, firm, individual, Mr. Dinardo, Mr. Last, person, police chief, police officer, respondent, suspect, stranger, witness	<i>commit</i> ₁	abuse, act, assault, breach, break and enter, crime, fraud, homicide, fault, offence, manslaughter, murder, neglect, perjury, robbery, theft, tort
	Subject, NP		Object, NP
	accused, City, Crown, Euro-excellence, firm, H.L., one, Sanofi, they	<i>engage</i> ₁	activity, behaviour, bid shopping, conduct, dispute, infringement, misconduct, patenting, practice, production
	Subject, NP		Complement, PP
Portuguese	arguido, autor, condutor, devedor, lesante, réu	<i>incorrer</i> ₁	abuso, crime, desobediência, falta, inadimplemento, incumprimento, infração, lesão, mora, prática, responsabilidade, violação
	Subject, NP		Complement, PP
	agente, arguido, autor, devedor, filho, lesante, pessoa, recorrente, relação, réu	<i>praticar</i> ₁	acto, crime, facto, ilícito, infração, violação
	Subject, NP		Object, NP

The scenario includes two core FEs: the core FE PROTAGONIST and the core FE CRIME. The PROTAGONIST can be anyone: the accused or the accuser (criminal suit), the petitioner or the respondent (civil suit) and even the judge. The CRIME is the conduct or behaviour that is prohibited by law. The FE CRIME is typically instantiated by terms denoting the generic idea of crime (e.g. *crime, misconduct, infringement*) or by terms denoting specific types of crime (e.g. *break and enter, theft, homicide*).

From Table 40 we can observe that the instantiations of the FE CRIME in the contexts in which the term *commit*₁ occur denote specific types of crime, whereas the instantiations of the FE CRIME in the contexts in which the terms *engage*₁, *incorrer*₁ and *praticar*₁ occur denote the generic idea of crime. As a result, the term *engage*₁ can be translated by *incorrer*₁ as well as by *praticar*₁, but *commit*₁ cannot be translated by *incorrer*₁ or by *praticar*₁ in all contexts:

engage₁

*H.L. became addicted to alcohol, had emotional difficulties, and **engaged** in criminal conduct.*

Translations:

H. L. viciou-se no álcool, teve problemas emocionais e **incorreu** numa conduta ilícita.

H. L. viciou-se no álcool, teve problemas emocionais e **praticou** uma conduta ilícita.

commit₁

*It did not appear that a stranger could have **committed** the murder.*

Translations:

* Não parecia que um desconhecido tivesse **incorrido** no homicídio

* Não parecia que um desconhecido tivesse **praticado** o homicídio.

incorrer₁

*Não obstante saber que as aprovações ou indeferimentos eram anuais e só por período anual podiam ser consideradas, a A. decidiu **incorrer** em desobediência frontal, pondo em causa a autoridade e poder da direcção e gestão da sua entidade patronal.*

Translations:

* Although the approvals and rejections were considered on a yearly basis, the A. decided to **commit** direct disobedience by contesting the authority and power of the direction and management of the employer.

Although the approvals and rejections were considered on a yearly basis, the A. decided to **engage in** direct disobedience by contesting the authority and power of the direction and management of the employer.

praticar₁

*Na réplica a A. sustenta a improcedência da reconvenção, porquanto a A. não **praticou** qualquer facto ilícito.*

Translations:

In response, the A. argues that the cross-complaint should not proceed because the A. did not **commit** any illegal fact.

The following pairs of terms are partial equivalents for similar reasons: *argue₁* and *aduzir₁*, *apply₃* and *deduzir₁*, *assert₁* and *aduzir₁*, *assert₁* and *exercer₁*, *commit₁* and *incorrer₁*, *commit₁* and *praticar₁*, *consider₂* and *julgar₁*, *contend₁* and *aduzir₁*, *deem₁* and *julgar₁*, *invoke₁* and *declarar₁*, *invoke₁* and *propugnar₁*, *request₁* and *formular₁*, *seek₁* and *formular₁*, *state₁* and *aduzir₁*, *submit₁* and *aduzir₁*.

5.3.1.2.3. Semantic prosody

About 3% of the total number of equivalent pairs (i.e. 5 out of the 165 pairs of equivalents) and 10% of the total number of partial equivalents were given the partial equivalence status because the comparison of the descriptions revealed that the semantic prosody of one of the actants is different.

For instance, *amend*₁, *remedy*₁, *resolve*₁ and *suprir*₁ were grouped together into the frame [Remedy] illustrated in Table 41.

Table 41. The [Remedy] frame grouping together partial equivalents

Frame:			
Remedy			
Definition:			
Somebody with the power or authority (REMEDY PROVIDER) provides the means by which the wrong (REMEDY REQUIRING) is prevented or redressed.			
Core FEs:			
REMEDY PROVIDER - Somebody with the power or authority provides the means by which the wrong is prevented or redressed.			
REMEDY REQUIRING – The issue that requires a remedy. This FE usually has a negative affective prosody.			
Non-core FEs:			
BASIS, CONDITION, MANNER, MEANS, PURPOSE, REASON, TIME			
Contexts:			
<i>In 2000, the Company amended the Plan text in order to introduce a DC component.</i>			
<i>Accordingly, the curative proviso cannot remedy this error.</i>			
<i>This Court can resolve the legal issue presently before it without expressing an opinion on this point.</i>			
<i>Serão de suprir as omissões e lacunas de factualização apontadas.</i>			
	REMEDY PROVIDER	Terms	REMEDY REQUIRING
English	Alberta, company, council, court, employer, government, judgment, Mr. Breslaw, Mr. Marcotte, party Subject, NP	<i>amend</i> ₁	by-law, Canada Pension Plan, conclusion, paragraph, Plan Text, pleading, provision, regulation, statement, term, trust Object, NP
	arbitrator, court, curative proviso, decree, legislation, legislature, Ontario Human Rights Code, parliament, person, Title Three Subject, NP	<i>remedy</i> ₁	abuse, consequence, deficiency, discrimination, effect, error, legislation, infirmity, omission, prejudice, reduction, state of affairs, violation Object, NP
	I, Deschamps J., court, decision, immunity, judge, jury, rule Subject, NP	<i>resolve</i> ₁	appeal, case, conflict, difficulty, impasse, issue, motion, question Object, NP
	juiz, empregador, relação, tribunal, Vossa Excelência Subject, NP	<i>suprir</i> ₁	deficiência, falta, inexistência, nulidade, omissão Object, NP
Portuguese			

This frame describes a scenario in which somebody with the power or authority provides the means by which the wrong is prevented or redressed. Thus, this frame involves two core FEs: a REMEDY PROVIDER who redresses the wrong and a REMEDY REQUIRING with which a negative semantic prosody is associated. As mentioned in section 5.2.2.2., the instantiations of the FE REMEDY REQUIRING can display a greater or smaller negative prosody in the contexts of the English terms. Among the three English verbs, *remedy*₁ is the term with the strongest negative affective prosody. We remind the reader that this was presented as one of the reasons why the English verbs are not perfect synonyms.

Similarly to what was observed in *remedy*₁, the instantiations of the FE Remedy requiring display in the contexts of the Portuguese term *suprir*₁ a very strong negative affective prosody. By implication, *amend*₁ and *resolve*₁ have a less negative affective prosody than *suprir*₁ and, as a result, they cannot always be translated by *suprir*₁ and vice versa:

amend₁

*In May 2003, Alberta **amended** the regulations to make a photograph mandatory for all driver's licences.*

Translation:

* Em Maio de 2003, Alberta **supriu** os regulamentos por forma a tornar obrigatório o uso de uma fotografia em todas as cartas de condução.

remedy₁

*The general objective of Title Three is to **remedy** this deficiency by establishing specific rules for determining the international jurisdiction of Quebec authorities.*

Translation:

O objectivo geral do Título Três consiste em **suprir** a deficiência ao estabelecer regras específicas para estabelecer a jurisdição internacional das autoridades do Quebec.

resolve₁

*This Court can **resolve** the legal issue presently before it without expressing an opinion on this point.*

Translation:

* Este Tribunal pode **suprir** a questão legal que se apresenta sem emitir uma opinião sobre este ponto.

suprir₁

*Serão de **suprir** as omissões e lacunas de factualização apontadas.*

Translations:

* One has to **amend** the omissions in the presented facts.

One has to **remedy** the omissions in the presented facts.

* One has to **resolve** the omissions in the presented facts.

The following pairs of terms are partial equivalents for similar reasons: *amend₁* and *suprir₁*, *constitute₁* and *padecer₂*, *impugn₁* and *invocar₁*, *impugn₁* and *arguir₁*, *resolve₁* and *suprir₁*.

5.3.1.3. Differences in the valence patterns

About 6% of the total number of equivalent pairs (i.e. 10 out of the 165 pairs of equivalents) and about 20% of the total number of partial equivalents were given the partial equivalence status because the comparison of the actantial structures of the verbs revealed that the verbs' valence patterns are different.

For instance, *commit₂*, *impose₁*, *order₁*, *require₁* and *determinar₂* were grouped together into the frame [Order] illustrated in Table 42. This frame describes a scenario in which the LAW or its representative, the JUDGE commands somebody to do something. Thus, this frame involves four core FEs: JUDGE, LAW, DUTY and PROTAGONIST. Each lexical unit grouped into this frame profiles the FEs in a given way. For instance, the term *commit₂* profiles the JUDGE, the PROTAGONIST and the DUTY. The JUDGE is typically the syntactic subject of the verb; the PROTAGONIST is typically the syntactic object of the verb; and the DUTY is a complement that takes the form of a PP. In contrast, the term *impose₁* profiles all four FEs but the FE PROTAGONIST is typically a complement of the verb in the

form of a PP, whereas DUTY is the NP syntactic object. In fact, in the contexts of the other terms the core FE PROTAGONIST can also take the form of that-clauses as well as infinitive clauses.

This frame groups together four pairs of equivalents: *commit*₂ and *determinar*₂, *impose*₁ and *determinar*₂, *order*₁ and *determinar*₂ and *require*₁ and *determinar*₂. The full equivalent of *determinar*₂ is *order*₁, whereas *commit*₂, *impose*₁ and *require*₁ were considered partial equivalents because the observation of their actants revealed significant differences in the syntactic patterns when compared to the syntactic patterns of *determinar*₂. The Portuguese verb admits three valence patterns:

JUDGE (Sub. NP) ~ PROTAGONIST (Obj. NP) DUTY (Comp. That-clause)

JUDGE (Sub. NP) ~ DUTY (Comp. That-clause)

JUDGE (Sub. NP) ~ DUTY (Obj. NP)

The first pattern occurs only once, whereas the second and the third pattern occur very often. Similarly, the English term *order*₁ admits the first pattern three times, but the most frequent patterns are the second and the third. In contrast, *commit*₂ only admits the pattern JUDGE (Sub. NP) ~ PROTAGONIST (Obj. NP) DUTY (Comp. PP) which is similar to the first mentioned pattern of *determinar*₂ but that only occurs once in its contexts. The term *impose*₁ only admits the patterns JUDGE (Sub. NP) ~ DUTY (Obj. NP) PROTAGONIST (Comp. PP) and LAW (Sub. NP) ~ DUTY (Obj. NP) PROTAGONIST (Comp. PP) which never occur in the contexts of *determinar*₂. Among the valence patterns that the term *require*₁ admits the only one that coincides with those of *determinar*₂ is JUDGE (Sub. NP) ~ DUTY (Obj. NP) but this pattern occurs only twice in the contexts of *require*₁, whereas it is very frequent in the contexts of *determinar*₂.

Table 42. The [Order] frame grouping together partial equivalents

Frame:				
Order				
Definition:				
Every direction or DUTY made in writing by the LAW or given in a judgment by a JUDGE. The DUTY concerns a given PROTAGONIST.				
Core FEs:				
JUDGE – The entity responsible for applying the LAW due to their knowledge of it. It can either be a single entity or collective one. In Portuguese, the metonymic JUDGMENT is also possible for this slot.				
LAW – Usually written, LAW refers to the norms established by a group of legal experts so as to guide human behaviour.				
PROTAGONIST – The PROTAGONIST can be anyone: the accused or the accuser (criminal suit), the petitioner or the respondent (civil suit) and even the judge.				
DUTY – An order or obligation that is imposed by the LAW or by the JUDGE to the PROTAGONIST.				
Non-core FEs:				
BASIS, CASE, CHARGES, CONDITION, MANNER, MEANS, PURPOSE, REASON, TIME				
Contexts:				
<i>The hearing judge rejected the argument, found M in breach of her conditional sentence and committed her into custody.</i>				
<i>Nor does it mean that a court cannot impose an adult sentence on a young person.</i>				
<i>In Monière, the judge also ordered the accused to serve half his sentence before being eligible for parole.</i>				
<i>The law does not require a party to provide advance financing of the claim of its opponent as a general rule.</i>				
<i>Sem prejuízo do disposto no n° 7 do artigo anterior, o juiz determina a destruição imediata dos suportes técnicos e relatórios manifestamente estranhos ao processo:</i>				
	JUDGE / LAW	Terms	PROTAGONIST	DUTY
English	judge	<i>commit</i> ₂	accused, fugitive, he, her, individual, Mr. Bjelland, person, you	custody, extradition, trial
	Subject, NP		Object, NP	Complement, PP
	court, judge	<i>impose</i> ₁	Canada, Chief, Crown, employer, government, person, police, spouse, worker	burden, duty, obligation, period, sanction, sentence, tax
	article, law, legislature parliament, section		Complement, PP	Object, NP
	Subject, NP	<i>order</i> ₁	accused, Davis, party	cost, disclosure, forfeiture, measure, probation, reinstatement, remedy, surrender, trial
	agency, court, Court of Appeal, Federal Court of Appeal, I, judge, minister		Object, NP	Object, NP
	Subject, NP			Complement, that-clause Complement, inf-clause
Court, Doherty J.A., judge,	<i>require</i> ₁	Company, court, Crown,	attendance, proof	

	minister Act, article, clause, criminal code, emergency management act, law, obligation, principle, section		government, judge, party, person, police, mechanic, municipality, RCMP	
	Subject, NP		Object, NP	Object, NP Complement, that-clause Complement, inf-clause
Portuguese	decisão, despacho, Ex.Mo Senhor Presidente do Supremo Tribunal de Justiça, Ex.Mo Vice- Presidente do Conselho Superior da Magistratura, juiz, julgamento, relator, sentença, tribunal, Tribunal da Relação do Porto	<i>determinar₂</i>	réu	absolvição, alteração, apresentação, arquivamento, condenação, destruição, execução, julgamento, notificação, repetição, suspensão
	Subject, NP		Object, NP	Object, NP Complement, that-clause

The analysis of the following pairs of verbs revealed the same kind of differences: *confer₁* and *conferir₁*, *confer₁* and *outorgar₂*, *entitle₁* and *conferir₁*, *commit₂* and *determinar₂*, *entitle₁* and *outorgar₂*, *grant₁* and *conceder₁*, *impose₁* and *determinar₂*, *rely₁* and *assentar₁*, *rely₁* and *fundamentar₁*, *require₁* and *determinar₂*.

5.3.2. Discussion

In this sub-chapter we described the equivalents that we assigned by means of the frame labels attributed to each specialized meaning of the verbs. We identified two degrees of equivalence, i.e. full equivalence and partial equivalence, and provided reasons why some verbs were considered full equivalents whereas others were considered partial equivalents.

We remind the reader that the first hypothesis that we aimed at testing with the methodology explained in Chapter 4 was whether Portuguese and English verbs could be

considered candidate equivalents when they were grouped into the same frame because they would convey the same scenario and, therefore, would have the potential to be used in the translation of the specialized texts. This hypothesis was based on the idea that frames could function as interlingual representations (Boas 2005) that would help us assign the equivalents of the verbs. The second hypothesis that we tested was whether differences in the way in which the conceptual scenarios are instantiated in the Portuguese and English discourse were the reason why some equivalents are not always interchangeable in all contexts and, therefore, could only be considered partial equivalents.

We believe that the results that were presented in this chapter confirm the hypothesis that we had formulated because they show that, although 29% of the verbs grouped into the same frame are only partial equivalents, the vast majority are full equivalents. It should be noted, however, that the methodology that we proposed also allowed us to differentiate between full and partial equivalents. Based on the observation of the findings, it seems that the criterion of belonging to the same frame is indeed a good starting point even if not a sufficient condition for full equivalence. It is a good starting point namely because we were able to differentiate between full equivalents and partial equivalents by analyzing the items of information contained in the description of each frame, e.g. the core FEs, their linguistic realizations, their syntactic patterns. Thus, in order to be considered full equivalents a given pair of verbs must: 1) evoke the same frame; 2) profile the same FEs, i.e. have the number of the actants; 3) have comparable actants, i.e. combine with linguistic realizations that denote the same kind of entities; and 4) display no significant differences in their valence patterns. Equivalents were considered partial whenever any of the criteria 2-4 were not met.

These findings have two implications. Firstly, they presuppose that the only characteristic that full equivalents mandatorily need to share with partial equivalents and vice versa is the association to the same frame (criterion 1). Secondly, they confirm the idea

defended by Atkins and Rundell (2008: 468) according to which the semantic content of the lexical units as well as their collocational contexts are of paramount importance for the assignment of equivalents. For instance, *commit*₁, *engage*₁, *incorrer*₁ and *praticar*₁ were grouped together into the same frame but whereas the last three verbs typically combine with terms denoting the generic idea of crime, the first one does not. As a result, the term *engage*₁ can be translated by *incorrer*₁ as well as by *praticar*₁, but *commit*₁ cannot be translated by *incorrer*₁ or by *praticar*₁ in all contexts. Thus, frames proved to be an excellent “tertium comparationis” means (Piotrowski 1994) to assign equivalents as they include information on the semantic content of the lexical units as well as their collocational contexts.

It is important to mention that our methodology did not account for zero equivalents. There are two reasons for this. Firstly, our objective consisted in developing a methodology for assigning equivalents and discriminating them. Secondly, the number of selected terms which we described corresponds to a small amount of the terms that can be found in the corpus texts. We cannot conclude that a verb does not have an equivalent because we did not describe all the terms of the corpus. Nonetheless, the methodology that we used allows us to explain why some cognate terms that we identified are not full equivalents. For instance, *invoke*₁ ([Argumentation] frame) is not the equivalent of *invocar*₁ ([Contesting] frame) because they were grouped into different frames.

As our methodology was not designed to account for zero equivalents and as we identified 117 pairs of full equivalents, our findings do not indicate significant asymmetries in the English and Portuguese terminologies. We remind the reader that legal discourse is said to be culture-bound, this originating many mismatches between each national legal system. We can only formulate the hypothesis that verbs lend themselves less well to the observation of such phenomena. Thus, as far as the (un)translatability debate is concerned (cf. Chapter 2, section 2.1.1.3.), we argue that, at least, specialized verbs that occur in

Supreme Court judgments not only seem to be translatable but, in most cases, there are several options of translation.

Most importantly, our findings confirm some ideas concerning the phenomenon of equivalence which are discussed in the literature. As mentioned in Chapter 2 there are two typologies of equivalence degrees: a qualitative one based on the nature of equivalence and a quantitative one based on the number of equivalents. In this research, we identified full and partial equivalents (qualitative typology) and we identified equivalence relations of one-to-one and one-to-many concerning both languages (quantitative typology). For instance, we identified one equivalent of *vincular*₁ (*apply*₂) and we identified two equivalents for *apply*₂ (*vincular*₁ and *aplicar*₂). We also identified partial equivalents by inclusion and partial equivalents by intersection. *Apply*₂ includes *vincular*₁ and *aplicar*₂ for the reasons mentioned in section 5.3.1.2.1. *Amend*₁ and *suprir*₁ are partial equivalents by intersection for the reasons mentioned in section 5.3.1.2.3.

Finally, the attested importance of the collocational contexts so as to assess the interchangeability of the specialized verbs leads us to agree with Wiegand (2002) when he argues that equivalence should be formulated at the textual level. As suggested by Atkins and Rundell (2008: 473) corpus data can indeed widen our translating horizons.

5.4. JuriDiCo

The descriptions of the terms and frames as well as the information on the equivalence status of the terms in the two languages were encoded in an xml editor, stored in a server and published in a webpage called *JuriDiCo*. This website was designed to be a free online bilingual lexical resource based on Frame Semantics as well as on the methodology for elaborating specialized lexical resources developed in the *Observatoire de linguistique Sens-texte* (OLST) (L'Homme 2008). This resource aims to allow users interested in legal

terminology such as translators and technical writers to browse the various aspects of lexical units. For the moment, JuriDiCo contains the most relevant specialized verbs used in the highest court decisions of Portugal and Canada.

This sub-chapter is organized as follows. Section 5.4.1 describes the macrostructure of JuriDiCo or the structure of the resource as a whole. Section 5.4.2 describes the microstructure or the internal structure of the entries. Finally, section 5.4.3 discusses future work. Both the macrostructure and the microstructure of JuriDiCo were designed and implemented in collaboration with the computational linguist, Benoît Robichaud, who works in the OLST.

5.4.1. The macrostructure

The resource was designed to describe the linguistic as well as the extralinguistic information related to specialized verbs that occur in legal texts and to provide their equivalents. This information serves a decoding and an encoding function, i.e. it should be helpful for the understanding of legal terminology as well as for the translation and production of legal texts. Therefore, as in FrameNet (2012), this resource should allow users to search the information they need by introducing the knowledge they already have about a concept (search by frames) or by introducing a term so as to learn about its characteristics (search by terms).

In order to serve these objectives, JuriDiCo can be consulted in three ways. The first option is to browse alphabetically ordered lists of terms (Figure 45). The user may click on the terms to directly access their description. Section 5.4.2 describes the microstructure of the term entries.

English Terms

[A](#) [B](#) [C](#) [D](#) [E](#) [G](#) [I](#) [M](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#)

A

accuse	acquit	adduce	affirm	allege
amend	appeal	apply	argue	arise
assert	assess	authorize		

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Figure 45. Alphabetical list of terms in JuriDiCo

The second option is to browse alphabetically ordered lists of frames (Figure 46). The user may click on the frames to directly access their description. Section 5.4.2 describes the microstructure of the frame entries.

JuriDico - Alphabetical list of frames				
Assessing	Appellate procedure	Apply law	Argumentation basis	Argumentation
Compliance	Authorization	Case transfer	Cause irregularity	Come_into_existence
Convincing	Conclusion	Constitutionality	Consulting a lawyer	Contesting
Detaining	Court examination	Crime	Decision	Decision type
Hiring	Duty	Evidence	Firing	Granting
Judge's procedure	Incriminating	Investigate	Irregularity	Issues
Law changes	Judging	Jurisdiction	Jury	Law applicability
	Law interpretation	Law-making	Legal relations	Lessening and irregularity
Make an error	Order	Pay	Petition	Presumption
Proceeding	Pronouncing a verdict	Proof	Prosecutor procedure	Regulations
Remedy	Result	Revealing	Review	Right
Sentencing	Taking into consideration	Testimony	Validity of proceeding	Verdict

Figure 46. Alphabetical list of frames in JuriDiCo

Finally, a search engine is also available. This window, reproduced in Figure 47, offers several advanced search options. The search engine allows the user to search by term or by frame. A term-based search matches the character sequence entered by the user with the headword section of the entries. The frame-based search, on the other hand, associates the sequence of characters entered with the frames found in the list of frames. The search parameter “Search language” allows the user to choose the language(s) that the requested terms may be from. Choosing “Portuguese” will limit the results to Portuguese-language terms while “English” will generate the English language results. “Bilingual” will return terms in either language.



[Alphabetical list of terms](#) | [Alphabetical list of frames](#) | [Versão portuguesa](#) | [Documentation](#) | [Team](#) | [Help](#)

Search the Juridico

Mode:
 Language:
 Precision:
 Expression:
 Show equivalences

Figure 47. JuriDiCo’s search engine

As in DiCoInfo (L’Homme 2008), the parameter specifying precision level defines how closely the sequence entered must correspond to the file contents. Choosing “Exact”, will generate only the terms with the exact same spelling as the search term entered by the user. Therefore, if ASSERT is entered, the results will be limited to that sequence only. If the user enters the sequence ASSE, he or she will get no results. Choosing “Starting with” will generate the terms beginning with the character sequence entered, so a search for the sequence ASSE will obtain ASSERT and ASSESS. “Containing” generates the terms that contain the sequence even as a part of the word, so the search for AS will obtain entries for ASSERT, ASSESS, as well as QUASH.

5.4.2. The microstructure of the term entries

Each term entry of JuriDiCo contains the following items of information or fields (Figure 48).

dismiss₁, vt

Status: 0

Frame

Actantial structure: Court{court} dismiss Appeal{appeal}

Linguistic realizations of Frames Elements

Definition: A COURT determines that an APPEAL is invalid.

Context(s)

português: negar₁

português (partial): revogar₁

Written by: JP

Last update: 28/03/2012

Figure 48. The term entry *dismiss₁* in JuriDiCo

5.4.2.1. Headword

This field names the specialized verb with its sense number, e.g. *dismiss*₁. This number is always displayed, even if the term has only one specialized sense. The sense number is used in all the other sections in which the term appears. In general, senses are not arranged in a hierarchical order and the sense numbers do not have a particular meaning except to differentiate the frames that a given verb may evoke. Each entry keyword has a label indicating the part of speech to which it belongs. Verbs are marked as transitive, intransitive or pronominal.

5.4.2.2. Frame

This field includes four pieces of information: a frame label, a definition of the frame, the participants in the frame and other terms that evoke the frame (Figure 49). For instance, Decision is the label attributed to the frame that the verb *to dismiss* evokes. Frame names start by a capital letter. The participants in the frame are divided into mandatory participants or core FEs and optional participants or non-core FEs. A brief definition is provided for each core FE. The section “Other Terms” lists the terms in the same language as the headword that were grouped together into the frame [Decision]. Terms that are grouped together into the same frame can be synonyms (*quash*₁), near-synonyms and antonyms (*uphold*₁, *affirm*₁) of *dismiss*₁.

5.4.2.3. Actantial structure

This field describes the arguments or actants of the verb. The actants are represented by a system of labels which describe their semantic role with regard to the predicate keyword. Appendix 8 lists some of the labels used to tag the actants of the terms in the JuriDico. The actants of the verbs correspond to the core FEs that it profiles. Therefore, the number of actants may or may not correspond to the number of core FEs of the frame. In the case of

the term *dismiss*₁ the actantial structure contains two out of the three core FEs of the frame [Decision] (contrast Figure 48 with Figure 49).

Frame

Decision	
Frame Definition:	
A COURT determines if a previous DECISION or an APPEAL is valid or invalid. When the DECISION or the APPEAL is valid, the COURT affirms or upholds it. When the DECISION or the DECISION is invalid, the COURT dismisses or quashes it.	
Core Elements:	
Court:	The tribunal duly constituted for the hearing and determination of cases.
Decision:	A judgment pronounced by a court in settlement of a controversy.
Appeal:	A proceeding for review of a former decision.
Non-Core Elements:	
Basis, Case, Extent, Manner, Means, Reason, Text, Time	
Other Terms:	
quash ₁ , uphold ₁ , affirm ₁	

Figure 49. The frame field in the entry of *dismiss*₁

5.4.2.4. Linguistic realizations of the FEs

This field lists the terms that instantiate the mandatory participants in the meaning of the verb. The linguistic realizations of the FEs also correspond to the realizations of the actants of the verb and they are most often the head of NPs (Figure 50).

Linguistic realizations of Frames Elements

court
Corriveau J. , court , I , Superior Court , we
appeal
action , appeal , application , complaint , cross-appeal , motion , proceeding , work

Figure 50. Linguistic realizations of the FEs that were annotated in the contexts of the term *dismiss*₁

5.4.2.5. Definition

This field provides a definition of the verb. This definition may or may not correspond exactly to the definition of the frame. For instance, the definition of *dismiss*₁ illustrates the way this verb profiles the frame [Decision] (contrast definition in Figure 48 with definition in Figure 49).

5.4.2.6. Contexts

This field includes two pieces of information: three illustrative and simple contexts of the term (Figure 51) and about twenty annotated contexts (Figure 52) together with a summary table that contains the semantic and syntactic properties of the term. One can access the annotated contexts as well as the summary table with the semantic and syntactic properties of the term by clicking on “Annotated Contexts” (Figure 51).

Context(s)

Annotated Contexts

We would dismiss the appeal. (Source: SCC-2008-9)

I would dismiss the cross-appeal. (Source: SCC-2007-24)

I would accordingly dismiss the appeal. (Source: SCC-2009-44)

Figure 51. Contexts of the term *dismiss*₁

In the annotated contexts (Figure 52), the elements are graphically marked in the following ways: the keyword term to which the annotation belongs is capitalized; the surrounding actants are coded by color (each color corresponds to a different semantic role); the actants appear in bold; the realizations of the actants appear in italics. The information following the annotated contexts indicates the source, the annotation status (only 0-status contexts are displayed), the editor's code, and the date last updated.

<p><i>I</i> would also DISMISS <i>the cross-appeal</i>. [SCC-2007-41 0 JP 27/06/2010]</p> <p><i>On all other counts, we</i> would DISMISS <i>the appeal</i>. [SCC-2009-32 0 JP 27/06/2010]</p> <p><i>Accordingly, I</i> would allow the appeal and DISMISS <i>the action with costs</i>. [SCC-2007-38 0 JP 27/06/2010]</p>

Figure 52. Annotated contexts of the term *dismiss*₁

5.4.2.7. Equivalentents

This field provides a full equivalent of the headword (Figure 48). When a given term has several full equivalentents, these are listed. When no full equivalent is available, a partial equivalent is provided.

5.4.2.8. Additional information

When applicable, this field explains in which way the equivalent provided in the field “equivalent” is considered partial.

5.4.2.9. Administrative information

This field provides information concerning the entry status, the entity of the editors and the date when the entry was last updated. JuriDico is still under construction and, as a result, its entries are at different points of the editing process. The entry status is a number quantifying the degree of completion of the entry relative to the other entries. 0 status means that the editing is completed. Status 1 means advanced editing of the sections

(actantial structure, linguistic realizations, contexts). Status 2 means that only the contexts in which the terms occur are available.

5.4.3. The microstructure of the frame entries

Each frame entry of JuriDiCo contains the following items of information or fields (Figure 53).

Decision

Frame Definition:	
A COURT determines if a previous DECISION or an APPEAL is valid or invalid. When the DECISION or the APPEAL is valid, the COURT affirms or upholds it. When the DECISION or the DECISION is invalid, the COURT dismisses or quashes it.	
Core Elements:	
<u>Appeal</u> : A proceeding for review of a former decision.	
<u>Court</u> : The tribunal duly constituted for the hearing and determination of cases.	
<u>Decision</u> : A judgment pronounced by a court in settlement of a controversy.	
Non-Core Elements:	
Basis, Case, Extent, Manner, Means, Reason, Text, Time	
English Terms:	Portuguese Terms:
affirm 1 dismiss 1 quash 1 uphold 1	negar 1 revogar 1

Figure 53. The frame entry [Decision]

5.4.3.1. Definition

This field provides a schematic presentation of a situation type that underlies the meaning of a term (or of the members of sets of terms) along with named participant roles, i.e. FEs. The frame definition may specify the manner in which the FEs are given linguistic

expression in sentences containing the terms. It can also draw considerations on the manner in which certain terms profile the frame (e.g. positively or negatively).

5.4.3.2. FEs

This section is divided into a list of the core FEs, or mandatory participants in the frame, and a list of non-core FEs, or optional participants in the frame. Each FE is given a semantic label that can be subject-field-specific like LAW or more general like ACT and PROTAGONIST. Labels were adopted from Appendix 7, a compilation of the frames described in FrameNet that are related to the subject field of law. When no candidate label was found, labels were created based on the typical occurrences of the actants. In any case, the choice of labels aims to help the dictionary user to quickly grasp the participants in the meaning of terms. Definitions are provided for the core FEs.

5.4.3.3. Terms

This field provides a list of the terms in the languages described that evoke a given frame. For instance, in Figure 53 one can find a list of English terms as well as a list of Portuguese terms that evoke the [Decision] frame. Terms that are grouped together into the same frame can be synonyms (*quash*₁ and *dismiss*₁), near-synonyms, antonyms (*dismiss*₁ and *affirm*₁), or related terms (*negar*₁ and *revogar*₁).

5.4.4. Future work

JuriDiCo was designed to be a free online bilingual lexical resource based on Frame Semantics as well as on the methodology for compiling specialized lexical resources developed in the OLST, such as DiCoInfo (L’Homme 2008). At the moment of writing, it describes specialized verbs, their equivalents and the frames they evoke. The descriptions are based on corpus evidence, namely on the annotation of the contexts in which the verbs

occur. Considering the objectives and the current state of JuriDiCo, a number of avenues for its future development could be pursued.

Firstly, terms belonging to parts of speech other than verbs, such as nouns, adjectives and adverbs could be included in the resource. These could be described following the same methodology and be grouped together into the frames that have already been identified or into new frames. The fact that a given frame may group together terms belonging to several parts of speech should allow users to access a wider choice of possibilities for expressing a given concept. In addition, as frames can group together terms belonging to distinct languages, the inclusion of terms other than verbs can be particularly interesting for translators because this provides them with more options for choosing the necessary equivalents.

Secondly, the corpus used to select and document the specialized verbs that can be consulted in JuriDiCo could be extended by including other legal genres. The inclusion of other genres of texts would allow for a larger coverage of the subject field of law as well as its terminology. It could be relevant to include a field in the frame entries that describes the genres of texts that typically evoke the frame that is being described.

Thirdly, the identification of frames and the activity of grouping together the terms into them seem to suggest that some frames may be related to other frames because they have some core FEs in common (section 5.2.3). By implication, the terms grouped together into frames that have a relation to other frames have high chances of being related to each other. Thus, it would be relevant to study the relations between the frames by following the FrameNet methodology. This would allow for a better representation of the specialized field.

Finally, as the task of annotating the contexts in which the terms occur (section 4.3.8) is long and fastidious, it could benefit from a higher degree of automatization such as the one proposed in Hadouche et al. (2010) and evaluated in Hadouche et al. (2011). In most cases, the automatic method proposed in Hadouche et al. (2010) correctly identifies and annotates the mandatory and optional participants in the meaning of the terms. More precisely, Hadouche et al. (2011) prove that terminologists can gain 60% of the time only by correcting the errors of the automatic outputs. Although this system has been designed for the French, it could be adapted to other languages, such as English and Portuguese.

6. Conclusion

This research was carried out with two specific objectives: to establish criteria for justifying why a specialized verb in one language is a more or less suitable equivalent of a specialized verb in a different language; and to elaborate a methodology for describing specialized verbs as well as for assigning their equivalents based on the theory of Frame Semantics (Fillmore 1976, 1977, 1982, 1985; Fillmore and Atkins 1992), on the FrameNet methodology (Ruppenhofer et al. 2010) as well as on model developed in the OLST for building specialized resources (L'Homme 2008). Ultimately, it aimed at contributing to: a better understanding of the phenomenon of terminological equivalence; to the development of multilingual lexical resources, in general; and to the development of multilingual lexical resources that describe legal terminology, in particular.

The methodology that was designed consisted in: the extraction of candidate terms from a comparable corpus of judgments by means of a term extractor tool called TermoStat (Drouin 2003); the validation of the candidate terms based on the criteria set out in L'Homme (2004); the description of the actantial structures of 200 Portuguese and English terms; the description of the frames that the terms evoke based on the criteria used by FrameNetters (Ruppenhofer et al. 2010); the encoding of the data in an xml editor; the annotation of the contexts in which the terms occur (L'Homme 2008); the validation of the data; and, the assignment of equivalents.

117 pairs of full equivalents as well as 48 pairs of partial equivalents were identified by means of the frame labels attributed to the terms and by the subsequent comparison of their descriptions. It was observed that full equivalents: 1) evoke the same frame; 2) profile the same FEs, i.e. have the number of the actants; 3) have comparable actants, i.e. the verbs combine with linguistic realizations that denote the same kind of entities; and 4) display no significant differences in their syntactic patterns. Equivalents were considered partial whenever any of the criteria 2-4 were not met.

The study started with the review of: the literature on legal language; the definitions of equivalence provided in bilingual lexicography and in terminology; the methodologies that the disciplines use to assign equivalents; the approaches and frameworks that have been applied to the description of specialized verbs; the applicability of Frame Semantics and the FrameNet methodology to the elaboration of general and specialized lexical resources, in general, and to the elaboration of multilingual resources, in particular. The interpretation of the research results allows us to confirm or refute some principles discussed in the state of the art and to suggest a number of avenues for future research development.

With reference to the main characteristics of legal language, in general, and of judgments as a text, in particular, the findings of the research, namely the observation of the selected verbs, confirmed the proximity between the legal lexicon and the general lexicon that is described in the literature as well as the importance of taking legal genres into account when designing a lexical resource that describes legal terminology. In fact, most verbs that were selected are part of the general lexicon, but they denote actions that are relevant in the corpus texts and, as a result, their behaviour may display specificities (e.g. unusual choice of prepositions, combinatorial preferences).

In contrast, the findings of the research do not support the view according to which legal terminology is untranslatable because it is “culture-bound” and therefore extremely anisomorphic. For instance, Sandrini (1995, 1996) argues that absolute equivalence is only possible with concepts coming from the same legal system and proposes a comparative and descriptive approach in terminography that does not aim at complete conceptual correspondence but at complete documentation of the national concepts. The results obtained in this research show that, at least, specialized verbs are translatable because in most cases more than one equivalent was assigned to a verb. This leads us to formulate two hypotheses and suggest a compromise between the two. On the one hand, specialized verbs

may be more easily translated than noun terms; on the other, the methodology for assigning equivalents that was proposed is efficient enough to gather candidate equivalents that can be used to translate legal texts.

As far as the way in which the phenomenon of equivalence has been approached in lexicography and in terminology, the findings of the research reveal that equivalence is a relationship between two terms that evoke the same conceptual scenario and that have a more or less similar linguistic behaviour. Also, a given term in one language can have one or more equivalents in another language and these can be more or less interchangeable due to differences in their collocational contexts. Full equivalents are interchangeable in all contexts, whereas partial equivalents are not. As the candidate equivalents were grouped together by means of the frame labels that were attributed to the terms in each language separately, the equivalence relationship can be said to be discovered. However, as candidate equivalents were validated afterwards through the comparison of their descriptions, the equivalence relationship can be said to be confirmed or refuted and, therefore, created by the terminologist.

The results that were obtained in this research concerning the equivalence between specialized verbs do not differ immensely from the findings reported in Schmidt (2009), which were based on the observation of equivalents that belong to various parts of speech and that were extracted from a parallel corpus. According to Schmidt, LUs in different languages that share identical meaning, parts of speech and argument structure are considered full equivalents. Also, according to him, partial equivalence occurs when LUs in different languages can share the same semantic characteristics and argument structures, but differ in their part of speech or in their syntactic properties. In this respect, the findings of our research point to more reasons why equivalents can be given the “partial” status.

As the research specifically aimed at assigning the equivalents of specialized verbs, the various theoretical frameworks that have been applied to the treatment of this kind of predicative units were reviewed as well as the few contributions on the identification of specialized verb equivalents. The findings of the research confirm the principles set out in the works of Chodkiewicz and Gross (2005), Lerat (2002), L'Homme (2008) and Pimentel and L'Homme (2011): the argument structures of the verbs as well as a classification of the actants in terms of the entities that can instantiate them are of paramount importance to the identification of the equivalents. Therefore, in this respect, the findings of the research are not original. In fact, the originality of the current contribution lies in the systematicity of the methodology as well as in the possibility it provides for identifying several candidate equivalents and for differentiating between full and partial equivalents. This leads us to draw considerations on the kind of theoretical frameworks that can be used to describe specialized verbs and assign their equivalents.

It was observed that the arguments of predicates in legal discourse usually refer to abstract legal entities which can be sub-categorized by means of fine-grained generalizations. The theories that were discussed that are the best equipped to examine specialized verbs in these molds are the theory of the classes of objects and Frame Semantics, even though the theories were originally conceived to describe general language. As mentioned, the main difference between the theory of the classes of objects and the theory of Frame Semantics as well as FrameNet's methodology resides in the fact that the latter directly explains the scenarios in which a given class of predicates participate whereas the former does not. In addition, the notion of *semantic frame* as a scenario that is to a fair degree language independent (Boas 2005; Baker 2009) served, in this research, not only to describe the extralinguistic properties of specialized verbs but also to assign their equivalents.

However, even though the labels attributed to each frame were an efficient means for grouping together candidate equivalents, they are not exempt of subjectivity. Calling a frame [Verdict] instead of [Decision] or [Judgment] is, most of the times, a matter of choice that the terminologist has to make the same way sense distinctions are to a certain degree the product of the terminologists' intellectual labours. Nonetheless, it should be noted that as arbitrary as the labels attributed to the frames may be they were only taken as the starting point and that the most important basis for the assignment of equivalents was the comparison of the ways in which the terms perspectivize the frame. As mentioned in section 5.2.4, the criterion that proved to be the most relevant for grouping terms together as well as for assigning their equivalents takes into account the number and nature of core FEs that a given term may profile. In this study, this criterion is also the one that best illustrates the "common features" to which Atkins et al. (2003: 334 citing Hanks (2000) and Kilgarriff (1997)) refer when they propose that sense distinctions be based on "clusters of instances that share enough common features to justify being treated as a coherent 'meaning group'".

In order to counter the relative arbitrariness of the frame labels and to turn the sense distinctions into a product of the terminologists' intellectual labours that has value for future users, a number of avenues for research should be discussed. The first one concerns the automatization of some of the tasks carried out in the research, namely the selection and annotation of contexts. It has been previously mentioned that the task of annotating the contexts in which the terms occur (section 4.3.8) could benefit from a higher degree of automatization, such as the one proposed in Hadouche et al. (2010) and evaluated in Hadouche et al. (2011). The second one concerns a systematic validation of the data involving a multidisciplinary team composed by legal experts and translators.

Finally, in order to provide a larger coverage of the subject field and offer translators more options for choosing the necessary equivalents, it would be relevant to

study: a larger amount of terms; terms belonging to other parts of speech, such as nouns, adjectives and adverbs; terms in other languages; terms that occur in other legal genres; and the relations between the frames that the terms evoke. With a higher degree of automatization as well as with the implementation of the aforementioned research avenues, the end product of this study, JuriDiCo, could not only be an observatory of the relationship of equivalence for terminologists but also a lexical resource for anyone interested in legal terminology.

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Appendix 1. A Portuguese judgment

Acórdão do Supremo Tribunal de Justiça

Processo: 532/09.5YFLSB

Nº Convencional: 3ª SECCÃO

Relator: MAIA COSTA

Descritores: SUSPEIÇÃO

ESCUSA

JUIZ

IMPARCIALIDADE

ISENÇÃO

JUIZ NATURAL

PRINCÍPIO DA CONFIANÇA

Nº do Documento: SJ

Data do Acórdão: 09/23/2009

Votação: UNANIMIDADE

Texto Integral: S

Privacidade: 1

Meio Processual: ESCUSA/RECUSA

Decisão: INDEFERIDO O PEDIDO DE ESCUSA

Sumário :

I - O fundamento da suspeição a que se refere o art. 43.º do CPP deve ser avaliado segundo dois parâmetros: um de natureza subjectiva, outro de ordem objectiva.

II - O primeiro indagará se o juiz manifestou, ou tem motivo para ter, algum interesse pessoal no processo, ficando assim inevitavelmente afectada a sua imparcialidade enquanto julgador.

III -O segundo averiguará se, do ponto de vista de um cidadão comum, de um homem médio conhecedor das circunstâncias do caso, a confiança na imparcialidade e isenção do juiz estaria seriamente lesada.

IV -Em todo o caso, os motivos da suspeita terão que ser, como a lei refere, sérios e graves para servirem de fundamento à recusa ou à escusa, pois o afastamento do juiz (natural) do processo só pode ser determinado por razões mais fortes do que aquelas que o princípio do juiz natural visa salvaguardar, que se relacionam com a independência, mas também com a imparcialidade do tribunal.

V - O facto de o arguido em recurso na Relação, em cujo julgamento o Juiz-Desembargador peticionante da escusa participa como adjunto, ser irmão de um amigo seu, desacompanhado de outros factores (não existe qualquer ligação directa entre o peticionante e o arguido, nem sequer é afirmado que se conheçam pessoalmente; a relação de amizade é com o irmão do arguido, que aliás não teve intervenção no processo), não se mostra suficiente para pôr objectivamente em crise a confiança no peticionante, ou seja, não constitui um motivo sério e grave para o afastar do julgamento da causa, enquanto juiz natural do processo, na condição de adjunto do colectivo de juizes, não sendo, em resumo, para um observador comum e desinteressado, um motivo de desconfiança na capacidade do juiz em se manter fiel à imparcialidade que o seu estatuto lhe impõe.

Decisão Texto Integral:

Acordam no Supremo Tribunal de Justiça:

I. RELATÓRIO

AA, Juiz-Desembargador no Tribunal da Relação de Guimarães, vem, nos termos do art. 43º, nº 4 do Código de Processo Penal (CPP), pedir escusa de intervenção, como adjunto, no proc. nº 869/07.8GCBRG.G1, daquele Tribunal da Relação, com base nos seguintes fundamentos:

1º - O requerente foi, durante cerca de seis anos, Juiz no Tribunal de Família e de Menores de Braga.

2º - Durante esse período de tempo, o requerente manteve relações institucionais com o Director de uma Instituição Particular de Solidariedade Social.

3º - Desse relacionamento surgiu, também, a criação de fortes relações pessoais de amizade e, terminada a função do requerente naquele Tribunal, as relações de amizade mantiveram-se e aprofundaram-se, sobretudo pelas qualidades pessoais daquele, às quais o ora requerente procura corresponder.

4º - Nessa media, o requerente e o referido Director da instituição mantêm estreitos contactos, com encontros regulares (refeições, cafés, encontros festivos, por exemplo), incluindo na residência pessoal do citado amigo, sita em Santa Maria de Bouro, Amares.

5º Ora, sucede que, ao aperceber-se dos apelidos do arguido, o requerente veio a confirmar que se trata de um irmão desse seu amigo, que reside naquele mesmo lugar.

6º - Tal circunstância, se bem que subjectivamente possa não ter – e não tem - qualquer relevo, do ponto de vista objectivo é susceptível de fazer suscitar sérias reservas sobre a imparcialidade do requerente, o que o leva a formular o presente pedido. (...)

O Ministério Público teve vista dos autos.

Colhidos os vistos, cumpre decidir.

II. FUNDAMENTAÇÃO

Nos termos do art. 43º do CPP, a intervenção do juiz num processo pode ser recusada, ou autorizada a escusa por ele pedida, quando houver o risco de a sua intervenção ser considerada suspeita “por existir motivo, sério e grave, adequado a gerar desconfiança sobre a sua imparcialidade” (nº 1).

Como a doutrina e a jurisprudência têm assinalado, o fundamento da “suspeição” deverá ser avaliado segundo dois parâmetros: um de natureza subjectiva, outro de ordem objectiva. O primeiro indagará se o juiz manifestou, ou tem motivo para ter, algum interesse pessoal no processo, ficando assim inevitavelmente afectada a sua imparcialidade enquanto julgador. O segundo averiguará se, do ponto de vista de um cidadão comum, de um homem médio conhecedor das circunstâncias do caso, a confiança na imparcialidade e isenção do juiz estaria seriamente lesada. Em todo o caso, acentue-se que os motivos da suspeita terão que ser, como a lei refere, sérios e graves para servirem de fundamento à recusa ou à escusa. Pois o afastamento do juiz (natural) do processo só pode ser determinado por razões mais fortes do que aquelas que o princípio do juiz natural visa salvaguardar, que se relacionam com a independência, mas também com a imparcialidade do tribunal.

Analisemos então o caso dos autos. Quanto ao primeiro vector, é evidente que falece qualquer motivo para escusa. Na verdade, não se vislumbra nenhum interesse pessoal do peticionante na causa que irá julgar. Ele próprio reconhece que nenhuma circunstância subjectiva afecta a sua imparcialidade. Mas existirá, como ele pretende, o risco, do ponto de vista objectivo, de a sua intervenção suscitar “sérias reservas” sobre a sua imparcialidade? O fundamento invocado para esse risco é o facto de o arguido do processo em recurso na Relação de Guimarães, em cujo julgamento participa como adjunto, ser irmão de um amigo seu. Ou seja, não existe qualquer ligação directa entre o peticionante e o arguido, nem sequer é afirmado que se conheçam pessoalmente; a relação de amizade é com o irmão do arguido, que aliás não teve intervenção no processo. A mera existência dessa relação com o irmão do arguido, desacompanhada de outros factores, não se mostra suficiente para pôr objectivamente em crise a confiança no peticionante, ou seja, não constitui um motivo suficientemente sério e grave para afastar do julgamento da causa o peticionante, enquanto juiz natural do processo, na condição de adjunto do colectivo de juízes, não constitui, em resumo, para um observador comum e desinteressado, um motivo de desconfiança na capacidade do juiz em se manter fiel à imparcialidade que o seu estatuto lhe impõe. Improcede, pois, o pedido.

III. DECISÃO

Com base no exposto, indefere-se o pedido de escusa.
Sem custas.

Lisboa, 23 de Setembro de 2009

Maia Costa (Relator)
Pires da Graça

Appendix 2. Indexing terms of the Portuguese judgments

Ranking	Indexing terms of the Portuguese corpus	Frequency
1	contrato (~ de arrendamento, ~ de compra e venda, ~ de empreitada, ~ de prestação de serviço, ~ de seguro, ~ de trabalho, ~ promessa, ~ contrato-promessa de compra e venda, etc.)	100
2	direito (~ ao recurso, ~ de defesa, etc.)	70
3	dano (~ não patrimonial, ~ futuros, etc.)	57
4	nulidade (~ da sentença, ~ de acórdão, ~ do contrato, ~ por falta de forma legal etc.)	55
5	princípio da confiança, princípio da igualdade, princípio do contraditório, etc.	45
6	recurso (~ da matéria de facto, ~ de revisão, ~ penal etc.)	41
7	responsabilidade (~ civil, ~ civil extracontratual, ~ contratual etc.)	36
8	competência (~ da relação, ~ do supremo tribunal de justiça, ~ internacional, ~ material)	33
9	ónus da prova	33
10	indemnização	31
11	matéria de facto	30
12	acórdão (~ da relação, ~ do tribunal coletivo, etc.)	23
13	acção (~ cível, ~ de impugnação de despedimento, ~ de reivindicação, etc.)	22
14	acidente de trabalho	19
15	culpa	19
16	prova (~ testemunhal, etc.)	19
17	interpretação (~ do negócio jurídico, etc.)	17
18	nexo de causalidade	17
19	obrigação (~ de indemnizar, ~ pecuniária etc.)	17
20	prazo (~ de prescrição, etc.)	17
21	arrendamento (~ comercial, ~ rural, etc.)	16
22	impugnação (~ da matéria de facto, ~ pauliana, etc.)	16
23	abuso de direito (~ abuso do direito)	15
24	resolução (~ do contrato, ~ pelo trabalhador, etc.)	15
25	caso julgado (~ formal, ~ material)	14
26	cláusula (~ penal, ~ resolutive, ~ contratual, etc.)	14
27	cúmulo jurídico, cúmulo material, cúmulo por arrastamento	14
28	justa causa (~ de despedimento, ~ de rescisão, etc.)	14
29	dever (~ de lealdade, ~ acessórios, etc.)	13
30	incumprimento (~ definitivo, ~ do contrato, etc.)	13
31	poderes do supremo tribunal de justiça	13
32	seguro (~ obrigatório, etc.)	13

33	violação de regras de segurança	13
34	fundamentação (~ de direito, ~ de facto etc.)	12
35	medida concreta da pena	12
36	admissibilidade de recurso	11
37	aplicação da lei no tempo + aplicação da lei processual no tempo	11
38	despedimento (~ colectivo, ~ ilícito etc.)	11
39	documento (~ escrito, ~ particular etc.)	11
40	erro (~ de escrita, ~ material, ~ -motivo, etc.)	11
41	pedido (~ de indemnização civil etc.)	11
42	facto (~ ilícito, ~ conclusivos, etc.)	10
43	omissão de pronúncia	10
44	pena única	10

Appendix 3. A Canadian judgment

SUPREME COURT OF CANADA

Citation: R. v. Solowan, [2008] 3 S.C.R. 309, 2008 SCC 62

Date: 20081114

Docket: 32237

Between:

Kenneth Stephen Terrance Solowan

Appellant

and

Her Majesty The Queen

Respondent

Coram: Binnie, LeBel, Deschamps, Fish, Abella, Charron and Rothstein JJ.

Reasons for Judgment:

(paras. 1 to 18)

Fish J. (Binnie, LeBel, Deschamps, Abella, Charron and Rothstein JJ. concurring)

Appeal heard and judgment rendered: October 8, 2008

Reasons delivered: November 14, 2008

on appeal from the court of appeal for british columbia

Criminal law — Sentencing — Summary convictions — Crown electing to prosecute hybrid offences by way of summary conviction — Trial judge imposing maximum sentence — Whether trial judge erred in imposing maximum custodial sentences without first finding that accused was “worst offender who had committed the worst offence” — Whether “worst offender committing the worst offence” principle limits imposition of maximum sentence where it is otherwise appropriate in light of sentencing principles — Whether sentences imposed proportionate to offences — Whether Court of Appeal disregarded Crown’s election to proceed by way of summary conviction — Criminal Code, R.S.C. 1985, c. C- 46, Part XXIII, ss. 718.1, 787(1).

The accused pleaded guilty to three offences, including two hybrid offences upon which the Crown had elected to proceed summarily. He was sentenced to a total of 15 months’ imprisonment. On appeal, the accused argued that the trial judge had erred in imposing the maximum custodial sentence of six months for each offence without first finding that “he was the worst offender who had committed the worst offence”. In rejecting this submission, the Court of Appeal stated that “[t]he maximum sentence for the offences was not imposed here. It is available only where the Crown elects to proceed by indictment.” The Court of Appeal nonetheless found the global sentence to be excessive and reduced it from 15 to 12 months. The accused now appeals on the ground that the Court of Appeal disregarded the Crown’s election to proceed by way of summary conviction.

Held: The appeal should be dismissed.

The sentencing principles set out in Part XXIII of the Criminal Code apply to both indictable and summary conviction offences. Where the Crown elects to prosecute a hybrid offence summarily, as it did in this case, the offence must be treated for sentencing purposes as a summary conviction offence and the sentencing court must determine the appropriate punishment within the limits established by Parliament for that mode of procedure. Absent an error of principle, failure to consider a relevant factor, or overemphasis of the appropriate factors, any sentence within that range — including the maximum — should not be varied on appeal unless it is demonstrably inadequate or excessive. The “worst offender, worst offence” principle no longer operates as a constraint on the imposition of a maximum sentence where a maximum sentence is otherwise appropriate, bearing in mind the principles set out in Part XXIII. In this case, the Court of Appeal was alert to the sentencing principles set out in the Code, particularly the fundamental principle of proportionality, and did not err in affirming the maximum custodial sentence for the second hybrid offence. [3] [8] [13] [16]

Cases Cited

Referred to: *R. v. Cheddesingh*, [2004] 1 S.C.R. 433, 2004 SCC 16; *R. v. L.M.*, [2008] 2 S.C.R. 163, 2008 SCC 31; *R. v.—Gladue*, [1999] 1 S.C.R. 688.

Statutes and Regulations Cited

Criminal Code, R.S.C. 1985, c. C- 46, Part XXIII, ss. 716, 718.1, 718.2(d), (e), 787(1).

APPEAL from a judgment of the British Columbia Court of Appeal (Saunders, Lowry and Kirkpatrick JJ.A.) (2007), 50 M.V.R. (5th) 30, [2007] B.C.J. No. 1658 (QL), 2007 CarswellBC 1718, 2007 BCCA 388, varying the sentence imposed by Hoy Prov. Ct. J., 2006 CarswellBC 3501. Appeal dismissed.

Peter Benning and Roger P. Thirkell, for the appellant.

Wendy L. Rubin, for the respondent.

The judgment of the Court was delivered by
Fish J. —

I

[1] The appellant pleaded guilty to three offences and was sentenced by the trial judge to a total of 15 months’ imprisonment: three months for taking a motor vehicle without consent; six months for possession of stolen property; and six months for failure to stop a motor vehicle while being pursued by the police. The latter two counts were for hybrid offences upon which the Crown had elected to proceed summarily. On those two counts, the appellant received the maximum custodial sentences permitted by law.

[2] The appellant attacked his six-month sentences on the ground that the trial judge “erred in imposing the maximum allowable sentence of six months on two of the counts without first finding that he was the worst offender who had committed the worst offence”. The British Columbia Court of Appeal rejected this submission, but nonetheless reduced the appellant’s sentence for possession

of stolen property from six to three months on the ground that a global sentence of 15 months was excessive in the circumstances. The appellant's six-month sentence for failure to stop was left undisturbed.

[3] The "worst offender, worst offence" principle invoked by the appellant in the Court of Appeal has been laid to rest. It no longer operates as a constraint on the imposition of a maximum sentence where a maximum sentence is otherwise appropriate, bearing in mind the principles of sentencing set out in Part XXIII of the Criminal Code, R.S.C. 1985, c. C-46: *R. v. Cheddesingh*, [2004] 1 S.C.R. 433, 2004 SCC 16; *R. v. L.M.*, [2008] 2 S.C.R. 163, 2008 SCC 31. Unwarranted resort to maximum sentences is adequately precluded by a proper application of those principles, notably the fundamental principle of proportionality set out in s. 718.1 of the Code, and Parliament's direction in s. 718.2(d) and (e) to impose the least restrictive sanction appropriate in the circumstances: see *R. v. Gladue*, [1999] 1 S.C.R. 688.

[4] Nothing in the reasons of the Court of Appeal calls into question any of these principles.

II

[5] With his "worst offender, worst offence" ground of appeal thus foreclosed, the appellant instead relies in this Court on the reasons given by the Court of Appeal in disposing of that issue.

[6] Speaking for a unanimous court, Lowry J.A. rejected the appellant's submission in these terms:

The applicant contends that the judge erred in imposing the maximum sentence for which the law provides on two of the counts without first finding he was the worst offender committing the worst offence which the judge could not have done. The applicant says the sentences are in the result at odds with the principle of proportionality. But possession of stolen property under \$5,000 and failing to stop are hybrid offences. The Crown can proceed summarily or by indictment. The maximum sentence for the offences was not imposed here. It is available only where the Crown elects to proceed by indictment. [Emphasis added.]

((2007), 50 M.V.R. (5th) 30, 2007 BCCA 388, at para. 9)

[7] Pointing to the underlined words in this passage, the appellant contends that the Court of Appeal disregarded the Crown's election to proceed by way of summary conviction. In considering the fitness of the sentence imposed, says the appellant, the Court of Appeal mistakenly considered that the maximum sentence to which he was liable in this case was the maximum punishment available had the Crown elected to proceed by indictment.

[8] Read literally, the impugned passage is capable of this construction. With respect, it is to that extent wrong in law. Where the Crown elects to prosecute a hybrid offence summarily, as it did in this case, that offence must be treated for sentencing purposes as a summary conviction offence. The defendant is therefore liable, except where otherwise provided by law, to a fine of not more than \$5,000 (\$2,000 at the time of trial in this case) or to imprisonment for six months or to both: Criminal Code, s. 787(1). Accordingly, the appellant did indeed receive the maximum custodial sentence on the only count that remains in issue here — for failure to stop a motor vehicle while being pursued by the police — and the question is whether the Court of Appeal erred in law in affirming that sentence.

[9] I would answer that question in the negative.

[10] As mentioned earlier, the "worst offender, worst offence" principle no longer operates as a constraint on the imposition of maximum sentences. A maximum sentence, like any other, will be subject to intervention on appeal only where the trial court applied the wrong principles or the sentence was clearly excessive in the circumstances.

[11] In this case, the totality of the sentences was the prime focus of the representations by both counsel at trial. Indeed, but for the six-month maximum applicable to all three offences, the trial

judge would have acceded to the appellant's plea for a longer global sentence in order to facilitate his rehabilitation: Through his counsel at trial, the appellant urged the sentencing judge to impose a two-year penitentiary term to "help him . . . access better programs".

[12] Moreover, through his counsel in this Court (who did not represent him at trial), the appellant does not now argue that his global sentence of 12 months' imprisonment is manifestly excessive. He submits instead that the Court of Appeal, in considering the fitness of the six-month sentence that remains in issue, failed to give effect to the sentencing principles, notably the fundamental principle of proportionality, made applicable by Parliament in Part XXIII of the Criminal Code to indictable and summary conviction offences alike. Section 718.1 of the Code provides:

A sentence must be proportionate to the gravity of the offence and the degree of responsibility of the offender.

[13] Considering the reasons of the Court of Appeal in their entirety, and bearing in mind the appellant's previous convictions and the proceedings at trial, I am satisfied that the Court of Appeal was alert to the sentencing principles set out in the Code — particularly, I might add, to the fundamental principle of proportionality.

[14] Manifestly, that is why the court reduced the appellant's global sentence from 15 to 12 months' imprisonment.

III

[15] A fit sentence for a hybrid offence is neither a function nor a fraction of the sentence that might have been imposed had the Crown elected to proceed otherwise than it did. More particularly, the sentence for a hybrid offence prosecuted summarily should not be "scaled down" from the maximum on summary conviction simply because the defendant would likely have received less than the maximum had he or she been prosecuted by indictment. Likewise, upon indictment, the sentence should not be "scaled up" from the sentence that the accused might well have received if prosecuted by summary conviction.

[16] In short, the sentencing principles set out in Part XXIII of the Criminal Code apply to both indictable and summary conviction offences. Parliament has made that clear in the definition of "court" at s. 716 of the Code. And when the Crown elects to prosecute a "hybrid" offence by way of summary conviction, the sentencing court is bound by the Crown's election to determine the appropriate punishment within the limits established by Parliament for that mode of procedure. Absent an error of principle, failure to consider a relevant factor, or overemphasis of the appropriate factors, any sentence within that range — including the maximum — should not be varied on appeal unless it is demonstrably inadequate or excessive.

IV

[17] In affirming the appellant's six-month sentence on one count while reducing his global sentence from 15 months to 12, the Court of Appeal committed no error warranting our intervention. The court properly took into account the proceedings at trial, the mandatory requirement of proportionality and the other governing principles as well.

[18] The appellant's further appeal to this Court was therefore dismissed at the conclusion of the hearing.

Appeal dismissed.

Solicitors for the appellant: Thirkell & Company, Abbotsford.

Solicitor for the respondent: Attorney General of British Columbia, Vancouver.

Appendix 4. Indexing terms of the Canadian judgments

Ranking	Indexing terms of the English corpus	Frequency
1	Whether...	377
2	Charter of Rights	109
3	Criminal law	81
4	Evidence (of sth, exclusion of evidence, etc.)	79
5	Right (to equality, to life, etc.)	73
6	Police (Act, officer, powers, etc.)	72
7	Constitutional law	65
8	Canadian Charter of Rights and Freedoms	60
9	Trial judge	56
10	Duty (of care, to accommodate, etc.)	49
11	Crown (etc.)	40
12	Whether trial judge	37
13	Employee (etc.)	36
14	Federal	36
15	Criminal Code	33
16	Standard (of review, of proof, etc.)	28
17	Employment	23
18	Accused convicted of (first degree murder, second degree murder, sexual assault, etc.)	22
19	Provincial (Crown, human rights, etc.)	22
20	Income tax	20
21	Charge to jury	19
22	Civil procedure	17
23	Constitution Act	16
24	Sentencing	16
25	Taxation	15
26	Negligence (Act, etc.)	14
27	Appeals	13
28	Immigration (law, and Refugee Protection Act)	13
29	Remedy	13
30	Scope (of duty, etc.)	13
31	Trial	12
32	Admissibility	12
33	Motion (dismissed, to strike, etc.)	12
34	Administrative law	11
35	Torts	11
36	Civil Code of Québec	10

Appendix 5. Partial list of Portuguese candidate terms

Portuguese candidate terms	Frequency	Specificity
provar	2897	128.71
invocar	1579	110.17
assentar	1650	97.74
suprir	610	86.34
impugnar	604	85.69
tender	3431	82.33
aludir	732	80.27
alegar	1324	77.34
resultar	1853	76.94
celebrar	1167	75.57
fixar	1272	73.21
violar	907	72.19
condenar	1569	71.93
deduzir	531	70.65
constar	1147	69.99
intentar	371	68.83
julgar	1363	68.79
auferir	494	68.66
proceder	1358	68.14
transitar	594	65.58
improceder	265	64.68
peticionar	257	63.28
revogar	472	62.30
proferir	646	61.37
interpor	400	59.67
acrescer	532	57.22
absolver	389	54.58
acordar	747	54.53
arguir	340	54.27
morar	625	53.99

Appendix 6. Partial list of English candidate terms

English candidate terms	Frequency	Specificity
accuse	2175	152.00
impugn	258	81.92
authorize	340	80.34
determine	1297	77.32
concur	219	70.56
require	1742	68.70
constitute	466	68.33
conclude	669	68.09
impose	765	60.73
apply	1444	58.67
err	205	58.21
recognize	378	54.82
justify	501	53.17
consider	1396	51.06
dismiss	551	50.97
rebut	132	50.66
preclude	193	48.94
entitle	531	47.17
infringe	148	46.38
deem	268	45.93
satisfy	463	45.25
adduce	106	44.54
establish	906	43.24
disclose	287	42.82
violate	178	41.24
relate	645	40.72
enumerate	77	40.14
mitigate	102	39.49
interpret	296	38.13
provide	1716	38.08

Appendix 7. Frames related to the subject field of law (FrameNet 2010)

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>Abusing</p> <p>In this frame an Abuser repeatedly treats the Victim in a cruel and violent way, including physically harming or forcing the Victim to engage in sexual activity against their will. The Victim usually lacks the power to resist or fight back. A Type of abuse may be indicated. There may also be a Degree.</p> <p>Her father verbally ABUSED her mother.</p>	<p>Abuser [Abu] Semantic Type Sentient The Abuser subjects the Victim to repeated verbal, physical, emotional or sexual attacks.</p> <p>Fred ABUSED Martha by locking her into a closet .</p> <p>Victim [Vic] Semantic Type Sentient The Victim is the recipient of the Abuser's actions. Fred ABUSED Martha by locking her into a closet.</p>	<p><i>abuse.n, abuse.v, abusive.a, batter.v, domestic violence.n, maltreat.v, maltreatment.n</i></p>	<p>Inherits From: Committing crime</p> <p>Uses: Cause harm</p>
<p>Appeal</p> <p>In the Appeal stage of the criminal process the Convict or his or her Representative applies to a higher Court to reverse the Decision of the lower court on certain Grounds.</p> <p>The defense plans to APPEAL the court's decision on the grounds that the judge violated Code 81.b.</p> <p>John Michaels will APPEAL his conviction.</p>	<p>Convict [Con] The Convict is the individual convicted of the crime who may make an appeal on her or his behalf.</p> <p>Decision [Dec] The Decision is the ruling handed down by the first court.</p> <p>Representative [Rep] The Representative applies to a higher court on behalf of the Convict.</p>	<p><i>appeal.n, appeal.v, appellant.n, appellate.a, plead.v</i></p>	<p>Uses: Criminal process</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>Arraignment</p> <p>At a court hearing, a Defendant is informed of the Charges against him or her, (usually) enters a plea, and a decision is made by a Judge as to the amount of bail, if any.</p>	<p>Charges [Chrg] Charges is the crime with which the Defendant is charged. Jan was ARRAIGNED on eight counts of treason.</p> <p>Defendant [Def] The Defendant is charged with a crime by a Judge. Jan was ARRAIGNED on eight counts of treason.</p> <p>Judge [Jud] Semantic Type Sentient The Judge is the head of the court where the arraignment occurs. Jan was ARRAIGNED on eight counts of treason before Duncan Smith.</p>	<p><i>arraign.v, arraignment.n</i></p>	<p>Inherits From: Process</p> <p>Subframe of: Criminal_process</p> <p>Has Subframes: Bail_decision, Entering_of_plea, Notification_of_charges</p> <p>Precedes: Trial</p> <p>Is Preceded by: Arrest</p>
<p>Arrest</p> <p>Authorities charge a Suspect, who is under suspicion of having committed a crime (the Charges), and take him/her into custody.</p> <p>The police ARRESTED Harry.</p>	<p>Authorities [Auth] Semantic Type Sentient The Authorities charge the Suspect with committing a crime, and take him/her into custody. The police ARRESTED Harry on charges of manslaughter.</p> <p>Charges [Chrg] Charges identifies a category within the legal system; it is the crime with which the Suspect is charged. The police ARRESTED Harry on charges of manslaughter.</p>	<p><i>apprehend.v, apprehension.n, arrest.n, arrest.v, book.v, bust.n, bust.v, collar.v, cop.v, nab.v, summons.v</i></p>	<p>Inherits From: Intentionally_affect</p> <p>Subframe of: Criminal_process</p> <p>Precedes: Arraignment</p> <p>Uses: Inhibit_movement</p> <p>Is Used By: Surrendering</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
	<p>Offense [Off] Offense identifies the ordinary language use of the reason for which a Suspect is arrested. They arrested Harry for shoplifting.</p> <p>Suspect [Susp] The Suspect is taken into custody, under suspicion of having committed a crime. The police ARRESTED Harry on charges of manslaughter.</p>		
<p>Arson</p> <p>A Perpetrator intentionally sets fire to his own or someone else's property, often in order to collect an insurance payment on this property.</p>	<p>Offense [off] Semantic Type State_of_affairs The illegal setting of fire to destroy something.</p> <p>Perpetrator [Perp] Semantic Type Sentient The Perpetrator sets fire to a building in order to gain some benefit from so doing. The two men were charged with ARSON when found running from the burning factory.</p> <p>Victim [Vict] Semantic Type Sentient Victim identifies the entity that is negatively effected by the arson. There has been an increase in the number of ARSON attacks on local schools.</p>	<p><i>arson.n, arsonist.n</i></p>	<p>Inherits From: Offenses</p> <p>Uses: Intentionally affect, Setting fire</p>
<p>Bail_decision</p> <p>This frame covers a step in a criminal process</p>	<p>Accused [Acc] At the time of bail setting, the Accused is held without bail/bond, released on his/her own</p>	<p><i>bail.n, bond.n, fix.v, order.v, set.v</i></p>	<p>Inherits From: Intentionally act</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>in which a Judge decides whether the Accused should be released on bail, and, if so, what the amount of the bail should be.</p>	<p>recognizance, or required to give the Court a specific amount of money for bail. Judge Duncan FIXED the doctor's bail at one million dollars.</p> <p>Judge [Judge] Semantic Type Sentient The Judge, as head of the Court, determines the Accused's bail. Judge Duncan FIXED the doctor's bail at one million dollars.</p> <p>Status [Stat] Status identifies the decision made with regard to bail. The possible statuses are "without bail/bond", "on one's own recognizance", or a specific amount of money required for bail. Judge Duncan FIXED the doctor's bail at one million dollars.</p>		<p>Subframe of: Arraignment</p> <p>Is Preceded by: Entering_of_plea</p> <p>Uses: Communication</p>
<p>Committing_crime</p> <p>A Perpetrator (generally intentionally) commits a Crime, i.e. does something not permitted by the laws of society.</p> <p>They PERPETRATED a felony by substituting a lie for negotiations.</p> <p>The suspect had allegedly COMMITTED the crime to gain the attention of a female celebrity.</p>	<p>Crime [Cr] An act, generally intentional, that has been formally forbidden by law. How can he COMMIT treason against the King of England in a foreign country, if he is not English? He PERPETRATED a crime against mother nature.</p> <p>Perpetrator [Perp] Semantic Type Sentient The individual that commits a Crime. How can he COMMIT treason against the King</p>	<p><i>commission.n, commit.v, crime.n, perpetrate.v</i></p>	<p>Inherits From: Misdeed</p> <p>Is Inherited By: Abusing, Kidnapping, Piracy, Rape, Robbery, Smuggling, Theft</p> <p>Subframe of: Crime_scenario</p> <p>Precedes: Criminal_investigation</p> <p>Uses: Compliance, Legality</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
	<p>of England in a foreign country , if he is not English? He PERPETRATED a crime against mother nature.</p>		<p>Is Used By: Offenses</p>
<p>Compliance</p> <p>This frame concerns Acts and State_of_Affairs for which Protagonists are responsible and which either follow or violate some set of rules or Norms.</p>	<p>Act [Act] Semantic Type State_of affairs This FE identifies the Act that is judged to be in or out of compliance with the Norms. Jo's VIOLATION of the no trespassing law came as a surprise.</p> <p>Norm [Norm] This FE identifies the rules or Norms that ought to guide a person's behavior. John VIOLATED the law by not paying taxes.</p> <p>Protagonist [Prot] Semantic Type Sentient The Protagonist's behavior is in or out of compliance with norms. Jo VIOLATED the no trespassing law.</p> <p>State_of_Affairs [soa] A State_of_Affairs may violate a law or rule.</p> <p>Their pricing policy VIOLATED inter-governmental agreements.</p>	<p><i>(in/out) line.n, abide_((by)).v, adhere.v, adherence.n, breach.n, breach.v, break.v, circumvent.v, compliance.n, compliant.a, comply.v, conform.v, conformity.n, contrary.a, contravene.v, contravention.n, disobey.v, flout.v, follow.v, honor.v, in accordance.a, keep.v, lawless.a, noncompliance.n, obedient.a, obey.v, observance.n, observant.a, observe.v, play by the rules.v, submit.v, transgress.v, transgression.n, violate.v, violation.n</i></p>	<p>Inherits From: Satisfying, Social_behavior_evaluation</p> <p>Uses: Obligation_scenario</p> <p>Is Used By: Committing_crime, Legality, Offenses, Strictness</p>
<p>Court_examination</p> <p>A Questioner asks a Witness (or defendant) questions in the context of a court procedure.</p>	<p>Questioner [Qu] Semantic Type Sentient The individual that asks a Witness questions.</p>	<p><i>cross-examination.n, cross-examine.v, cross.n, examination.n, examine.v</i></p>	<p>Subframe of: Trial</p> <p>Precedes: Jury_deliberation</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>We'd like to CROSS-EXAMINE the witness if we can.</p>	<p>Witness [Wit] Semantic Type Sentient A person who is present in a courtroom in order to give some form of evidence, has been sworn in, and is being examined by a Questioner. You have leave to EXAMINE the witness.</p>		<p>Uses: Questioning</p>
<p>Crime_scenario</p> <p>A (putative) Crime is committed and comes to the attention of the Authorities. In response, there is a Criminal_investigation and (often) Arrest and criminal court proceedings. The Investigation, Arrest, and other parts of the Criminal_Process are pursued in order to find a Suspect (who then may enter the Criminal_process to become the Defendant) and determine if this Suspect matches the Perpetrator of the Crime, and also to determine if the Charges match the Crime. If the Suspect is deemed to have committed the Crime, then they are generally given some punishment commensurate with the Charges.</p> <p>Semantic Type Non-Lexical Frame</p>	<p>Authorities [] The group which is responsible for the maintenance of law and order, and as such have been given the power to investigate Crimes, find Suspects and determine if a Suspect should be submitted to the Criminal_process.</p> <p>Charge [] A description of a type of act that is not permissible according to the law of society.</p> <p>Crime [] An act, generally intentional, that matches the description that belongs to an official Charge.</p> <p>Perpetrator [] Semantic Type Sentient The individual that commits a Crime.</p> <p>Suspect [] The individual which is under suspicion of having committed the Crime.</p>		<p>Has Subframes: Committing_crime, Criminal_investigation, Criminal_process</p>
<p>Criminal_investigation</p> <p>This frame describes the process that involves the determination by an authority, the Investigator, of the circumstances surrounding</p>	<p>Incident [Inc] The Investigator attempts to determine the exact circumstances surrounding the Incident, which is typically a criminal act (murder, robbery) or the result of such an act (death, loss of money).</p>	<p><i>clue.n, inquire.v, inquiry.n, investigate.v, investigation.n, lead.n, probe.n, probe.v, under investigation.prep</i></p>	<p>Subframe of: Crime_scenario</p> <p>Precedes: Criminal_process</p> <p>Is Preceded by:</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>an Incident by means of inquiry.</p> <p>The police are INVESTIGATING the bank's reported loss of several thousand dollars from their downtown branch's top security vault.</p> <p>Authorities are INVESTIGATING several murders.</p>	<p>Investigator [Inv] Semantic Type Sentient The Investigator is the person or agency that investigates a person of a crime.</p> <p>Suspect [Sus] Semantic Type Goal This FE denotes the Suspect that is investigated by the Investigator. The police are INVESTIGATING Dr. Phil.</p>		<p>Committing crime</p> <p>Uses: Seeking</p> <p>Is Used By: Suspicion</p>
<p>Criminal process</p> <p>A Suspect is arrested by an Authority on certain Charges, then is arraigned as a Defendant. If at any time the Defendant pleads guilty, then the Defendant is sentenced, otherwise the Defendant first goes to trial. If the Verdict after the trial is guilty, then the Defendant is sentenced. In the end, the Defendant is either released or is given a Sentence by a Judge at the sentencing. The core roles in this frame include Jury, Judge, Defendant, District Attorney, Defense Attorney, an Authority such as the police/sheriff. Non-core roels include Witness, Accomplice and Victim.</p> <p>Semantic Type Non-Lexical Frame</p>	<p>Charges [Chrg] This FE identifies the Charges brought against the Defendant.</p> <p>Court [Crt] This FE identifies the court involved in a trial.</p> <p>Defendant [Dfnd] The Defendant is charged with an offense.</p> <p>Defense [Dfns] The Defense represents the interests of the Defendant.</p> <p>Judge [Judge] The Judge heads the court where arraignment occurs and the case is tried.</p>		<p>Subframe of: Crime scenario</p> <p>Has Subframes: Arraignment, Arrest, Sentencing, Trial</p> <p>Is Preceded by: Criminal investigation</p> <p>Uses: Is Used By: Appeal</p>
<p>Evidence</p> <p>The Support, a phenomenon or fact, lends support to a claim or proposed course of action, the Proposition, where the</p>	<p>Proposition [Prp] This is a belief, claim, or proposed course of action to which the Support lends validity. Normally it is expressed as a Finite Clause Complement:</p>	<p><i>argue.v, argument.n, attest.v, confirm.v, contradict.v, corroborate.v, credence_((lend)).n, demonstrate.v, disprove.v,</i></p>	<p>Is Used By: Explaining the facts, Sign</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>Domain of Relevance may also be expressed. Some of the words in this frame (e.g. argue) are communication words used in a non-communicative, epistemic sense.</p> <p>The latest poll results SHOW that support of the president is at an all-time low.</p>	<p>The fact that you lied to me SHOWS that I shouldn't trust you.</p> <p>Some words in this frame require the proposition to be expressed as an NP Object:</p> <p>The fact that you lied SUBSTANTIATES the claim that you can't be trusted.</p> <p>Support [Sup] Support is a fact that lends epistemic support to a claim, or that provides a reason for a course of action. Typically it is expressed as an External Argument.</p> <p>The fact that you lied to me SHOWS that I shouldn't trust you.</p> <p>The look on your face REVEALS that you are lying.</p>	<p><i>evidence.n, evidence.v, evince.v, from.prep, illustrate.v, imply.v, indicate.v, mean.v, point to.v, proof.n, prove.v, reveal.v, show.v, substantiate.v, suggest.v, support.v, tell.v, testify.v, verify.v</i></p>	
<p>Entering of plea</p> <p>The Accused enters a Plea in answer to the Charges. In most jurisdictions, the possible pleas are innocent, guilty, or nolo contendere. Accused persons may stand mute, in which case, the court usually enters a plea on their behalf.</p>	<p>Accused [acc] The person entering the plea in court. Joy Peterson PLEADED innocent to the murder of his son.</p> <p>Charges [Chrg] The crime with which the Accused is charged</p> <p>Court [] The Court is the institution before which the plea is entered.</p> <p>Judge [judge] Semantic Type Sentient The judge of the court in which the accused</p>	<p><i>plea.n, plead.v</i></p>	<p>Subframe of: Arraignment</p> <p>Precedes: Bail decision</p> <p>Is Preceded by: Notification of charges</p> <p>Uses: Communication</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
	<p>enters a plea.</p> <p>Plea [Plea] The Plea that a defendant makes. The student PLEADED guilty to stealing a bike.</p>		
<p>Guilt or innocence</p> <p>An Accused individual is deemed by a (usually implicit) Judge to be involved (or not) in a Misdeed.</p> <p>I am INNOCENT of this crime and so is James Griffiths .</p> <p>It is possible that the Frauleins Krabbe , Breuer and Moller are GUILTY of serious wrongdoing.</p> <p>Note that this frame is not limited to technical, legal uses. The use of guilty in this frame is also to be distinguished from that in the Contrition frame by not referring to an emotional state. Innocent has several other meanings that are distinct from the one it has in this frame. It can mean 'ignorant of'; 'innocuous'; 'pure and unsullied by experience'.</p>	<p>Accused [acc] This is the person who is accused of a Misdeed.</p> <p>Frank Quattrone is found GUILTY of obstructing federal investigations</p> <p>Misdeed [mis] The wrongful act which the Accused was purportedly involved in. Cambridge woman says she's INNOCENT of fraud.</p>	<p><i>blood on hands.n, guilt.n, guilty.a, innocence.n, innocent.a</i></p>	<p>Uses: Misdeed</p>
<p>Judgment</p> <p>A Cognizer makes a judgment about an Evaluee. The judgment may be positive (e.g. <i>respect</i>) or negative (e.g. <i>condemn</i>), and this information is recorded in the semantic types</p>	<p>Cognizer [Cog] Semantic Type Sentient The Cognizer makes the judgment. This role is typically expressed as the External Argument (or in a <i>by</i>-PP in passives). The boss APPRECIATES you for your</p>	<p><i>accolade.n, accuse.v, admiration.n, admire.v, admiring.a, applaud.v, appreciate.v, appreciation.n, appreciative.a, approbation.n, approving.a, blame.n, blame.v,</i></p>	<p>Uses: Emotions</p> <p>Is Used By: Exemplar, Judgment_communication, Praiseworthiness, Regard</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>Positive and Negative on the Lexical Units of this frame. There may be a specific Reason for the Cognizer's judgment, or there may be a capacity or Role in which the Evaluee is judged.</p> <p>This frame is distinct from the Judgment_communication frame in that this frame does not involve the Cognizer communicating his or her judgment to an Addressee.</p> <p>JUDGMENT: She ADMIRE Einstein for his character.</p> <p>JUDGMENT_COMMUNICATION: She ACCUSED Einstein of collusion. Currently, however, some lexical units and annotation for both remain in this frame.</p>	<p>diligence. The boss is very APPRECIATIVE of my work.</p> <p>Evaluee [Eval] Evaluee is the person or thing about whom/which a judgment is made. With verbs this FE is typically expressed as Object: The boss APPRECIATES you for your diligence.</p> <p>Expressor [Exr] Expressor is the body part or action by a body part that conveys the judgment made by the Cognizer. She viewed him with an APPRECIATIVE gaze.</p> <p>Reason [Reas] Semantic Type State_of_affairs Typically, there is a constituent expressing the REASON for the Judge's judgment. It is usually a <i>for</i>-PP, e.g. I ADMIRE you for your intellect.</p>	<p><i>boo.v, contempt.n, contemptuous.a, critical.a, damnation.n, deify.v, deplore.v, derisive.a, disapproval.n, disapprove.v, disapproving.a, disdain.n, disdain.v, disdainful.a, disrespect.n, esteem.n, esteem.v, exalt.v, exaltation.n, fault.n, fault.v, mock.v, mockery.n, prize.v, reprehensible.a, reproach.n, reproachful.a, respect.n, respect.v, revere.v, reverence.n, scorn.n, scorn.v, scornful.a, set store.v, stigma.n, stigmatize.v, stricture.n, uncritical.a, value.v, vilification.n</i></p>	
<p>Judgment_direct_address</p> <p>In this frame, a Communicator judges the Addressee and then communicates that appraisal directly to the Addressee. The judgment is given for a particular Reason or about a particular Topic.</p>	<p>Addressee [] Semantic Type Sentient The Addressee is judged by the Communicator and receives the message of approval or disapproval.</p> <p>Communicator [] Semantic Type Sentient</p>	<p><i>admonish.v, admonishment.n, admonition.n, berate.v, castigation.n, castigatory.a, chastise.v, chastisement.n, chide.v, compliment.n, compliment.v, harangue.v, jeer.n, jeer.v, rebuke.n, rebuke.v, reprimand.n,</i></p>	<p>Inherits From: Judgment_communication</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
	<p>The Communicator communicates a judgment to the Addressee.</p> <p>Expressor [] An action or entity under the control of the Communicator that expresses the criticism or praise directed towards the Addressee. Though she had killed him so long ago, she could still see his JEERING smile.</p> <p>Medium [] The Medium identifies the physical or abstract entity in which the judgment is conveyed.</p> <p>Reason [] Semantic Type State_of_affairsThe Reason is why the Communicator forms the type of judgment they form. The principal REBUKED the student for cheating on the exam.</p> <p>Topic [] The Topic is the subject on which the Addressee is being judged. The teacher SCOLDED the children about their messy cookie eating.</p>	<p><i>reprimand.v, reproach.v, reproof.n, reprove.v, scold.v, take to task.v, tell off.v, telling off.n, thank.v, thanks.n, tongue-lashing.n, upbraid.v</i></p>	
<p><u>Judicial body</u></p> <p>A Source of authority, typically a government, relies upon a set of institutions specialized for the administration of justice. These Judicial bodys hear cases that originate within</p>	<p>Domain [dom] The concern of the Judicial body-- broadly speaking, the aspect of society that they affect.</p> <p>Anything you say or write can and will be held against you in a COURT of law.</p>	<p><i>court.n, judicial.a, judiciary.n, tribunal.n</i></p>	<p>Inherits From: <u>Institutions</u></p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>their Jurisdiction and relate to the Task given to them by the Source_of_authority. Often, a Judicial_body is part of a larger system within which its Rank can be specified. The Judicial_body is typically located in a specific location, the Seat.</p> <p>The federal JUDICIARY's certification process is the foundation of the interpreter program. INI</p> <p>The city files an appeal with the state's Eastern District COURT of Appeals.</p> <p>The case, tried in the US District COURT in Boston, involved technical and financial issues regarding the feasibility of the project.</p> <p>On Oct. 31, the Alaska State Superior COURT granted Chugach Electric Association's Oct. 3 request to dissolve the stay. INI</p>	<p>Judicial_body [jud] A permanent organization with the socially important purpose of administering justice. The International Monetary Fund Administrative TRIBUNAL (IMFAT) adjudicates employment disputes between staff members and the IMF.</p> <p>Jurisdiction [jur] The geographical area within which the Judicial_body has authority and responsibility.</p> <p>On February 18, 1983, the Supreme COURT of Alabama denied this motion.</p> <p>Task [tas] The responsibility that a Judicial_body has, either defined in terms of the type of cases that they can hear, or more specifically by reference to an action that the authority constituting them wishes the Judicial_body to achieve. The International Criminal TRIBUNAL for Rwanda sentenced Mikaeli Muhimana on April 28 to life</p>		
<p>Jury_deliberation</p> <p>The Jury discuss the Case and its Charges in order to evaluate the Possible sentence of the Accused.</p>	<p>Case [Cse] The Case which a Trial is convened to decide.</p> <p>Charges [Chg] The legal label for the crime that the defendant is accused of.</p>	<p><i>deliberate.v, deliberation.n</i></p>	<p>Subframe of: Trial</p> <p>Precedes: Verdict</p> <p>Is Preceded by: Court_examination</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
	<p>Jury [Jury] The group that debates the case.</p> <p>Possible sentence [PS] A sentence that the jury considers during deliberation. The jury DELIBERATED his guilt.</p>		Uses: Discussion
<p>Kidnapping</p> <p>The words in this frame describe situations in which a Perpetrator carries off and holds the Victim against his or her will by force.</p>	<p>Perpetrator [Perp] Semantic Type Sentient The Perpetrator is the person (or other agent) who carries off and holds the Victim against his or her will.</p> <p>Victim [Vict] Semantic Type Sentient The Victim is the person who is carried off and held against his/her will.</p>	<p><i>abduct.v, abducted.a, abduction.n, abductor.n, kidnap.v, kidnapped.a, kidnapper.n, kidnapping.n, nab.v, shanghai.v, snatch.v, snatcher.n</i></p>	Inherits From: Committing crime , Getting
<p>Law</p> <p>A Law regulates activities or states of affairs within a Jurisdiction, dictating what Required states should be the case and what Forbidden states should not. Often it also indicates negative consequences for individuals that violate it, and these negative consequences are generally enforced by some official authority. They may or may not be created by some official legislative body.</p>	<p>Forbidden [for] The state-of-affairs which is disallowed by the Law. I think we need a LAW against all firearms within city limits.</p> <p>Law [Law] Semantic Type Artifact This FE identifies the rule designed to guide activity, deprecating some types of activity and/or requiring other types of activity.</p> <p>Required [req] A state-of-affairs which the Law declares must</p>	<p><i>act.n, code.n, law.n, policy.n, protocol.n, regime.n, regulation.n, statute.n</i></p>	<p>Inherits From: Artifact</p> <p>Uses: Text</p> <p>Is Used By: Legality, Prohibiting</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
	<p>be maintained.</p> <p>The LAW that all minors must be accompanied by an adult is a laughingstock.</p>		
<p>Legality</p> <p>Words in this frame describe the status of an Action with respect to a Code of laws or rules. An Object may also be in violation or compliance of the Code by virtue of its existence, location or possession.</p> <p>ILLEGAL drug use is on the rise. Scores of ILLEGAL immigrants cross the border every year.</p> <p>Feeding the buffalo is PROHIBITED according to Code 138.</p>	<p>Action [Act] The Action is the behavior which complies with or violates the Code. ILLEGAL drug use is on the rise.</p> <p>Object [Obj] The Object complies with or violates the Code by virtue of its existence, location or possession.</p>	<p><i>fair.a, illegal.a, illicit.a, lawful.a, legal.a, legitimate.a, licit.a, permissible.a, prohibited.a, unlawful.a, wrong.a, wrongful.a, wrongly.adv</i></p>	<p>Uses: Compliance, Law, Morality evaluation</p> <p>Is Used By: Committing crime</p>
<p>Misdeed</p> <p>A Wrongdoer engages in a Misdeed.</p> <p>You have SINNED for the last time, Stephen!</p>	<p>Misdeed [mis] The assessment of the Wrongdoer is based on his or her Misdeed.</p> <p>Wrongdoer [wro] This is the person whose Misdeed is being judged with respect to its morality.</p>	<p><i>misdeed.n, peccadillo.n, sin.n, sin.v, transgress.v, transgression.n</i></p>	<p>Inherits From: Event</p> <p>Is Inherited By: Committing crime</p> <p>Uses: Morality evaluation</p> <p>Is Used By: Guilt or innocence</p>
<p>Notification of charges</p> <p>The judge or other court officer (the Authority) informs the Accused of the Charges against him/her, i.e. the alleged actions and the relevant</p>	<p>Accused [Acc] Semantic Type Sentient The person being charged with an offense against the law.</p>	<p><i>accuse.v, charge.n, charge.v, indict.v, indictment.n</i></p>	<p>Subframe of: Arraignment</p> <p>Precedes: Entering of plea</p> <p>Uses: Communication</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
laws.	<p>Arraign authority [] Semantic Type Sentient The judge or other authority of the court in which the accused person is arraigned.</p> <p>Charges [Chrg] The crime with which the Accused is charged</p>		
<p>Offenses</p> <p>Words in this frame describe acts in violation of a legal code.</p>	<p>Offense [Off] The illegal act. He was charged with ASSAULT.</p> <p>Perpetrator [] The individual who commits the Offense</p> <p>Victim [Vic] Semantic Type Sentient This FE denotes the person or entity that is badly affected by the Offense. The police is investigating the HOMICIDE of Dr. Johnson.</p>	<p><i>arson.n, assault.n, battery.n, burglary.n, child abuse.n, conspiracy.n, copyright infringement.n, felony.n, fraud.n, hijacking.n, homicide.n, indecent assault.n, kidnapping.n, larceny.n, manslaughter.n, murder.n, negligence.n, possession.n, rape.n, robbery.n, sabotage.n, sexual assault.n, sexual harassment.n, statutory rape.n, theft.n, treason.n</i></p>	<p>Is Inherited By: Arson</p> <p>Uses: Committing crime, Compliance</p> <p>Is Used By: Severity of offense</p>
<p>Piracy</p> <p>The words in this frame describe situations in which a Perpetrator forcibly seizes control over a Victim's Vehicle to gain some end.</p>	<p>Perpetrator [Perp] Semantic Type Sentient This is the person (or other agent) who forcibly seizes control over a vehicle to gain some end.</p> <p>Vehicle [Veh] This is the means of transportation which gets under the control of the perpetrator. Example: The terrorists hijacked the plane.</p> <p>Victim [Vic]</p>	<p><i>carjack.v, carjacking.n, hijack.v, hijacked.a, hijacker.n, hijacking.n, piracy.n, pirate.v</i></p>	<p>Inherits From: Committing crime, Intentionally act</p> <p>Uses: Operate vehicle</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
	<p>Semantic Type Sentient This FE describes the people that are suffering as a result of the Perpetrator's action. The rebels skyjacked a plane with 89 passangers.</p>		
<p>Rape</p> <p>The words in this frame describe situations in which the Perpetrator has sexual intercourse with the Victim forcibly (or by threatening the use of force) and without his or her consent.</p>	<p>Event [Evt] Semantic Type State_of_affairs The rape of a Victim by the Perpetrator.</p> <p>Perpetrator [Perp] Semantic Type Sentient This is the person who forces another person to have sexual intercourse with him or her against the other person's will.</p> <p>Victim [Vic] Semantic Type Sentient This is the person who is forced to engage in sexual intercourse against his or her will.</p>	<p><i>rape.n, rape.v, raped.a, rapist.n, sexually assault.v</i></p>	<p>Inherits From: Committing_crime, Intentionally_affect</p>
<p>Robbery</p> <p>These are words describing situations in which a Perpetrator wrongs a Victim by taking something (Goods) from them. In some cases, the Source location from which the Goods were taken is used to metonymically refer to the Victim. The robbery can be done in a particular Manner (for example, forcefully) and via a specific Means (for example, by threatening the Victim).</p>	<p>Perpetrator [Perp] Semantic Type Sentient The Perpetrator is the person (or other agent) that takes the Goods away by force or threats.</p> <p>Leslie ROBBED Kim of her watch.</p> <p>Source [Src] Semantic Type Source Source is the initial location of the goods, before they change location. Leslie and Kim ROBBED a bank</p>	<p><i>hold-up.n, hold_up.v, mug.v, mugger.n, mugging.n, ransack.v, rifle.v, rob blind.v, rob.v, robber.n, robbery.n, stick up.v, stick-up.n</i></p>	<p>Inherits From: Committing_crime</p> <p>Uses: Theft</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>Half of the team HELD UP while the others were stationed to report the arrival of police.</p> <p>As opposed to Theft, Robbery focuses on the harm to the Victim and on the Source location from which the Goods have been removed, rather than the Goods themselves.</p>	<p>This FE is realized in compound nouns as follows: bank ROBBERY</p> <p>Victim [Vict] Semantic Type Sentient The Victim is the person (or other sentient being or group) that owns the Goods before they are taken away by the Perpetrator. Leslie ROBBED Kim of her watch.</p>		
<p><u>Ruling legally</u></p> <p>An Authority with the power to make decisions hands down a Finding over a question presented in a formal or informal Case.</p> <p>The judge RULED yesterday that revisions were not adequate. DNI</p> <p>A high court in London RULED on the case that a vulture fund can extract more than \$20 million from Zambia for a debt.</p> <p>In the California case, a judge RULED Oct. 12 that Tendler must pay the bloggers' legal fees.</p>	<p>Authority [Aut] Semantic Type Sentient The Authority (which may be the jury, judge, magistrate or court) decides on the Finding. The US International Trade Commission RULED 1987 anti-dumping tariff against frozen concentrated DNI.</p> <p>Case [Case] This FE describes the question on which the Authority gives a Finding. US Supreme Court RULED on flag salutes in public schools today.</p> <p>Finding [Fin] This FE identifies the outcome of the Authority's deliberation or consideration.</p>	<p><i>rule.v</i></p>	<p>Inherits From: <u>Intentionally act</u></p> <p>Is Inherited By: <u>Verdict</u></p> <p>Uses: <u>Communication</u></p>
<p><u>Sentencing</u></p> <p>During a court appearance, a Sentence, generally a punishment, is imposed on the Convict by a Court, usually represented by a</p>	<p>Convict [Conv] The Convict is given a Sentence by the Court.</p> <p>Judge Duncan SENTENCED Marty to five years under house detention.</p>	<p><i>condemn.v, order.v, send up.v, sentence.n, sentence.v</i></p>	<p>Subframe of: <u>Criminal process</u></p> <p>Is Preceded by: <u>Trial</u></p> <p>Uses: <u>Communication</u></p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>judge.</p>	<p>Court [Court] The Court imposes a Sentence on a Convict.</p> <p>Judge Duncan SENTENCED Marty to five years under house detention.</p> <p>Offense [off] The illegal action of which the Convict has been found guilty and for which they are punished.</p> <p>A pet store owner was SENTENCED for illegaly smuggling protected reptiles.</p> <p>Sentence [Sent] The Sentence is imposed on the Convict by the Court. Judge Duncan SENTENCED Marty to five years under house detention.</p> <p>Term of sentence [] This FE denotes the duration of the sentence.</p> <p>Tom will recieve a SENTENCE of five years.</p>		
<p>Severity of offense</p> <p>In this frame an Offense is described in terms of the legal or other punishing action that can be taken in response to the offense.</p> <p>He committed an INDICTABLE crime.</p>	<p>Offense [Off] The Offense is the action, crime, or event which is described in terms of what legal or punishing action can be taken against the offender.</p>	<p><i>actionable.a, capital.a, felonious.a, indictable.a</i></p>	<p>Uses: Offenses</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>Smuggling</p> <p>The words in this frame describe situations in which the Perpetrator secretly takes Goods into or out of a country or other area which are prohibited by law or on which one has not paid the required duty.</p>	<p>Goal [Goal] Semantic Type Goal Goal is the location the Goods end up in.</p> <p>Goods [Goods] The FE Goods is anything (including labor, time, or legal rights) that can be illegally taken into our out of a country.</p> <p>Path [Path] The path refers to (a part of the) ground the Goods travel over or to a landmark the Goods travel by.</p> <p>Perpetrator [Perp] Semantic Type Sentient This is the person (or other agent) that illegally takes the goods into or out of a country.</p> <p>Source [Src] Semantic Type Source The source is the location the goods occupy initially before change of location.</p>	<p><i>contraband.a, contraband.n, smuggle.v, smuggler.n, smuggling.n</i></p>	<p>Inherits From: Bringing, Committing crime</p>
<p>Suspicion</p> <p>A person or group, the Authority, believes that another person, the Suspect is a participant in a criminal Incident.</p> <p>The police SUSPECT Noah Rogers of aiding the robbery last night at Shop-n-drive.</p>	<p>Authority [Aut] Semantic Type Sentient The Authority is the group or person who suspects the Suspect of criminal activity.</p> <p>Incident [Inc] The (typically criminal) Incident in which the Suspect is suspected of being involved.</p>	<p><i>suspect.n, suspect.v, under suspicion.prep</i></p>	<p>Uses: Criminal investigation</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
	<p>Suspect [Sus] Semantic Type Goal The Suspect is the target of the Authority's suspicion.</p>		
<p><u>Theft</u></p> <p>These are words describing situations in which a Perpetrator takes Goods from a Victim or a Source. The Means by which this is accomplished may also be expressed.</p> <p>I can't believe he PICKPOCKETED my gold watch !</p> <p>I had to PILFER from the office just to get by INI</p> <p>SNATCHING purses from little old ladies is not a living . CNI</p>	<p>Goods [Goods] Goods is anything (including labor, time, or legal rights) that can be taken away. Leslie STOLE the watch from Kim.</p> <p>Perpetrator [Perp] Semantic Type Sentient Perpetrator is the person (or other agent) that takes the goods away. Leslie STOLE the watch from Kim.</p> <p>Source [Src] Semantic Type Source Source is the initial location of the goods, before they change location. Leslie STOLE the watch from the table.</p> <p>Victim [Vict] Semantic Type Sentient Victim is the person (or other sentient being or group) that owns the goods before they are taken away by the perpetrator. Leslie STOLE the watch from Kim.</p>	<p><i>abstract.v, cop.v, cutpurse.n, embezzle.v, embezzlement.n, embezzler.n, filch.v, flog.v, heist.n, kleptomaniac.n, larceny.n, lift.v, light-fingered.a, misappropriate.v, misappropriation.n, nick.v, peculation.n, pickpocket.n, pickpocket.v, pilfer.v, pilferage.n, pilferer.n, pilfering.n, pinch.v, purloin.v, rustle.v, shoplift.v, shoplifter.n, shoplifting.n, snatch.n, snatch.v, snatcher.n, snitch.v, steal.v, stealer.n, stealing.n, stolen.a, swipe.v, theft.n, thief.n, thief.v, thieving.a, thieving.n</i></p>	<p>Inherits From: Committing crime, Taking</p> <p>Is Used By: Robbery</p>
<p><u>Trial</u></p> <p>A trial is a process conducted in a Court before a Judge and (usually) a Jury in which the</p>	<p>Case [Cse] The Case which a Trial is convened to decide.</p> <p>Charges [Chg]</p>	<p><i>case.n, trial.n</i></p>	<p>Subframe of: Criminal process</p> <p>Has Subframes: Court examination,</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>participants meet in order to decide a Case. The Prosecution attempts to prove that the Defendant is guilty of the Charges and the Defense tries to prove that the Defendant is innocent. Trials have a rich schematic structure which is only partially represented here. The Trial frame is the part of the Criminal Process frame that occurs after a crime, Arrest of a suspect, Arraignment, jury selection, etc. and before Sentencing and Punishment or release. The Trial is made up of court appearances. The beginning of the Trial generally involves Opening Arguments, in which the Prosecution and the Defense present their respective points of view. Then during the course of the Trial, both sides present evidence, some of which is provided by witnesses with testimony, and this is then drawn upon as support for their arguments. Following the presentation of evidence, testimony, and arguments, generally culminating in Closing Arguments for each side, the Jury (if present) deliberates and either comes to no sufficient consensus or produces a Verdict.</p>	<p>The legal label for the crime that the Defendant is accused of.</p> <p>Court [Crt] The specific room where the participants in a Trial meet.</p> <p>Defendant [Defend] The person charged with an offence.</p> <p>Defense [Defens] The individual or group which is responsible for promoting the welfare of the Defendant during a Trial, usually involving the contention that the Defendant is innocent of the Charges.</p> <p>Judge [Judge] Semantic Type Sentient The official who directs and presides over the Trial.</p> <p>Jury [Jury] The group of individuals who observe the Trial and ultimately attempt to come to a verdict.</p> <p>Prosecution [Prsc] The individual or group responsible for promoting the interests of the state in the Trial, prototypically including presenting arguments for the guilt of the Defendant.</p>		<p>Jury_deliberation, Verdict</p> <p>Precedes: Sentencing</p> <p>Is Preceded by: Arraignment</p> <p>Is perspectivized in: Try_defendant</p>
<p>Try_defendant</p>	<p>Charges [Chg] This FE identifies the Charges brought against</p>	<p><i>try.v</i></p>	<p>Perspective on: Trial</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>A Defendant is tried by a Jury or Judge in a Court for Charges. This frame perspectivalizes the general Trial frame.</p>	<p>the Defendant.</p> <p>Defendant [Defens] The Defendant is being tried for the Charges in Court.</p> <p>Governing authority [GA] The Defendant is tried under the laws of the Governing authority. The United States will TRY the accused bomber in a federal courthouse.</p> <p>Judge [Judge] Semantic Type Sentient The Judge heads the court where the case is tried. An expression referring to the court may also stand in for the Judge. Judge Murphy will TRY the defendant for murder. The court is currently TRYING several South American militants on charges of vehicular manslaughter.</p> <p>Jury [Jury] This FE identifies the people who are charged by the Court to listen to the testimony, evidence, and arguments, and come to a consensus about the guilt or innocence of the Defendant.</p>		
<p>Verdict</p> <p>In this frame, which is a part of the Trial sequence, a Judge gives a Finding with respect</p>	<p>Case [Cse] The Case on which the verdict is being given.</p> <p>Charges [Chrg]</p>	<p><i>acquit.v, acquittal.n, clear.v, convict.v, conviction.n, find.v, finding.n, guilty.a, not_guilty.a, pronounce.v, ruling.n, verdict.n</i></p>	<p>Inherits From: Intentionally act, Ruling legally</p>

Frame and definition	Core Frame Elements	Lexical Units	Frame relations
<p>to the Charges against the Defendant in a particular Case.</p>	<p>This FE refers to the Charges with respect to which the verdict is being given.</p> <p>Defendant [Defend] Semantic Type Sentient The person who stands accused of a crime and is subject to the verdict.</p> <p>Finding [Vdct] This FE identifies the outcome of the Judge's deliberation or consideration.</p> <p>Judge [Judge] Semantic Type Sentient The Judge (which may be the jury, judge, magistrate or court) decides on the Finding.</p>		<p>Subframe of: Trial</p> <p>Is Preceded by: Jury_deliberation</p> <p>Uses: Communication</p>

Appendix 8. Partial list of the labels used in JuriDiCo

Frame Elements	Core or Non-core	English examples	Occurrences in English
Act	Core	<p><i>infringe</i>₂ [Compliance]</p> <p>On the facts, I believe <u>the police roadblock</u> in this case, although authorized by the common law, did infringe the respondents' rights under s. 9 of the Charter, which states as follows: 9. Everyone has the right not to be arbitrarily detained or imprisoned.</p> <p><i>violate</i>₂ [Compliance]</p> <p><u>The searches of the accused</u> did not violate s. 8 of the Charter.</p>	action, detention, use, payment, search, advertising, blockade, bringing, copyright, examination, extradition, holidays, protection, publication, request, copy, order, roadblock, unavailability, change, suppression, transfusion, acquisition, act, dissemination, display, disclosure, endorsement, infringement, sale, scavenging, stipulation, title, activity, admission, application, attack, disparity, consultation, creation, enforcement, finding, investment, operation, program, pursuit, relitigation, evidence, expenditure, incorporation, intervention, withdrawal, infinitive-clause, conduct, transaction, blood alcohol concentration, delay, interference, purpose
Appeal	Core	<p><i>apply</i>₄ [Appellate procedure]</p> <p>The Union applied <u>for judicial review of the arbitrator's decision</u>.</p>	action, appeal, application, complaint, cross-appeal, motion, proceeding, work, judicial review, review
Appellant	Core	<p><i>apply</i>₄ [Appellate procedure]</p> <p><u>The Union</u> applied for judicial review of the arbitrator's decision.</p>	employer, foundation, individual, person, province of new brunswick, they, union
Arguer	Core	<p><i>argue</i>₁ [Argumentation]</p> <p><u>The accused</u> also argued that his acquittal for obstructing justice should be accepted as fresh evidence in his appeal of the aggravated assault conviction.</p>	crown, appellant, accused, plaintiff, respondent, party, he, attorney general, defendant, employer, they, city, counsel, government, court, judge, company, claimant, defence, mr. singh, via, association, bell canada, attorney general of canada, band, tribunal, crtc, majority, apotex, dr. muroff, person, prosecution, seller, wal-mart, amos, employee, complainant, mr. charkaoui, northrop overseas, representative, transat, united states, attorney general of ontario, committee, debentureholder, lang j.a., mr. almrei, ms. bruker, patricia, bank, colleague, family, lebel j., police officer, she, wife,

			offender, monarch, mr. beaudry, officer, union, vpa, detainee, insurer, minister, prosecutor, rochon j.a., sergeant beaudry, state, alberta, amicus curiae, applicant, attorney general of british columbia, authority, commissioner, mr. blackman, zastowny, nova scotia court of appeal, agency, arbitrator, armstrong j.a., chief justice, court of appeal, cronk j.a. , dickson j., i, martin j.a., rowles j.a., sexton j.a. , desjardins j.a., sexton j.a.,
Argument	Core	<p><i>argue</i>₁ [Argumentation]</p> <p>The accused also argued <u>that his acquittal for obstructing justice should be accepted as fresh evidence in his appeal of the aggravated assault conviction.</u></p>	argument, existence, factor, reliability, authority, business judgment rule, defence, doctrine, exemption, health, jurisdiction, power, process, provision, proviso, right, section, situation, warranty, allegation, analysis, assumption, claim, challenge, conclusion, decision, dissent, reason, reversal, statement, issue, proposition, inf-clause, that-clause
Basis	Core and non-core	<p><i>impugn</i>₁ [Contesting]</p> <p>While <u>post-offence conduct</u> cannot usually serve on its own as a basis for inferring the specific degree of culpability of an accused person who has admitted committing an offence (R. v. Arcangioli, [1994] 1 S.C.R. 129, at p. 145; R. v. Marinaro, [1996] 1 S.C.R. 462; R. v. Peavoy (1997), 34 O.R. (3d) 620 (C.A.), at p. 631), <u>it</u> can be used, more generally, to impugn the accused person's credibility.</p> <p>It is not enough to impugn an employer's conduct <u>on the basis that what was done had a negative impact on an individual in a protected group.</u></p> <p><i>violate</i>₁ [Constitutionality]</p> <p>A.C. also argued that s. 25(8) violated her s. 15 equality rights <u>on the basis of age.</u></p>	case, evidence, patenting, section, analysis, argument, fact, factor, failure, finding, harassment, information, interpretation, passage, premise, testimony, anticipation, canadian pacific railway co. v. canada, decision, doctrine, interview, law, martineau v. m.n.r., principle, provision, right, sentence, schwartz, statement, threat, turgeon v. dominion bank
Case	Core and non-core	<p><i>apply</i>₁ [Apply law]</p> <p>I can now apply them <u>to the impugned provisions in the case at bar.</u></p>	case, assessment, context, decision, imputation, occasion, person, provision, situation, action, contract, dispute, product, relation, royalty, section, trade, trial, issue, matter

		<p><i>argue</i>₁ [Argumentation]</p> <p><u>In the current case</u>, Bell Canada argued that the rates had been made final, and that the disposition of the deferral accounts for one-time credits was therefore impermissible.</p>	
Charges	Core	<p><i>acquit</i>₁ [Verdict]</p> <p>The judge acquitted him <u>of murder</u> but convicted him of manslaughter.</p>	assault, charge, count, murder, offence, manslaughter, robbery
Condition	Non-core	<p><i>infringe</i>₂ [Compliance]</p> <p>Therefore, to accept the Kraft companies' argument, this Court would have to find that copyright owners can infringe their own copyright <u>if they have licensed copyright to an exclusive licensee despite their retention of the copyright.</u></p>	If-clause, whether-clause
Court		<p><i>affirm</i>₁ [Verdict on appeal]</p> <p><u>The Court of Appeal</u> affirmed that judgment.</p>	court, judge, i, court of appeal, we, superior court, federal court of appeal, tribunal, majority, coriveau j., sexton j. a., agency, arbitrator, board of enquiry, citt, minister, scrt, tax court, berger j.a., justice, courville j., federal court, morin j.a., nova scotia supreme court, rodgers, smith prov. ct. j., commission, party, one, review, crt, lamer j., ontario court of appeal, u.s. supreme court, gower j.
Crime	Core	<p><i>commit</i>₁ [Crime]</p> <p>It did not appear that a stranger could have committed <u>the murder.</u></p>	abuse, act, assault, breach, break and enter, crime, fraud, homicide, fault, offence, manslaughter, murder, neglect, perjury, robbery, theft, tort, activity, behaviour, bid shopping, conduct, dispute, infringement, misconduct, patenting, practice, production
Criterion	Non-core	<p><i>infringe</i>₁ [Constitutionality]</p> <p>Given these considerations, I am unable to agree that the impugned provisions of the Indian Act infringe s. 15(1) of the Charter <u>under the test established in Andrews and reaffirmed in Kapp: "(1) Does the law create a distinction based on an enumerated or analogous ground?</u></p>	circumstance, section, test, when-clause

		<p><i>infringe</i>₂ [Compliance]</p> <p>[I]n assessing whether a complainant's rights have been infringed under s. 15(1), it is not enough to focus only on the alleged ground of discrimination and decide whether or not it is an enumerated or analogous ground.</p>	
Decision	Core	<p><i>quash</i>₁ [Verdict on appeal]</p> <p>The tribunal may confirm, alter or quash <u>any decision submitted to it</u> and render the decision which it considers should have been rendered in first instance.</p> <p><i>uphold</i>₁ [Verdict on appeal]</p> <p>The Court of Appeal upheld the order.</p>	conviction, decision, order, ruling, acquittal, judgment, sentence, affidavit, appeal, by-law, certificate, indictment, process, resolution, ban, constitutionality, declaration, provision, suspension, finding, rule
Defendant	Core	<p><i>acquit</i>₁ [Verdict]</p> <p>The judge acquitted <u>him</u> of murder but convicted him of manslaughter.</p>	accused, appellant, respondent, him, mahalingan, mr. devine, mr. macdonald, mr. wittwer, she, her, himself, madinsky, mr. illes, ms. ellard, offender, person, plaintiff
Duty	Core	<p><i>commit</i>₂ [Order]</p> <p>The hearing judge rejected the argument, found M in breach of her conditional sentence and committed her <u>into custody</u>.</p> <p><i>impose</i>₁ [Order]</p> <p>Section 2(d) imposes <u>corresponding duties</u> on government employers to agree to meet and discuss with them.</p>	trial, that-clause, inf-clause, burden, duty, obligation, custody, extradition, cost, disclosure, forfeiture, measure, probation, reinstatement, remedy, surrender, agreement, function, onus, presumption, period, saction, sentence, tax, attendance, proof
Effect	Core	<p><i>consider</i>₂ [Judging]</p> <p>To this list, of course, may be added as many "contextual" considerations as the court considers <u>relevant and material</u>.</p>	advisable, approach, conducive, fair, inadmissible, indication, non-discriminatory, reasonable, appropriate, essential, inappropriate, just, material, proper, relevant, significant, unconstitutional, unreasonable, inf-clause

		<p><i>deem</i>₁ [Judging]</p> <p>Judges know these risks, yet they do not deem such evidence <u>inadmissible</u>.</p>	
Irregularity	Core	<p><i>allege</i>₁ [Contesting]</p> <p>Mr. Singh alleges <u>no other error in principle</u> and, in my view, understandably so.</p> <p><i>constitute</i>₁ [Irregularity]</p> <p>Terminating employment on the basis of age constitutes <u>prima facie discrimination</u> under the Code.</p>	<p>reason, evidence, error, punishment, accuracy, communication, conduct, credibility, finding, integrity, interview, lawfulness, order, principle, proceeding, reliability, statement, validity, argument, allegation, conclusion, fact, notion, proposition, presumption, abuse, basis, breach, discrimination, encroachment, expression, fault, infringement, intrusion, issue, limit, obligation, offence, perpetuation, consequence, culpability, damage, disadvantage, duty, effect, impact, jeopardy, obstacle, seriousness, unfairness, act, cause, violation, that-clause</p>
Issue	Core	<p><i>govern</i>₁ [Regulations]</p> <p>Sections 25(8) and 25(9) govern <u>when a court can impose medical treatment at the request of the agency</u>.</p> <p><i>instruct</i>₁ [Jury]</p> <p>The charge had correctly instructed the jury <u>that, "[y]ou must find Mr. Layton not guilty of the offence unless Crown counsel satisfies you beyond a reasonable doubt that he is guilty"</u>.</p> <p><i>scrutinize</i>₁ [Investigate]</p> <p>I have also scrutinized <u>the instructions on the count of criminal negligence</u> and have not found any defects.</p>	<p>evidence, issue, case, right, use, error, conduct, principle, sentence, factor, limit, question, remedy, decision, approach, requirement, administration, degree, detention, form, matter, admission, ban, compliance, law, obligation, violation, credibility, duty, presumption, assessment, distinction, jurisprudence, provision, section, protection, inquiry, dismissal, rule, admissibility, content, framework, intention, level, punishment, standard, status, advantage, cause, identity, indication, information, note, robbery, threat, authorization, breach, policy, presence, privilege, tax, applicability, demeanour, effect, impact, importance, injury, means, objective, reliability, seriousness, truthfulness, validity, worth, cause of action, conflict, contract, dispute, immunity, act, damage, exclusion, order, plebiscite, preference, category, manner, part, statute, submission, constitution, discrepancy, inconsistency, potential, award, committal, conviction, exception, elimination, interference, intervention, mandating, pursuit, result, sanction, trial, benner, discretion, exercise, investigation, negligence, statement, technique, article, expertise, interest, security, situation, floor, holding, rules, ability, burden, difference, free will, judgment, application, concept, defence, element, reasoning, consequence, offence, period, procedure, fact, instruction, legitimacy, motive, quality, reason, unfolding, prop, action, determination, disposition, joinder,</p>

			management, proceedings, promotion, release, relation, age, amendment, argument, by-law, circumstance, debt, problem, reputation, repute, standard of review, testimony, claim, common law, incident, paragraph, propensity, replacement, inf-clause, that-clause
Judge	Core	<p><i>apply</i>₁ [Apply law]</p> <p>A number of other differences relate to rules that <u>a judge</u> can apply to a young person.</p> <p><i>convict</i>₁ [Verdict]</p> <p><u>A jury convicted</u> him of manslaughter by criminal negligence and acquitted him of manslaughter by failing to provide the necessities of life.</p>	<p>judge, court, i, jury, court of appeal, he, we, arbitrator, majority, agency, minister,</p> <p>ontario court of appeal, colleague, giroux j.a., chamberland j.a., melachlin j., pelletier j.a., rosenberg j.a., charron j., forget, goudge j.a., low j.a., mackenzie j.a., morissette jj.a., customs, expert, federal court, government, laskin j.a., decision maker, quebec court of appeal, they, legislation, section, ycja, commissioner, manitoba court of appeal, quebec superior court, superior court, british columbia court of appeal, divisional court, judge beaulieu, ryan j.a., one, crtc, tribunal, federal court of appeal, charge, garrow b., conrad j.a., doyon j.a., justice ryan, kyle j., slatter j.a., adjudicator, planning committee, spcum, campbell j., côté j.a., doherty j.a.</p>
Law	Core	<p><i>apply</i>₁ [Apply law]</p> <p>In the meantime, this Court must apply <u>the Act that Parliament has given us</u>.</p> <p><i>infringe</i>₂ [Compliance]</p> <p>The HRT found that by rejecting it on that basis, the SPCUM had infringed <u>s. 18.2 of the Charter</u>.</p> <p><i>violate</i>₂ [Compliance]</p> <p>Did the Agency violate <u>VIA's Right to Procedural Fairness?</u></p>	<p>section, provision, law, rule, act, charter, legislation, principle, court, regulation, standard, parliament, statute, judge, legislature, amendment, article,</p> <p>right, decision, agreement, constitution, doctrine, requirement, common law, power, obligation, order, code, measure, freedom, guarantee, liberty, security, copyright, policy, presumption, test, remedy, charge, clause, evidence, city, state, civil code of québec, commissioner, contract, government of canada, minister of justice, plan, quebec superior court, statutory scheme, paragraph, prohibition, unavailability, ability, protection, patent, admission, discretion, part, procedure, geneva conventions, letter of the law, duty, undertaking, curative proviso, ait, chapter, faa, indian act, school trustee statutes amendment act, tax, form, four books appeal, element, prong, review, stage, canada elections act, bylaw, new brunswick human rights code, absence of evidence, british columbia family relations act, contravention, i, issue estoppel, subsection, claim, declaration, refusal, court of appeal, court of queen's bench, federal court, minister, case law, grant, purpose, reason, scheme,</p>

			<p>convention, alberta, hcda, british columbia court of appeal, canada transportation act, equity, jurisprudence, liability scheme, rail code, canadian charter of rights and freedoms, condition, fairness, letter, oath of office, sentence, term, arbitrator, indictment, proceeding, licence, administrative body, government, governor in council, authority, bound, function, guideline, jurisdiction, limit, mandate, scope, threshold, financial administration act, local authorities election act, miranda, progeny, criminal code, emergency management act</p>
Manner	Non-core	<p><i>impugn</i>₁ [Contesting]</p> <p>He proceeds to impugn the accuracy of sniffer dogs <u>generally</u>, by drawing on data gathered by the New South Wales Ombudsman, Review of the Police Powers (Drug Detection Dogs) Act 2001 (2006), concluding at para. 87: "In the sniffer-dog business, there are many variables.</p> <p>That was the issue on which Ms. Bowles had been subjected to an extensive cross-examination which <u>seriously impugned</u> the reliability of her evidence.</p> <p><i>violate</i>₂ [Compliance]</p> <p>I conclude that the IRPA <u>unjustifiably violates</u> s. 7 of the Charter.</p>	<p>broadly, correctly, differently, extent, fashion, liability, regularly, understanding</p>
Means	Non-core	<p><i>impugn</i>₁ [Contesting]</p> <p>For example, the respondent seeks to impugn Mr. Kong's credibility <u>by pointing to his inability to accurately describe his injuries in a manner consistent with the medical records.</u></p> <p>He proceeds to impugn the accuracy of sniffer dogs generally, <u>by drawing on data gathered by the New South Wales Ombudsman, Review of the Police Powers (Drug Detection Dogs) Act 2001 (2006), concluding at para. 87: "In the sniffer-dog business, there are many variables.</u></p>	

<p>Protagonist</p>	<p>Core</p>	<p><i>exceed</i>₁ [Compliance]</p> <p><u>The Court of Appeal exceeded</u> the limits of appellate review and unduly extended the scope of fiduciary obligations.</p> <p><i>infringe</i>₂ [Compliance]</p> <p>The HRT found that by rejecting it on that basis, <u>the SPCUM</u> had infringed s. 18.2 of the Charter.</p> <p><i>violate</i>₂ [Compliance]</p> <p>Did <u>the Agency Violate</u> VIA's Right to Procedural Fairness?</p>	<p>person, crown, judge, appellant, party, accused, court, respondent, police, city, employer, he, agency, government, canada, employee, arbitrator, him, they, firm, individual, via, company, body, parliament, member, child, state, bns, counsel, official, anyone, attorney general, officer, witness, her, you, worker, mr. khadr, province, slc, cvmm, lieutenant governor in council, société, csis, owner, spcum, authority, irpa, alliance, citizen, complainant, privacy commissioner, samson, trustee, administrator, crtc, legislature, defendant, mr. dinardo, mr. last, police chief, police officer, suspect, stranger, fugitive, mr. bjelland, agbc, bank, domtar, euro-excellence, h.l., one, sanofi, jury, licensee, minister, survivor, them, canadian radio-television and telecommunication commision, kci, double n, kerry, licensor, media, minor, sureway, work, davis, s, bidder, counterpart, cra, issuer, offender, mr. khosa, saaq, telus, claimant, mr. keays, mr. singh, provider, union, corporation, minister of justice, wal-mart, defence, detainee, ermineskin, resident, association, creditor, federal court, supplier, advocate, committee, constable ferguson, dell, united states, chief, spouse, adjudicator, court of appeal, longueuil, smith j.a., vpa, plaintiff, mechanic, municipality, rcmp</p>
<p>Purpose</p>	<p>Non-core</p>	<p><i>invoke</i>₁ [Argumentation]</p> <p>Sergeant Beaudry invoked Mr. Plourde's health <u>to justify his decision</u>.</p>	<p>Inf-clause</p>
<p>Reason</p>	<p>Non-core</p>	<p><i>acquit</i>₁ [Verdict]</p> <p>After hearing his alibi evidence, the trial judge acquitted him on both counts, <u>stating as follows (at p. 813): It is quite apparent that perjury has been committed in this Court room.</u></p> <p>The defence argued that the accused should be acquitted <u>because it was more likely than not that his blood alcohol concentration was below 80 mg at the relevant time.</u></p>	

Right	Core	<p><i>assert</i>₃ [Right]</p> <p>The party asserting it [<u>the right of set-off</u>] never acquires rights in the other's monetary claim at all;</p>	<p>right, discretion, jurisdiction, power, remedy, benefit, cost, interest, enforcement, access, disclosure, fairness, information, period, recalculation, application, leave, motion, order, pardon, permit, release, licence, relief, scope, suspension, cause for discharge, claim, discharge, certainty, channel, choice, inquiry, liberty, opportunity, status, competence, immunity, monopoly, inf-clause</p>
Text	Non-core	<p><i>impugn</i>₁ [Contesting]</p> <p>The fundamental principles in Place des Arts about what constitutes "utilizing" workers under s. 109.1(b) and about the right of a business to close are not impugned <u>in these reasons</u>.</p>	<p>paragraph, text, reason</p>
Time	Non-core	<p><i>apply</i>₄ [Appellate procedure]</p> <p><u>In 2005</u>, they applied for judicial review of the Crown's decision to use its discretion to assess them under s. 160 ITA.</p> <p><i>acquit</i>₁ [Verdict]</p> <p>The accused was acquitted <u>at trial</u> and the verdict was overturned on appeal.</p> <p>Friesen was acquitted <u>mid-trial</u> on the basis that the vehicle rental agreement in his name was hearsay.</p>	<p>before deciding to place any reliance on such statements first, 2005, recently, immediately, after a contract has been entered into, course, before an assignment to another creditor is known</p>

Appendix 9. Partial list of indirect links between target terms and FEs (Portuguese)

apresentar-se a	<p>O Autor apresenta-se a exercer um direito que lhe assiste na qualidade de sócio, não de gerente.</p> <p><fonction-syntaxique nom="Indirect link"> O Autor </fonction-syntaxique></p>
deixar de	<p>Nestes termos, e noutros que <u>Vossas Excelências, Preclaros Conselheiros</u>, sempre com o Mui Alto saber, não deixarão de suprir, deve ser dado provimento ao presente recurso, anulando o referido julgamento da matéria de facto, e substituindo a decisão por outra que contemple as pretensões dos Recorrentes, conforme se afigura mais consentâneo com a lei e os factos atendíveis e evidenciados.</p> <p><fonction-syntaxique nom="Indirect link"> Vossas Excelências, Preclaros Conselheiros </fonction-syntaxique></p>
dignar-se	<p>Termos em que e no muito que <u>V.Exas.</u> se dignarão suprir deve ser concedida a Revista e revogar-se o douto acórdão recorrido, absolvendo-se a recorrente B. do pedido.</p> <p><fonction-syntaxique nom="Indirect link"> V.Exas. </fonction-syntaxique></p>
impedir de	<p>Esta contradição na decisão de facto pode ser conhecida pelo Supremo Tribunal de Justiça, atendendo [a] que é lícito a este tribunal considerar adquiridos no processo factos que [o] deveriam ter sido pelas instâncias mas que não foram e que necessariamente impede o STJ de aplicar a lei a uma factualidade que, por ser contraditória, não se entende qual seja;</p> <p><fonction-syntaxique nom="Indirect link"> o STJ </fonction-syntaxique></p>
limitar-se a	<p>Limitando-se este Tribunal, face ao disposto nos arts 26.º da LOT, 722.º, nº 1 e 729.º, nº 1 do CPC, a aplicar definitivamente o regime jurídico que julgue adequado aos factos materiais fixados pelo tribunal recorrido.</p> <p><fonction-syntaxique nom="Indirect link"> este Tribunal </fonction-syntaxique></p>
obrigar a	<p>Obrigando-se o autor a alegar e provar o fundamento previsto na convenção das partes.</p> <p><fonction-syntaxique nom="Indirect link"> o autor </fonction-syntaxique></p>
pretender	<p><u>Os recorrentes</u>, nas suas conclusões, pretendem impugnar a matéria de facto e, simultaneamente, invocam, para além da insuficiência para a decisão da matéria de facto provada, uma errada apreciação da prova.</p> <p><fonction-syntaxique nom="Indirect link"> Os recorrentes </fonction-syntaxique></p>
ter legitimidade para	<p><u>O senhorio</u>, que foi o mesmo que negociou e chamou à renda que lhe era paga de cargas e descargas que as recebeu e contabilizou na escrita da sociedade e as fez desta, só não teve legitimidade para outorgar a escritura (e que aqui já teve legitimidade).</p> <p><fonction-syntaxique nom="Indirect link"> O senhorio </fonction-syntaxique></p>
vir	<p>Pelo exposto, vem o condenado, ora exponente, requerer a V. Exa. a revisão da sentença já transitada em julgado.</p> <p><fonction-syntaxique nom="Indirect link"> o condenado </fonction-syntaxique></p>

Appendix 10. List of common indirect links between English target terms and FEs

to be able to	The positive impact of the mandatory photo requirement and the use of facial recognition technology is that it is a way to help ensure that <u>individuals</u> will not be able to <i>commit</i> identity theft. <fonction-syntaxique nom="Indirect link"> individuals </fonction-syntaxique>
to be asked to	After being informed by counsel that Mr. Blackman was in fact stabbed in the Vaughan Road and Oakwood area in July 2000 and that <u>the jury</u> would be asked to <i>infer</i> from all the evidence that Mr. Ellison was indeed referring to Mr. Blackman in his statements to his mother, nothing more was required. <fonction-syntaxique nom="Indirect link"> the jury </fonction-syntaxique>
to be empowered to	<u>The court</u> is empowered , if it thinks it necessary, to review the contested material and determine whether the solicitor-client privilege has been properly claimed. <fonction-syntaxique nom="Indirect link"> The court </fonction-syntaxique>
to be open to	It was not open to <u>the Court of Appeal</u> to <i>acquit</i> the respondent on the basis of speculation about a possible explanation of his conduct that was flatly contradicted by his own testimony. <fonction-syntaxique nom="Indirect link"> the Court of Appeal </fonction-syntaxique>
to be possible for	It will not always be possible for <u>a plaintiff</u> to <i>adduce</i> direct evidence of the prosecutor's lack of belief. <fonction-syntaxique nom="Indirect link"> a plaintiff </fonction-syntaxique>
to be relevant to	The statement was "relevant to <i>rebut</i> the notion that others would also have had a motive to kill [Poirier] at the beginning of 2003" (2005 CanLII 5629, at para. 32). <fonction-syntaxique nom="Indirect link"> the statement </fonction-syntaxique>
to fail to	Finally, C.E. argues that <u>Domtar</u> failed to <i>mitigate</i> its damages and that the \$1,578,900 payment by Lloyd's to Domtar should reduce Domtar's claim against C.E. accordingly. <fonction-syntaxique nom="Indirect link"> Domtar </fonction-syntaxique>
to help	W. (D.) was a decision by this Court in which Cory J., at p. 758, established a three-step charge to the jury to help <u>the jury</u> <i>assess</i> conflicting evidence between the victim and the accused in cases of criminal prosecutions of sexual assaults. <fonction-syntaxique nom="Indirect link"> the jury </fonction-syntaxique>
to plan to	A review of the trial proceedings confirms that <u>Dr. Muroff</u> plans to <i>adduce</i> evidence. <fonction-syntaxique nom="Indirect link"> Dr. Muroff </fonction-syntaxique>
to refuse to	Can a <u>Quebec court</u> refuse to <i>recognize</i> a judgment rendered outside Quebec because, in its opinion, the foreign court should, pursuant to that doctrine, have declined jurisdiction over the case? <fonction-syntaxique nom="Indirect link"> a Quebec court </fonction-syntaxique>

to seek to	<p>For example, <u>the respondent</u> seeks to <i>impugn</i> Mr. Kong's credibility by pointing to his inability to accurately describe his injuries in a manner consistent with the medical records.</p> <p>the respondent</p>
to tend to	<p>On the other hand, any portion of the statements <u>that</u> tend to <i>incriminate</i> Mr. Illes in the commission of the offence only assist the Crown's case if you are convinced that portion is true beyond a reasonable doubt.</p> <p>that</p>

Appendix 11. Data validation

VALIDAÇÃO DA DESCRIÇÃO DE TERMOS JURÍDICOS

No Centro de Linguística da Universidade Nova de Lisboa (CLUNL) e no Observatoire de linguistique Sens-Texte da Universidade de Montreal (OLST) encontramos a desenvolver investigação sobre a elaboração de dicionários de especialidade destinados a tradutores e redactores técnicos. Esta investigação é financiada pela Fundação para a Ciência e a Tecnologia do Ministério da Ciência, Tecnologia e Ensino Superior (FCT-MCTES), no âmbito de uma bolsa de doutoramento em Tradução e Terminologia.

Com o presente questionário pretendemos validar junto de especialistas do domínio jurídico um conjunto de informações sobre termos como *absolver*, *infringir* e *violar*, de forma a garantir o rigor e a qualidade das descrições linguísticas. Os termos que serão apresentados nas seguintes páginas foram extraídos dos acórdãos do Supremo Tribunal de Justiça de Portugal produzidos entre Julho e Dezembro de 2009. Os dados relativos aos termos encontram-se organizados como no exemplo abaixo:

Termo:	absolver ₁
Contexto:	veredicto
Estrutura actancial:	JUIZ ou DECISÃO absolve RÉU de ACUSAÇÃO
Exemplos:	<ol style="list-style-type: none"> 1. Absolvo as partes do restante pedido. 2. Saneada, instruída e julgada a causa, foi proferida sentença que julgou a acção improcedente e absolveu a R. do pedido. 3. Afinal a oposição improcedeu na totalidade, decisão que a Relação revogou, absolvendo o Oponente do pedido formulado na acção executiva.

Cada aceção do verbo contém quatro campos: “Termo”, “Contexto”, “Estrutura actancial” e “Exemplos”. As questões que gostaríamos de colocar-lhe estão relacionadas com a informação que figura nestes quatro campos.

Muito obrigada pela sua colaboração.

Adaptation:
VALIDATION OF THE DESCRIPTION
OF LEGAL TERMS

In the Centro de Linguística da Universidade Nova de Lisboa (CLUNL) and in the Observatoire de linguistique Sens-Texte at the University of Montreal (OLST) we are currently developing a research project on the compilation of specialized dictionaries for translators and technical writers. The research is financed by the Fundação para a Ciência e a Tecnologia do Ministério da Ciência, Tecnologia e Ensino Superior (FCT-MCTES) as part of a scholarship for a PhD in translation and terminology.

The questions that we would like to ask you will help us validate a series of informations concerning terms such as *to acquit*, *to infringe* and *to violate* so as to ensure that the linguistic descriptions that we propose are valid and rigorous. The terms that will be presented in the following pages were extracted from the judgments of the Supreme Court of Canada produced between 2007 and 2009. The data is organized as in the example below:

Term:	acquit _t
Context:	Verdict
Actancial structure:	JUDGE acquits DEFENDANT of CHARGES
Examples:	<ol style="list-style-type: none"> 1. The judge acquitted him of murder but convicted him of manslaughter. 2. The appellant was acquitted of the charge of conspiracy to launder funds. 3. A person who is acquitted of an indictable offence other than by reason of a verdict of not criminally responsible on account of mental disorder and whose acquittal is set aside by the court of appeal may appeal to the Supreme Court of Canada.

Each meaning of the verb contains four fields: “Term”, “Context”, “Actancial structure” and “Examples”. The questions that we would like to ask you are related to the information found in those fields.

Thank you for your collaboration.

Appendix 12. Eliminated candidate terms (Portuguese)

	Portuguese CTs	Rank in the list	Frequency	Specificity
1.	tender	6	3431	82.33
2.	aludir	7	732	80.27
3.	resultar	9	1853	76.94
4.	fixar	11	1272	73.21
5.	constar	15	1147	69.99
6.	auferir	18	494	68.66
7.	acrescer	26	532	57.22
8.	morar	30	625	53.99
9.	entender	31	1469	53.85
10.	prestar	33	1092	52.63
11.	referir	34	2262	52.52
12.	pagar	42	2000	49.58
13.	efectuar	43	1407	49.45
14.	objectar	46	677	47.04
15.	liquidar	47	356	46.73
16.	ocorrer	48	1342	46.58
17.	titular	49	266	45.12
18.	inexistir	52	130	43.9
19.	dever	53	5130	43.78
20.	verificar	54	1250	42.48
21.	datar	57	379	41.57
22.	anotar	63	205	40.09
23.	atentar	66	334	38.51
24.	transcrever	69	188	37.84
25.	lograr	70	230	37.8
26.	valorar	71	124	37.65
27.	documentar	75	295	37.13
28.	causar	84	1050	34.52
29.	apensar	85	87	34.12
30.	restituir	87	164	33.22
31.	importar	88	560	33.06
32.	concernir	95	137	31.44
33.	reproduzir	96	286	31.38
34.	agir	98	447	30.87
35.	locar	101	131	30.54
36.	despender	102	172	30.4
37.	carecer	106	205	29.76
38.	controverter	110	59	29.48
39.	delimitar	111	179	29.38

Appendix 13. Eliminated candidate terms (English)

	English CTs	Rank in the list	Frequency	Specificity
1.	accuse	1	2175	152.00
2.	justify	13	501	53.17
3.	relate	26	645	40.72
4.	enumerate	27	77	40.14
5.	characterize	32	139	37.08
6.	individualize	44	46	34.37
7.	sniff	50	134	32.44
8.	limit	51	423	32.28
9.	obtain	58	559	30.69
10.	pertain	65	60	28.11
11.	underlie	66	219	27.94
12.	deduct	67	115	27.71
13.	protect	68	522	27.61
14.	define	71	339	26.85
15.	conduct	75	310	26.27
16.	absent	77	43	25.62
17.	minimize	85	61	23.19
18.	hypothecate	87	22	22.92
19.	premise	88	22	22.92
20.	note	89	314	22.84
21.	adopt	91	361	22.51
22.	owe	92	216	22.32
23.	generalize	97	36	22.00
24.	summarize	98	50	21.41
25.	result	102	389	21.09
26.	explain	107	428	20.01

Appendix 14. List of Portuguese terms

	Selected Portuguese terms	Frame	Frame-evoking terms
1.	<i>absolver</i> ₁	[Verdict]	<i>acquit</i> ₁ , <i>convict</i> ₁ , <i>discharge</i> ₁ ; <i>absolver</i> ₁ , <i>aplicar</i> ₃ , <i>condenar</i> ₁
2.	<i>absolver</i> ₂	[Verdict on petition]	<i>absolver</i> ₂ , <i>condenar</i> ₂
3.	<i>absolver</i> ₃	[Procedural requirements]	<i>absolver</i> ₃
4.	<i>acordar</i> ₁	[Relatório]	<i>acordar</i> ₁
5.	<i>acordar</i> ₂	[Verdict on appeal]	<i>acordar</i> ₂
6.	<i>aditar</i> ₁	[Adding]	<i>aditar</i> ₁
7.	<i>aduzir</i> ₁	[Argumentation]	<i>argue</i> ₁ , <i>assert</i> ₁ , <i>contend</i> ₁ , <i>invoke</i> ₁ , <i>state</i> ₁ , <i>submit</i> ₁ ; <i>alegar</i> ₁ , <i>aduzir</i> ₁ , <i>declarar</i> ₁ , <i>propugnar</i> ₁
8.	<i>aferir</i> ₁	[Assessing]	<i>assess</i> ₁ , <i>determine</i> ₁ ; <i>aferir</i> ₁ , <i>apreciar</i> ₁ , <i>ponderar</i> ₁
9.	<i>alegar</i> ₁	[Argumentation]	<i>argue</i> ₁ , <i>assert</i> ₁ , <i>contend</i> ₁ , <i>invoke</i> ₁ , <i>state</i> ₁ , <i>submit</i> ₁ ; <i>alegar</i> ₁ , <i>aduzir</i> ₁ , <i>declarar</i> ₁ , <i>propugnar</i> ₁
10.	<i>aplicar</i> ₁	[Apply law]	<i>apply</i> ₁ ; <i>aplicar</i> ₁
11.	<i>aplicar</i> ₂	[Law applicability]	<i>apply</i> ₂ ; <i>aplicar</i> ₂ , <i>vincular</i> ₁
12.	<i>aplicar</i> ₃	[Verdict]	<i>acquit</i> ₁ , <i>convict</i> ₁ , <i>discharge</i> ₁ ; <i>absolver</i> ₁ , <i>aplicar</i> ₃ , <i>condenar</i> ₁
13.	<i>apreciar</i> ₁	[Assessing]	<i>assess</i> ₁ , <i>determine</i> ₁ ; <i>aferir</i> ₁ , <i>apreciar</i> ₁ , <i>ponderar</i> ₁
14.	<i>arbitrar</i> ₁	[Compensation]	<i>arbitrar</i> ₁ , <i>indemnizar</i> ₁ , <i>ressarcir</i> ₁
15.	<i>arguir</i> ₁	[Contesting]	<i>allege</i> ₁ , <i>impugn</i> ₁ , <i>rebut</i> ₁ ; <i>arguir</i> ₁ , <i>impugnar</i> ₂ , <i>invocar</i> ₁
16.	<i>assentar</i> _{1a}	[Argumentation basis]	<i>base</i> ₁ , <i>rely</i> ₁ ; <i>assentar</i> _{1a} , <i>fundamentar</i> _{1a}
17.	<i>assentar</i> _{1b}	[Basis]	<i>assentar</i> _{1b} , <i>fundamentar</i> _{1b}
18.	<i>atender</i> ₁	[Taking into consideration]	<i>consider</i> ₁ , <i>disregard</i> ₁ , <i>exclude</i> ₁ ; <i>atender</i> ₁
19.	<i>celebrar</i> ₁	[Legal relations]	<i>terminate</i> ₁ ; <i>celebrar</i> ₁ , <i>cessar</i> ₁ , <i>outorgar</i> ₁
20.	<i>cessar</i> ₁	[Legal relations]	<i>terminate</i> ₁ ; <i>celebrar</i> ₁ , <i>cessar</i> ₁ , <i>outorgar</i> ₁
21.	<i>conceder</i> ₁	[Granting]	<i>confer</i> ₁ , <i>deprive</i> ₁ , <i>entitle</i> ₁ , <i>grant</i> ₁ ; <i>conceder</i> ₁ , <i>conferir</i> ₁ , <i>outorgar</i> ₂
22.	<i>concluir</i> ₁	[Conclusion]	<i>conclude</i> ₁ , <i>determine</i> ₂ ; <i>concluir</i> ₁
23.	<i>condenar</i> ₁	[Verdict]	<i>acquit</i> ₁ , <i>convict</i> ₁ , <i>discharge</i> ₁ ; <i>absolver</i> ₁ , <i>aplicar</i> ₃ , <i>condenar</i> ₁
24.	<i>condenar</i> ₂	[Verdict Petition]	<i>absolver</i> ₂ , <i>condenar</i> ₂
25.	<i>conferir</i> ₁	[Granting]	<i>confer</i> ₁ , <i>deprive</i> ₁ , <i>entitle</i> ₁ , <i>grant</i> ₁ ; <i>conceder</i> ₁ , <i>conferir</i> ₁ , <i>outorgar</i> ₂
26.	<i>configurar</i> ₁	[Irregularity]	<i>constitute</i> ₁ ; <i>configurar</i> ₁ , <i>constituir</i> ₁ , <i>consustanciar</i> ₁ , <i>padecer</i> ₂
27.	<i>consignar</i> ₁	[Regulations]	<i>codify</i> ₁ , <i>establish</i> ₁ , <i>govern</i> ₁ ,

			<i>mandate₁, prescribe₁, provide₁, recognize₁; consignar₁, determinar₁, disciplinar₁, establecer₁, estatuir₁, estipular₁, prescrever₁</i>
28.	<i>consustanciar₁</i>	[Irregularity]	<i>constitute₁; configurar₁, constituer₁, consustanciar₁, padecer₂</i>
29.	<i>constituir₁</i>	[Irregularity]	<i>constitute₁; configurar₁, constituer₁, consustanciar₁, padecer₂</i>
30.	<i>constituir₂</i>	[Become law]	<i>constituir₂</i>
31.	<i>contra-alegar₁</i>	[Defence]	<i>contra-alegar₁</i>
32.	<i>cumprir₁</i>	[Compliance]	<i>comply₂, exceed₁, infringe₂, violate₂; violar₂, cumprir₁</i>
33.	<i>cumprir₂</i>	[Being held in custody]	<i>cumprir₂</i>
34.	<i>cumprir₃</i>	[Duty]	<i>discharge₂; cumprir₃, impender₁, incumbir₁</i>
35.	<i>declarar₁</i>	[Argumentation]	<i>argue₁, assert₁, contend₁, invoke₁, state₁, submit₁; alegar₁, aduzir₁, declarar₁, propugnar₁</i>
36.	<i>declarar₂</i>	[Judging]	<i>consider₂, deem₁; declarar₂, julgar₁</i>
37.	<i>deduzir₁</i>	[Proceeding]	<i>apply₃; deduzir₁</i>
38.	<i>demandar₁</i>	[Suing]	<i>demandar₁, intentar₁</i>
39.	<i>demonstrar₁</i>	[Proof]	<i>establish₂, prove₁; demonstrar₁, provar₁</i>
40.	<i>determinar₁</i>	[Regulations]	<i>codify₁, establish₁, govern₁, mandate₁, prescribe₁, provide₁, recognize₁; consignar₁, determinar₁, disciplinar₁, establecer₁, estatuir₁, estipular₁, prescrever₁</i>
41.	<i>determinar₂</i>	[Order]	<i>commit₂, impose₁, order₁, require₁; determinar₂</i>
42.	<i>disciplinar₁</i>	[Regulations]	<i>codify₁, establish₁, govern₁, mandate₁, prescribe₁, provide₁, recognize₁; consignar₁, determinar₁, disciplinar₁, establecer₁, estatuir₁, estipular₁, prescrever₁</i>
43.	<i>estabelecer₁</i>	[Regulations]	<i>codify₁, establish₁, govern₁, mandate₁, prescribe₁, provide₁, recognize₁; consignar₁, determinar₁, disciplinar₁, establecer₁, estatuir₁, estipular₁, prescrever₁</i>
44.	<i>estatuir₁</i>	[Regulations]	<i>codify₁, establish₁, govern₁, mandate₁, prescribe₁, provide₁, recognize₁; consignar₁, determinar₁, disciplinar₁, establecer₁, estatuir₁, estipular₁, prescrever₁</i>
45.	<i>estipular₁</i>	[Regulations]	<i>codify₁, establish₁, govern₁, mandate₁, prescribe₁, provide₁, recognize₁; consignar₁, determinar₁, disciplinar₁, establecer₁, estatuir₁, estipular₁, prescrever₁</i>
46.	<i>exarar₁</i>	[Writing]	<i>exarar₁</i>
47.	<i>exercer₁</i>	[Right]	<i>assert₃, exercise₁; exercer₁</i>

48.	<i>exercer₂</i>	[Disagreement]	<i>exercer₂</i>
49.	<i>formular₁</i>	[Petition]	<i>request₁, seek₁; formular₁, peticionar₁, pugnar₁, requerer₁</i>
50.	<i>fundamentar_{1a}</i>	[Argumentation basis]	<i>base₁, rely₁; assentar_{1a}, fundamentar_{1a}</i>
51.	<i>fundamentar_{1b}</i>	[Basis]	<i>assentar_{1b}, fundamentar_{1b}</i>
52.	<i>impender₁</i>	[Duty]	<i>discharge₂; cumprir₃, impender₁, incumbir₁</i>
53.	<i>improceder₁</i>	[Validity of proceeding]	<i>proceed₁; improceder₁, proceder₁</i>
54.	<i>impugnar₁</i>	[Appeal]	<i>impugnar₁, recorrer₁</i>
55.	<i>impugnar₂</i>	[Contesting]	<i>allege₁, impugn₁, rebut₁; arguir₁, impugnar₂, invocar₁</i>
56.	<i>imputar₁</i>	[Accusation]	<i>imputar₁</i>
57.	<i>incorrer₁</i>	[Crime]	<i>commit₁, engage₁; incorrer₁, praticar₁</i>
58.	<i>incorrer₂</i>	[Make an error]	<i>err₁; incorrer₂</i>
59.	<i>incumbir₁</i>	[Duty]	<i>discharge₂; cumprir₃, impender₁, incumbir₁</i>
60.	<i>incumbir₂</i>	[Imposing a duty]	<i>incumbir₂</i>
61.	<i>indemnizar₁</i>	[Compensation]	<i>arbitrar₁, indemnizar₁, ressarcir₁</i>
62.	<i>intentar₁</i>	[Suing]	<i>demandar₁, intentar₁</i>
63.	<i>interpor₁</i>	[Appellate procedure]	<i>apply₄; interpor₁</i>
64.	<i>invocar₁</i>	[Contesting]	<i>allege₁, impugn₁, rebut₁; arguir₁, impugnar₂, invocar₁</i>
65.	<i>julgar₁</i>	[Judging]	<i>consider₂, deem₁; declarar₂, julgar₁</i>
66.	<i>julgar₂</i>	[Trial]	<i>julgar₂</i>
67.	<i>negar₁</i>	[Verdict on appeal]	<i>affirm₁, dismiss₁, quash₁, uphold₁; negar₁, revogar₁</i>
68.	<i>notificar₁</i>	[Informing]	<i>notificar₁</i>
69.	<i>obstar₁</i>	[Issues]	<i>engage₂, warrant₁; obstar₁, pressupor₁</i>
70.	<i>outorgar₁</i>	[Legal relations]	<i>terminate₁; celebrar₁, cessar₁, outorgar₁</i>
71.	<i>outorgar₂</i>	[Granting]	<i>confer₁, deprive₁, entitle₁, grant₁; conceder₁, conferir₁, outorgar₂</i>
72.	<i>padecer₁</i>	[Suffering damage]	<i>padecer₁, sofrer₁</i>
73.	<i>padecer₂</i>	[Irregularity]	<i>constitute₁; configurar₁, constituer₁, consustanciar₁, padecer₂</i>
74.	<i>peticionar₁</i>	[Petition]	<i>request₁, seek₁; formular₁, peticionar₁, pugnar₁, requerer₁</i>
75.	<i>ponderar₁</i>	[Assessing]	<i>assess₁, determine₁; aferir₁, apreciar₁, ponderar₁</i>
76.	<i>praticar₁</i>	[Crime]	<i>commit₁, engage₁; incorrer₁, praticar₁</i>
77.	<i>prescrever₁</i>	[Regulations]	<i>codify₁, establish₁, govern₁, mandate₁, prescribe₁, provide₁, recognize₁; consignar₁, determinar₁, disciplinar₁, estabelecer₁, estatuir₁, estipular₁, prescrever₁</i>
78.	<i>prescrever₂</i>	[Cease effect]	<i>prescrever₂</i>
79.	<i>pressupor₁</i>	[Issues]	<i>engage₂, warrant₁; obstar₁, pressupor₁</i>

80.	<i>proceder</i> ₁	[Validity of proceeding]	<i>proceed</i> ₁ ; <i>improceder</i> ₁ , <i>proceder</i> ₁
81.	<i>proferir</i> ₁	[Pronouncing a verdict]	<i>render</i> ₁ ; <i>proferir</i> ₁
82.	<i>propugnar</i> ₁	[Argumentation]	<i>argue</i> ₁ , <i>assert</i> ₁ , <i>contend</i> ₁ , <i>invoke</i> ₁ , <i>state</i> ₁ , <i>submit</i> ₁ ; <i>alegar</i> ₁ , <i>aduzir</i> ₁ , <i>declarar</i> ₁ , <i>propugnar</i> ₁
83.	<i>provar</i> ₁	[Proof]	<i>establish</i> ₂ , <i>prove</i> ₁ ; <i>demonstrar</i> ₁ , <i>provar</i> ₁
84.	<i>pugnar</i> ₁	[Petition]	<i>request</i> ₁ , <i>seek</i> ₁ ; <i>formular</i> ₁ , <i>peticionar</i> ₁ , <i>pugnar</i> ₁ , <i>requerer</i> ₁
85.	<i>recorrer</i>	[Appeal]	<i>impugnar</i> ₁ , <i>recorrer</i> ₁
86.	<i>relevar</i> ₁	[Being important]	<i>relevar</i> ₁
87.	<i>requerer</i> ₁	[Petition]	<i>request</i> ₁ , <i>seek</i> ₁ ; <i>formular</i> ₁ , <i>peticionar</i> ₁ , <i>pugnar</i> ₁ , <i>requerer</i> ₁
88.	<i>requerer</i> ₂	[Requesting documents]	<i>requerer</i> ₂
89.	<i>ressarcir</i> ₁	[Compensation]	<i>arbitrar</i> ₁ , <i>indemnizar</i> ₁ , <i>ressarcir</i> ₁
90.	<i>revogar</i> ₁	[Verdict on appeal]	<i>affirm</i> ₁ , <i>dismiss</i> ₁ , <i>quash</i> ₁ , <i>uphold</i> ₁ ; <i>negar</i> ₁ , <i>revogar</i> ₁
91.	<i>revogar</i> ₂	[Law changes]	<i>amend</i> ₂ ; <i>revogar</i> ₂
92.	<i>sindicar</i> ₁	[Investigate]	<i>scrutinize</i> ₁ ; <i>sindicar</i> ₁
93.	<i>sofrer</i> ₁	[Suffering damage]	<i>padecer</i> ₁ , <i>sofrer</i> ₁
94.	<i>suprir</i> ₁	[Remedy]	<i>amend</i> ₁ , <i>remedy</i> ₁ , <i>resolve</i> ₁ ; <i>suprir</i> ₁
95.	<i>transitar</i> ₁	[Res judicata]	<i>transitar</i> ₁
96.	<i>transitar</i> ₂	[Case transfer]	<i>remit</i> ₂ ; <i>transitar</i> ₂
97.	<i>vincular</i> ₁	[Law applicability]	<i>apply</i> ₂ ; <i>aplicar</i> ₂ , <i>vincular</i> ₁
98.	<i>violar</i> ₁	[Constitutionality]	<i>comply</i> ₁ , <i>infringe</i> ₁ , <i>violate</i> ₁ , <i>satisfy</i> ₁ ; <i>violar</i> ₁
99.	<i>violar</i> ₂	[Compliance]	<i>comply</i> ₂ , <i>exceed</i> ₁ , <i>infringe</i> ₂ , <i>violate</i> ₂ ; <i>violar</i> ₂ , <i>cumprir</i> ₁
100.	<i>violar</i> ₃	[Rape]	-

Appendix 15. List of English terms

	Selected English terms	Frame	Frame-evoking terms
1.	<i>acquit</i> ₁	[Verdict]	<i>acquit</i> ₁ , <i>convict</i> ₁ , <i>discharge</i> ₁ ; <i>absolver</i> ₁ , <i>aplicar</i> ₃ , <i>condenar</i> ₁
2.	<i>adduce</i> ₁	[Evidence]	<i>adduce</i> ₁
3.	<i>affirm</i> ₁	[Verdict on appeal]	<i>affirm</i> ₁ , <i>dismiss</i> ₁ , <i>quash</i> ₁ , <i>uphold</i> ₁ ; <i>negar</i> ₁ , <i>revogar</i> ₁
4.	<i>allege</i> ₁	[Contesting]	<i>allege</i> ₁ , <i>impugn</i> ₁ , <i>rebut</i> ₁ ; <i>arguir</i> ₁ , <i>impugnar</i> ₂ , <i>invocar</i> ₁
5.	<i>amend</i> ₁	[Remedy]	<i>amend</i> ₁ , <i>remedy</i> ₁ , <i>resolve</i> ₁ ; <i>suprir</i> ₁
6.	<i>amend</i> ₂	[Law changes]	<i>amend</i> ₂ ; <i>revogar</i> ₂
7.	<i>apply</i> ₁	[Apply law]	<i>apply</i> ₁ ; <i>aplicar</i> ₁
8.	<i>apply</i> ₂	[Law applicability]	<i>apply</i> ₂ ; <i>aplicar</i> ₂ , <i>vincular</i> ₁
9.	<i>apply</i> ₃	[Proceeding]	<i>apply</i> ₃ ; <i>deduzir</i> ₁
10.	<i>apply</i> ₂	[Appellate procedure]	<i>apply</i> ₂ ; <i>interpor</i> ₁
11.	<i>argue</i> ₁	[Argumentation]	<i>argue</i> ₁ , <i>assert</i> ₁ , <i>contend</i> ₁ , <i>invoke</i> ₁ , <i>state</i> ₁ , <i>submit</i> ₁ ; <i>alegar</i> ₁ , <i>aduzir</i> ₁ , <i>declarar</i> ₁ , <i>propugnar</i> ₁
12.	<i>assert</i> ₁	[Argumentation]	<i>argue</i> ₁ , <i>assert</i> ₁ , <i>contend</i> ₁ , <i>invoke</i> ₁ , <i>state</i> ₁ , <i>submit</i> ₁ ; <i>alegar</i> ₁ , <i>aduzir</i> ₁ , <i>declarar</i> ₁ , <i>propugnar</i> ₁
13.	<i>assert</i> ₂	[Jurisdiction]	<i>assert</i> ₂
14.	<i>assert</i> ₃	[Right]	<i>assert</i> ₃ , <i>exercise</i> ₁ ; <i>exercer</i> ₁
15.	<i>assess</i> ₁	[Assessing]	<i>assess</i> ₁ , <i>determine</i> ₁ ; <i>aferir</i> ₁ , <i>apreciar</i> ₁ , <i>ponderar</i> ₁
16.	<i>authorize</i> ₁	[Authorization]	<i>authorize</i> ₁ , <i>permit</i> ₁ , <i>preclude</i> ₁ , <i>prohibit</i> ₁
17.	<i>base</i> ₁	[Argumentation basis]	<i>base</i> ₁ , <i>rely</i> ₁ ; <i>assentar</i> _{1a} , <i>fundamentar</i> _{1a}
18.	<i>codify</i> ₁	[Regulations]	<i>codify</i> ₁ , <i>establish</i> ₁ , <i>govern</i> ₁ , <i>mandate</i> ₁ , <i>prescribe</i> ₁ , <i>provide</i> ₁ , <i>recognize</i> ₁ ; <i>consignar</i> ₁ , <i>determinar</i> ₁ , <i>disciplinar</i> ₁ , <i>estabelecer</i> ₁ , <i>estatuir</i> ₁ , <i>estipular</i> ₁ , <i>prescrever</i> ₁
19.	<i>commit</i> ₁	[Crime]	<i>commit</i> ₁ , <i>engage</i> ₁ ; <i>incorrer</i> ₁ , <i>praticar</i> ₁
20.	<i>commit</i> ₂	[Order]	<i>commit</i> ₂ , <i>impose</i> ₁ , <i>order</i> ₁ , <i>require</i> ₁ ; <i>determinar</i> ₂
21.	<i>comply</i> ₁	[Constitutionality]	<i>comply</i> ₁ , <i>infringe</i> ₁ , <i>violate</i> ₁ , <i>satisfy</i> ₁ ; <i>violar</i> ₁
22.	<i>comply</i> ₂	[Compliance]	<i>comply</i> ₂ , <i>exceed</i> ₁ , <i>infringe</i> ₂ , <i>violate</i> ₂ ; <i>violar</i> ₂ , <i>cumprir</i> ₁
23.	<i>conclude</i> ₁	[Conclusion]	<i>conclude</i> ₁ , <i>determine</i> ₂ ; <i>concluir</i> ₁
24.	<i>concur</i> ₁	[Decision type]	<i>concur</i> ₁
25.	<i>confer</i> ₁	[Granting]	<i>confer</i> ₁ , <i>deprive</i> ₁ , <i>entitle</i> ₁ , <i>grant</i> ₁ ; <i>conceder</i> ₁ , <i>conferir</i> ₁ , <i>outorgar</i> ₂
26.	<i>consider</i> ₁	[Taking into]	<i>consider</i> ₁ , <i>disregard</i> ₁ , <i>exclude</i> ₁ ;

		consideration]	<i>atender</i> ₁
27.	<i>consider</i> ₂	[Judging]	<i>consider</i> ₂ , <i>deem</i> ₁ ; <i>declarar</i> ₂ , <i>julgar</i> ₁
28.	<i>constitute</i> ₁	[Irregularity]	<i>constitute</i> ₁ ; <i>configurar</i> ₁ , <i>constituir</i> ₁ , <i>consustanciar</i> ₁ , <i>padecer</i> ₂
29.	<i>contend</i> ₁	[Argumentation]	<i>argue</i> ₁ , <i>assert</i> ₁ , <i>contend</i> ₁ , <i>invoke</i> ₁ , <i>state</i> ₁ , <i>submit</i> ₁ ; <i>alegar</i> ₁ , <i>aduzir</i> ₁ , <i>declarar</i> ₁ , <i>propugnar</i> ₁
30.	<i>convict</i> ₁	[Verdict]	<i>acquit</i> ₁ , <i>convict</i> ₁ , <i>discharge</i> ₁ ; <i>absolver</i> ₁ , <i>aplicar</i> ₃ , <i>condenar</i> ₁
31.	<i>cross-examine</i> ₁	[Court examination]	<i>cross-examine</i> ₁
32.	<i>deem</i> ₁	[Judging]	<i>consider</i> ₂ , <i>deem</i> ₁ ; <i>declarar</i> ₂ , <i>julgar</i> ₁
33.	<i>deprive</i> ₁	[Granting]	<i>confer</i> ₁ , <i>deprive</i> ₁ , <i>entitle</i> ₁ , <i>grant</i> ₁ ; <i>conceder</i> ₁ , <i>conferir</i> ₁ , <i>outorgar</i> ₂
34.	<i>designate</i> ₁	[Appointing]	<i>designate</i> ₁
35.	<i>detain</i> ₁	[Detaining]	<i>detain</i> ₁
36.	<i>determine</i> ₁	[Assessing]	<i>assess</i> ₁ , <i>determine</i> ₁ ; <i>aferrir</i> ₁ , <i>apreciar</i> ₁ , <i>ponderar</i> ₁
37.	<i>determine</i> ₂	[Conclusion]	<i>conclude</i> ₁ , <i>determine</i> ₂ ; <i>concluir</i> ₁
38.	<i>discharge</i> ₁	[Verdict]	<i>acquit</i> ₁ , <i>convict</i> ₁ , <i>discharge</i> ₁ ; <i>absolver</i> ₁ , <i>aplicar</i> ₃ , <i>condenar</i> ₁
39.	<i>discharge</i> ₂	[Duty]	<i>discharge</i> ₂ ; <i>cumprir</i> ₃ , <i>impender</i> ₁ , <i>incumbir</i> ₁
40.	<i>disclose</i> ₁	[Revealing]	<i>disclose</i> ₁
41.	<i>dismiss</i> ₁	[Verdict on appeal]	<i>affirm</i> ₁ , <i>dismiss</i> ₁ , <i>quash</i> ₁ , <i>uphold</i> ₁ ; <i>negar</i> ₁ , <i>revogar</i> ₁
42.	<i>disregard</i> ₁	[Taking into consideration]	<i>consider</i> ₁ , <i>disregard</i> ₁ , <i>exclude</i> ₁ ; <i>atender</i> ₁
43.	<i>enact</i> ₁	[Law-making]	<i>enact</i> ₁
44.	<i>engage</i> ₁	[Crime]	<i>commit</i> ₁ , <i>engage</i> ₁ ; <i>incorrer</i> ₁ , <i>praticar</i> ₁
45.	<i>engage</i> ₂	[Issues]	<i>engage</i> ₂ , <i>warrant</i> ₁ ; <i>obstar</i> ₁ , <i>pressupor</i> ₁
46.	<i>entitle</i> ₁	[Granting]	<i>confer</i> ₁ , <i>deprive</i> ₁ , <i>entitle</i> ₁ , <i>grant</i> ₁ ; <i>conceder</i> ₁ , <i>conferir</i> ₁ , <i>outorgar</i> ₂
47.	<i>err</i> ₁	[Make an error]	<i>err</i> ₁ ; <i>incorrer</i> ₂
48.	<i>establish</i> ₁	[Regulations]	<i>codify</i> ₁ , <i>establish</i> ₁ , <i>govern</i> ₁ , <i>mandate</i> ₁ , <i>prescribe</i> ₁ , <i>provide</i> ₁ , <i>recognize</i> ₁ ; <i>consignar</i> ₁ , <i>determinar</i> ₁ , <i>disciplinar</i> ₁ , <i>estabelecer</i> ₁ , <i>estatuir</i> ₁ , <i>estipular</i> ₁ , <i>prescrever</i> ₁
49.	<i>establish</i> ₂	[Proof]	<i>establish</i> ₂ , <i>prove</i> ₁ ; <i>demonstrar</i> ₁ , <i>provar</i> ₁
50.	<i>exceed</i> ₁	[Compliance]	<i>comply</i> ₂ , <i>exceed</i> ₁ , <i>infringe</i> ₂ , <i>violate</i> ₂ ; <i>violar</i> ₂ , <i>cumprir</i> ₁
51.	<i>exclude</i> ₁	[Taking into consideration]	<i>consider</i> ₁ , <i>disregard</i> ₁ , <i>exclude</i> ₁ ; <i>atender</i> ₁
52.	<i>exercise</i> ₁	[Right]	<i>assert</i> ₃ , <i>exercise</i> ₁ ; <i>exercer</i> ₁
53.	<i>govern</i> ₁	[Regulations]	<i>codify</i> ₁ , <i>establish</i> ₁ , <i>govern</i> ₁ , <i>mandate</i> ₁ , <i>prescribe</i> ₁ , <i>provide</i> ₁ , <i>recognize</i> ₁ ; <i>consignar</i> ₁ , <i>determinar</i> ₁ , <i>disciplinar</i> ₁ , <i>estabelecer</i> ₁ , <i>estatuir</i> ₁ ,

			<i>estipular</i> ₁ , <i>prescrever</i> ₁
54.	<i>grant</i> ₁	[Granting]	<i>confer</i> ₁ , <i>deprive</i> ₁ , <i>entitle</i> ₁ , <i>grant</i> ₁ ; <i>conceder</i> ₁ , <i>conferir</i> ₁ , <i>outorgar</i> ₂
55.	<i>impose</i> ₁	[Order]	<i>commit</i> ₂ , <i>impose</i> ₁ , <i>order</i> ₁ , <i>require</i> ₁ ; <i>determinar</i> ₂
56.	<i>impugn</i> ₁	[Contesting]	<i>allege</i> ₁ , <i>impugn</i> ₁ , <i>rebut</i> ₁ ; <i>arguir</i> ₁ , <i>impugnar</i> ₂ , <i>invocar</i> ₁
57.	<i>incriminate</i> ₁	[Incriminating]	<i>incriminate</i> ₁
58.	<i>infer</i> ₁	[Inference]	<i>infer</i>
59.	<i>infringe</i> ₁	[Constitutionality]	<i>comply</i> ₁ , <i>infringe</i> ₁ , <i>violate</i> ₁ , <i>satisfy</i> ₁ ; <i>violar</i> ₁
60.	<i>infringe</i> ₂	[Compliance]	<i>comply</i> ₂ , <i>exceed</i> ₁ , <i>infringe</i> ₂ , <i>violate</i> ₂ ; <i>violar</i> ₂ , <i>cumprir</i> ₁
61.	<i>instruct</i> ₁	[Jury]	<i>instruct</i> ₁
62.	<i>instruct</i> ₂	[Consulting a lawyer]	<i>instruct</i> ₂
63.	<i>interpret</i> ₁	[Law interpretation]	<i>interpret</i> ₁
64.	<i>invoke</i> ₁	[Argumentation]	<i>argue</i> ₁ , <i>assert</i> ₁ , <i>contend</i> ₁ , <i>invoke</i> ₁ , <i>state</i> ₁ , <i>submit</i> ₁ ; <i>alegar</i> ₁ , <i>aduzir</i> ₁ , <i>declarar</i> ₁ , <i>propugnar</i> ₁
65.	<i>mandate</i> ₁	[Regulations]	<i>codify</i> ₁ , <i>establish</i> ₁ , <i>govern</i> ₁ , <i>mandate</i> ₁ , <i>prescribe</i> ₁ , <i>provide</i> ₁ , <i>recognize</i> ₁ ; <i>consignar</i> ₁ , <i>determinar</i> ₁ , <i>disciplinar</i> ₁ , <i>estabelecer</i> ₁ , <i>estatuir</i> ₁ , <i>estipular</i> ₁ , <i>prescrever</i> ₁
66.	<i>mitigate</i> ₁	[Lessening irregularity]	<i>mitigate</i> ₁
67.	<i>order</i> ₁	[Order]	<i>commit</i> ₂ , <i>impose</i> ₁ , <i>order</i> ₁ , <i>require</i> ₁ ; <i>determinar</i> ₂
68.	<i>permit</i> ₁	[Authorization]	<i>authorize</i> ₁ , <i>permit</i> ₁ , <i>preclude</i> ₁ , <i>prohibit</i> ₁
69.	<i>preclude</i> ₁	[Authorization]	<i>authorize</i> ₁ , <i>permit</i> ₁ , <i>preclude</i> ₁ , <i>prohibit</i> ₁
70.	<i>prescribe</i> ₁	[Regulations]	<i>codify</i> ₁ , <i>establish</i> ₁ , <i>govern</i> ₁ , <i>mandate</i> ₁ , <i>prescribe</i> ₁ , <i>provide</i> ₁ , <i>recognize</i> ₁ ; <i>consignar</i> ₁ , <i>determinar</i> ₁ , <i>disciplinar</i> ₁ , <i>estabelecer</i> ₁ , <i>estatuir</i> ₁ , <i>estipular</i> ₁ , <i>prescrever</i> ₁
71.	<i>presume</i> ₁	[Presumption]	<i>presume</i> ₁
72.	<i>proceed</i> ₁	[Validity of proceeding]	<i>proceed</i> ₁ ; <i>improceder</i> ₁ , <i>proceder</i> ₁
73.	<i>proceed</i> _{2a}	[Judge procedure]	<i>proceed</i> _{2a} ; <i>proceder</i> ₂
74.	<i>proceed</i> _{2b}	[Prosecutor procedure]	<i>proceed</i> _{2b}
75.	<i>prohibit</i> ₁	[Authorization]	<i>authorize</i> ₁ , <i>permit</i> ₁ , <i>preclude</i> ₁ , <i>prohibit</i> ₁
76.	<i>prove</i> ₁	[Proof]	<i>establish</i> ₂ , <i>prove</i> ₁ ; <i>demonstrar</i> ₁ , <i>provar</i> ₁
77.	<i>provide</i> ₁	[Regulations]	<i>codify</i> ₁ , <i>establish</i> ₁ , <i>govern</i> ₁ , <i>mandate</i> ₁ , <i>prescribe</i> ₁ , <i>provide</i> ₁ , <i>recognize</i> ₁ ; <i>consignar</i> ₁ , <i>determinar</i> ₁ , <i>disciplinar</i> ₁ , <i>estabelecer</i> ₁ , <i>estatuir</i> ₁ , <i>estipular</i> ₁ , <i>prescrever</i> ₁
78.	<i>quash</i> ₁	[Verdict on appeal]	<i>affirm</i> ₁ , <i>dismiss</i> ₁ , <i>quash</i> ₁ , <i>uphold</i> ₁ ; <i>negar</i> ₁ , <i>revogar</i> ₁

79.	<i>rebut</i> ₁	[Contesting]	<i>allege</i> ₁ , <i>impugn</i> ₁ , <i>rebut</i> ₁ ; <i>arguir</i> ₁ , <i>impugnar</i> ₂ , <i>invocar</i> ₁
80.	<i>recognize</i> ₁	[Regulations]	<i>codify</i> ₁ , <i>establish</i> ₁ , <i>govern</i> ₁ , <i>mandate</i> ₁ , <i>prescribe</i> ₁ , <i>provide</i> ₁ , <i>recognize</i> ₁ ; <i>consignar</i> ₁ , <i>determinar</i> ₁ , <i>disciplinar</i> ₁ , <i>estabelecer</i> ₁ , <i>estatuir</i> ₁ , <i>estipular</i> ₁ , <i>prescrever</i> ₁
81.	<i>rely</i> ₁	[Argumentation basis]	<i>base</i> ₁ , <i>rely</i> ₁ ; <i>assentar</i> _{1a} , <i>fundamentar</i> _{1a}
82.	<i>remedy</i> ₁	[Remedy]	<i>amend</i> ₁ , <i>remedy</i> ₁ , <i>resolve</i> ₁ ; <i>suprir</i> ₁
83.	<i>remit</i> ₂	[Case transfer]	<i>remit</i> ₂ ; <i>transitar</i> ₂
84.	<i>render</i> ₁	[Pronouncing a verdict]	<i>render</i> ₁ ; <i>proferir</i> ₁
85.	<i>render</i> ₂	[Cause irregularity]	<i>render</i> ₂
86.	<i>request</i> ₁	[Petition]	<i>request</i> ₁ , <i>seek</i> ₁ ; <i>formular</i> ₁ , <i>peticionar</i> ₁ , <i>pugnar</i> ₁ , <i>requerer</i> ₁
87.	<i>require</i> ₁	[Order]	<i>commit</i> ₂ , <i>impose</i> ₁ , <i>order</i> ₁ , <i>require</i> ₁ ; <i>determinar</i> ₂
88.	<i>resolve</i> ₁	[Remedy]	<i>amend</i> ₁ , <i>remedy</i> ₁ , <i>resolve</i> ₁ ; <i>suprir</i> ₁
89.	<i>review</i> ₁	[Reviewing]	<i>review</i> ₁
90.	<i>satisfy</i> ₁	[Constitutionality]	<i>comply</i> ₁ , <i>infringe</i> ₁ , <i>violate</i> ₁ , <i>satisfy</i> ₁ ; <i>violar</i> ₁
91.	<i>satisfy</i> ₂	[Convincing]	<i>satisfy</i> ₂
92.	<i>scrutinize</i> ₁	[Investigate]	<i>scrutinize</i> ₁ ; <i>sindicar</i> ₁
93.	<i>seek</i> ₁	[Petition]	<i>request</i> ₁ , <i>seek</i> ₁ ; <i>formular</i> ₁ , <i>peticionar</i> ₁ , <i>pugnar</i> ₁ , <i>requerer</i> ₁
94.	<i>state</i> ₁	[Argumentation]	<i>argue</i> ₁ , <i>assert</i> ₁ , <i>contend</i> ₁ , <i>invoke</i> ₁ , <i>state</i> ₁ , <i>submit</i> ₁ ; <i>alegar</i> ₁ , <i>aduzir</i> ₁ , <i>declarar</i> ₁ , <i>propugnar</i> ₁
95.	<i>submit</i> ₁	[Argumentation]	<i>argue</i> ₁ , <i>assert</i> ₁ , <i>contend</i> ₁ , <i>invoke</i> ₁ , <i>state</i> ₁ , <i>submit</i> ₁ ; <i>alegar</i> ₁ , <i>aduzir</i> ₁ , <i>declarar</i> ₁ , <i>propugnar</i> ₁
96.	<i>terminate</i> ₁	[Legal relations]	<i>terminate</i> ₁ ; <i>celebrar</i> ₁ , <i>cessar</i> ₁ , <i>outorgar</i> ₁
97.	<i>testify</i> ₁	[Testimony]	<i>testify</i> ₁
98.	<i>uphold</i> ₁	[Verdict on appeal]	<i>affirm</i> ₁ , <i>dismiss</i> ₁ , <i>quash</i> ₁ , <i>uphold</i> ₁ ; <i>negar</i> ₁ , <i>revogar</i> ₁
99.	<i>violate</i> ₁	[Constitutionality]	<i>comply</i> ₁ , <i>infringe</i> ₁ , <i>violate</i> ₁ , <i>satisfy</i> ₁ ; <i>violar</i> ₁
100.	<i>violate</i> ₂	[Compliance]	<i>comply</i> ₂ , <i>exceed</i> ₁ , <i>infringe</i> ₂ , <i>violate</i> ₂ ; <i>violar</i> ₂ , <i>cumprir</i> ₁
101.	<i>warrant</i> ₁	[Issues]	<i>engage</i> ₂ , <i>warrant</i> ₁ ; <i>obstar</i> ₁ , <i>pressupor</i> ₁

Appendix 16. List of frames grouping together candidate equivalents

	Frames that group together candidate-equivalents	Candidate-equivalents
1.	[Appellate procedure]	<i>apply</i> ₄ ; <i>interpor</i> ₁
2.	[Apply law]	<i>apply</i> ₁ ; <i>aplicar</i> ₁
3.	[Argumentation]	<i>argue</i> ₁ , <i>assert</i> ₁ , <i>contend</i> ₁ , <i>invoke</i> ₁ , <i>state</i> ₁ , <i>submit</i> ₁ ; <i>alegar</i> ₁ , <i>aduzir</i> ₁ , <i>declarar</i> ₁ , <i>propugnar</i> ₁
4.	[Argumentation basis]	<i>base</i> ₁ , <i>rely</i> ₁ ; <i>assentar</i> _{1a} , <i>fundamentar</i> _{1a}
5.	[Assessing]	<i>assess</i> ₁ , <i>determine</i> ₁ ; <i>aferrir</i> ₁ , <i>apreciar</i> ₁ , <i>ponderar</i> ₁
6.	[Case transfer]	<i>remit</i> ₂ ; <i>transitar</i> ₂
7.	[Compliance]	<i>comply</i> ₂ , <i>exceed</i> ₁ , <i>infringe</i> ₂ , <i>violate</i> ₂ ; <i>violar</i> ₂ , <i>cumprir</i> ₁
8.	[Conclusion]	<i>conclude</i> ₁ , <i>determine</i> ₂ ; <i>concluir</i> ₁
9.	[Constitutionality]	<i>comply</i> ₁ , <i>infringe</i> ₁ , <i>violate</i> ₁ , <i>satisfy</i> ₁ ; <i>violar</i> ₁
10.	[Contesting]	<i>allege</i> ₁ , <i>impugn</i> ₁ , <i>rebut</i> ₁ ; <i>arguir</i> ₁ , <i>impugnar</i> ₂ , <i>invocar</i> ₁
11.	[Crime]	<i>commit</i> ₁ , <i>engage</i> ₁ ; <i>incorrer</i> ₁ , <i>praticar</i> ₁
12.	[Proof]	<i>establish</i> ₂ , <i>prove</i> ₁ ; <i>demonstrar</i> ₁ , <i>provar</i> ₁
13.	[Granting]	<i>confer</i> ₁ , <i>deprive</i> ₁ , <i>entitle</i> ₁ , <i>grant</i> ₁ ; <i>conceder</i> ₁ , <i>conferir</i> ₁ , <i>outorgar</i> ₂
14.	[Investigating]	<i>scrutinize</i> ₁ ; <i>sindicar</i> ₁
15.	[Irregularity]	<i>constitute</i> ₁ ; <i>configurar</i> ₁ , <i>constituir</i> ₁ , <i>consustanciar</i> ₁ , <i>padecer</i> ₂
16.	[Issues]	<i>engage</i> ₂ , <i>warrant</i> ₁ ; <i>obstar</i> ₁ , <i>pressupor</i> ₁
17.	[Judging]	<i>consider</i> ₂ , <i>deem</i> ₁ ; <i>declarar</i> ₂ , <i>julgar</i> ₁
18.	[Law applicability]	<i>apply</i> ₂ ; <i>aplicar</i> ₂ , <i>vincular</i> ₁
19.	[Law changes]	<i>amend</i> ₂ ; <i>revogar</i> ₂
20.	[Legal relations]	<i>terminate</i> ₁ ; <i>celebrar</i> ₁ , <i>cessar</i> ₁ , <i>outorgar</i> ₁
21.	[Make an error]	<i>err</i> ₁ ; <i>incorrer</i> ₂
22.	[Order]	<i>commit</i> ₂ , <i>impose</i> ₁ , <i>order</i> ₁ , <i>require</i> ₁ ; <i>determinar</i> ₂
23.	[Petition]	<i>request</i> ₁ , <i>seek</i> ₁ ; <i>formular</i> ₁ , <i>peticionar</i> ₁ , <i>pugnar</i> ₁ , <i>requerer</i> ₁
24.	[Procedure of judges]	<i>proceed</i> _{2a} ; <i>proceder</i> ₂
25.	[Proceeding]	<i>apply</i> ₃ ; <i>deduzir</i> ₁
26.	[Pronouncing a verdict]	<i>render</i> ₁ ; <i>proferir</i> ₁
27.	[Regulations]	<i>codify</i> ₁ , <i>establish</i> ₁ , <i>govern</i> ₁ , <i>mandate</i> ₁ , <i>prescribe</i> ₁ , <i>provide</i> ₁ , <i>recognize</i> ₁ ; <i>consignar</i> ₁ , <i>determinar</i> ₁ , <i>disciplinar</i> ₁ , <i>estabelecer</i> ₁ , <i>estatuir</i> ₁ , <i>estipular</i> ₁ , <i>prescrever</i> ₁
28.	[Remedy]	<i>amend</i> ₁ , <i>remedy</i> ₁ , <i>resolve</i> ₁ ; <i>suprir</i> ₁
29.	[Right]	<i>assert</i> ₃ , <i>exercise</i> ₁ ; <i>exercer</i> ₁
30.	[Taking into consideration]	<i>consider</i> ₁ , <i>disregard</i> ₁ , <i>exclude</i> ₁ ; <i>atender</i> ₁
31.	[Validity of proceeding]	<i>proceed</i> ₁ ; <i>improceder</i> ₁ , <i>proceder</i> ₁
32.	[Verdict]	<i>acquit</i> ₁ , <i>convict</i> ₁ , <i>discharge</i> ₁ ; <i>absolver</i> ₁ , <i>aplicar</i> ₃ , <i>condenar</i> ₁
33.	[Verdict on appeal]	<i>affirm</i> ₁ , <i>dismiss</i> ₁ , <i>quash</i> ₁ , <i>uphold</i> ₁ ; <i>negar</i> ₁ , <i>revogar</i> ₁

Appendix 17. List of equivalent terms

	Portuguese alphabetical order	English alphabetical order
1.	absolver ₁ , acquit ₁ [Verdict]	acquit ₁ , absolver ₁ [Verdict]
2.	aduzir ₁ , argue ₁ [Argumentation]	allege ₁ , arguir ₁ [Contesting]
3.	aduzir ₁ , invoke ₁ [Argumentation]	allege ₁ , invocar ₁ [Argumentation]
4.	aferir ₁ , assess ₁ [Assessing]	amend ₂ , revogar ₂ [Law changes]
5.	aferir ₁ , determine ₁ [Assessing]	apply ₁ , aplicar ₁ [Apply law]
6.	alegar ₁ , argue ₁ [Argumentation]	argue ₁ , alegar ₁ [Argumentation]
7.	alegar ₁ , assert ₁ [Argumentation]	argue ₁ , aduzir ₁ [Argumentation]
8.	alegar ₁ , contend ₁ [Argumentation]	argue ₁ , declarar ₁ [Argumentation]
9.	alegar ₁ , invoke ₁ [Argumentation]	argue ₁ , propugnar ₁ [Argumentation]
10.	alegar ₁ , state ₁ [Argumentation]	assert ₁ , alegar ₁ [Argumentation]
11.	alegar ₁ , submit ₁ [Argumentation]	assert ₁ , declarar ₁ [Argumentation]
12.	aplicar ₁ , apply ₁ [Apply law]	assert ₁ , propugnar ₁ [Argumentation]
13.	apreciar ₁ , assess ₁ [Assessing]	assess ₁ , aferir ₁ [Assessing]
14.	apreciar ₁ , determine ₁ [Assessing]	assess ₁ , apreciar ₁ [Assessing]
15.	arguir ₁ , allege ₁ [Contesting]	assess ₁ , ponderar ₁ [Assessing]
16.	assentar ₁ , base ₁ [Argumentation basis]	base ₁ , assentar ₁ [Argumentation basis]
17.	atender ₁ , consider ₁ [Taking into consideration]	base ₁ , fundamentar ₁ [Argumentation basis]
18.	cessar ₁ , terminate ₁ [Legal relations]	codify ₁ , consignar ₁ [Regulations]
19.	conceder ₁ , confer ₁ [Granting]	codify ₁ , determinar ₁ [Regulations]
20.	conceder ₁ , entitle ₁ [Granting]	codify ₁ , estabelecer ₁ [Regulations]
21.	concluir ₁ , conclude ₁ [Conclusion]	codify ₁ , estipular ₁ [Regulations]
22.	concluir ₁ , determine ₂ [Conclusion]	codify ₁ , disciplinar ₁ [Regulations]
23.	conferir ₁ , grant ₁ [Granting]	codify ₁ , estatuir ₁ [Regulations]
24.	configurar ₁ , constitute ₁ [Irregularity]	codify ₁ , prescrever ₁ [Regulations]
25.	consignar ₁ , codify ₁ [Regulations]	conclude ₁ , concluir ₁ [Conclusion]
26.	consignar ₁ , establish ₁ [Regulations]	confer ₁ , conceder ₁ [Granting]
27.	consignar ₁ , govern ₁ [Regulations]	consider ₁ , atender ₁ [Taking into consideration]
28.	consignar ₁ , mandate ₁ [Regulations]	constitute ₁ , configurar ₁ [Irregularity]
29.	consignar ₁ , prescribe ₁ [Regulations]	constitute ₁ , constituir ₁ [Irregularity]
30.	consignar ₁ , provide ₁ [Regulations]	constitute ₁ , consubstanciar ₁ [Irregularity]
31.	consignar ₁ , recognize ₁ [Regulations]	contend ₁ , alegar ₁ [Argumentation]
32.	constituir ₁ , constitute ₁ [Irregularity]	contend ₁ , declarar ₁ [Argumentation]
33.	consubstanciar ₁ , constitute ₁ [Irregularity]	contend ₁ , propugnar ₁ [Argumentation]
34.	declarar ₁ , argue ₁ [Argumentation]	deem ₁ , declarar ₂ [Judging]
35.	declarar ₁ , assert ₁ [Argumentation]	determine ₁ , aferir ₁ [Assessing]
36.	declarar ₁ , contend ₁ [Argumentation]	determine ₁ , apreciar ₁ [Assessing]

37.	declarar ₁ , state ₁ [Argumentation]	determine ₁ , ponderar ₁ [Assessing]
38.	declarar ₁ , submit ₁ [Argumentation]	determine ₂ , concluir ₁ [Conclusion]
39.	declarar ₂ , deem ₁ [Judging]	dismiss ₁ , negar ₁ [Decision]
40.	demonstrar ₁ , establish ₂ [Proof]	engage ₁ , incorrer ₁ [Crime]
41.	demonstrar ₁ , prove ₁ [Proof]	engage ₁ , praticar ₁ [Crime]
42.	determinar ₁ , codify ₁ [Regulations]	engage ₂ , pressupor ₁ [Issues]
43.	determinar ₁ , establish ₁ [Regulations]	entitle ₁ , conceder ₁ [Granting]
44.	determinar ₁ , govern ₁ [Regulations]	establish ₁ , consignar ₁ [Regulations]
45.	determinar ₁ , mandate ₁ [Regulations]	establish ₁ , determinar ₁ [Regulations]
46.	determinar ₁ , prescribe ₁ [Regulations]	establish ₁ , disciplinar ₁ [Regulations]
47.	determinar ₁ , provide ₁ [Regulations]	establish ₁ , estabelecer ₁ [Regulations]
48.	determinar ₁ , recognize ₁ [Regulations]	establish ₁ , estipular ₁ [Regulations]
49.	determinar ₂ , order ₁ [Order]	establish ₁ , estatuir ₁ [Regulations]
50.	disciplinar ₁ , codify ₁ [Regulations]	establish ₁ , prescrever ₁ [Regulations]
51.	disciplinar ₁ , establish ₁ [Regulations]	establish ₂ , demonstrar ₁ [Proof]
52.	disciplinar ₁ , govern ₁ [Regulations]	establish ₂ , provar ₁ [Proof]
53.	disciplinar ₁ , mandate ₁ [Regulations]	exercise ₁ , exercer ₁ [Right]
54.	disciplinar ₁ , prescribe ₁ [Regulations]	govern ₁ , consignar ₁ [Regulations]
55.	disciplinar ₁ , provide ₁ [Regulations]	govern ₁ , determinar ₁ [Regulations]
56.	disciplinar ₁ , recognize ₁ [Regulations]	govern ₁ , disciplinar ₁ [Regulations]
57.	estabelecer ₁ , codify ₁ [Regulations]	govern ₁ , estabelecer ₁ [Regulations]
58.	estabelecer ₁ , establish ₁ [Regulations]	govern ₁ , estatuir ₁ [Regulations]
59.	estabelecer ₁ , govern ₁ [Regulations]	govern ₁ , estipular ₁ [Regulations]
60.	estabelecer ₁ , mandate ₁ [Regulations]	govern ₁ , prescrever ₁ [Regulations]
61.	estabelecer ₁ , prescribe ₁ [Regulations]	grant ₁ , conferir ₁ [Granting]
62.	estabelecer ₁ , provide ₁ [Regulations]	grant ₁ , outorgar ₂ [Granting]
63.	estabelecer ₁ , recognize ₁ [Regulations]	impugn ₁ , impugnar ₂ [Contesting]
64.	estatuir ₁ , codify ₁ [Regulations]	infringe ₁ , violar ₁ [Constitutionality]
65.	estatuir ₁ , establish ₁ [Regulations]	infringe ₂ , violar ₂ [Compliance]
66.	estatuir ₁ , govern ₁ [Regulations]	invoke ₁ , alegar ₁ [Argumentation]
67.	estatuir ₁ , mandate ₁ [Regulations]	invoke ₁ , aduzir ₁ [Argumentation]
68.	estatuir ₁ , prescribe ₁ [Regulations]	mandate ₁ , consignar ₁ [Regulations]
69.	estatuir ₁ , provide ₁ [Regulations]	mandate ₁ , determinar ₁ [Regulations]
70.	estatuir ₁ , recognize ₁ [Regulations]	mandate ₁ , disciplinar ₁ [Regulations]
71.	estipular ₁ , codify ₁ [Regulations]	mandate ₁ , estabelecer ₁ [Regulations]
72.	estipular ₁ , establish ₁ [Regulations]	mandate ₁ , estatuir ₁ [Regulations]
73.	estipular ₁ , govern ₁ [Regulations]	mandate ₁ , estipular ₁ [Regulations]
74.	estipular ₁ , mandate ₁ [Regulations]	mandate ₁ , prescrever ₁ [Regulations]
75.	estipular ₁ , prescribe ₁ [Regulations]	order ₁ , determinar ₂ [Order]
76.	estipular ₁ , provide ₁ [Regulations]	prescribe ₁ , consignar ₁ [Regulations]
77.	estipular ₁ , recognize ₁ [Regulations]	prescribe ₁ , determinar ₁ [Regulations]

78.	exercer ₁ , exercise ₁ [Right]	prescribe ₁ , disciplinar ₁ [Regulations]
79.	fundamentar ₁ , base ₁ [Argumentation basis]	prescribe ₁ , establecer ₁ [Regulations]
80.	impugnar ₂ , impugn ₁ [Contesting]	prescribe ₁ , estatuir ₁ [Regulations]
81.	incorrer ₁ , engage ₁ [Crime]	prescribe ₁ , estipular ₁ [Regulations]
82.	invocar ₁ , allege ₁ [Argumentation]	prescribe ₁ , prescrever ₁ [Regulations]
83.	negar ₁ , dismiss ₁ [Frame]	proceed ₁ , proceder ₁ [Validity of proceeding]
84.	outorgar ₂ , grant ₁ [Frame]	prove ₁ , demonstrar ₁ [Proof]
85.	peticionar ₁ , request ₁ [Frame]	prove ₁ , provar ₁ [Proof]
86.	peticionar ₁ , seek ₁ [Frame]	provide ₁ , consignar ₁ [Regulations]
87.	praticar ₁ , engage ₁ [Frame]	provide ₁ , determinar ₁ [Regulations]
88.	ponderar ₁ , assess ₁ [Frame]	provide ₁ , disciplinar ₁ [Regulations]
89.	ponderar ₁ , determine ₁ [Frame]	provide ₁ , establecer ₁ [Regulations]
90.	prescrever ₁ , codify ₁ [Regulations]	provide ₁ , estatuir ₁ [Regulations]
91.	prescrever ₁ , establish ₁ [Regulations]	provide ₁ , estipular ₁ [Regulations]
92.	prescrever ₁ , govern ₁ [Regulations]	provide ₁ , prescrever ₁ [Regulations]
93.	prescrever ₁ , mandate ₁ [Regulations]	quash ₁ , revogar ₁ [Frame]
94.	prescrever ₁ , prescribe ₁ [Regulations]	recognize ₁ , consignar ₁ [Regulations]
95.	prescrever ₁ , provide ₁ [Regulations]	recognize ₁ , determinar ₁ [Regulations]
96.	prescrever ₁ , recognize ₁ [Regulations]	recognize ₁ , disciplinar ₁ [Regulations]
97.	pressupor ₁ , engage ₂ [Issues]	recognize ₁ , establecer ₁ [Regulations]
98.	pressupor ₁ , warrant ₁ [Issues]	recognize ₁ , estatuir ₁ [Regulations]
99.	proceder ₁ , proceed ₁ [Frame]	recognize ₁ , estipular ₁ [Regulations]
100.	proferir ₁ , render ₁ [Pronouncing a verdict]	recognize ₁ , prescrever ₁ [Regulations]
101.	propugnar ₁ , argue ₁ [Argumentation]	remedy ₁ , suprir ₁ [Remedy]
102.	propugnar ₁ , assert ₁ [Argumentation]	render ₁ , proferir ₁ [Pronouncing a verdict]
103.	propugnar ₁ , contend ₁ [Argumentation]	request ₁ , peticionar ₁ [Frame]
104.	propugnar ₁ , state ₁ [Argumentation]	request ₁ , pugnar ₁ [Frame]
105.	propugnar ₁ , submit ₁ [Argumentation]	scrutinize ₁ , sindicar ₁ [Investigating]
106.	provar ₁ , establish ₂ [Proof]	seek ₁ , peticionar ₁ [Petition]
107.	provar ₁ , prove ₁ [Proof]	seek ₁ , pugnar ₁ [Petition]
108.	pugnar ₁ , seek ₁ [Petition]	state ₁ , alegar ₁ [Argumentation]
109.	pugnar ₁ , request ₁ [Petition]	state ₁ , declarar ₁ [Argumentation]
110.	revogar ₁ , quash ₁ [Frame]	state ₁ , propugnar ₁ [Argumentation]
111.	revogar ₂ , amend ₂ [Law changes]	submit ₁ , alegar ₁ [Argumentation]
112.	sindicar ₁ , scrutinize ₁ [Investigating]	submit ₁ , declarar ₁ [Argumentation]
113.	suprir ₁ , remedy ₁ [Remedy]	submit ₁ , propugnar ₁ [Argumentation]
114.	violar ₁ , infringe ₁ [Constitutionality]	terminate ₁ , cessar ₁ [Legal relations]
115.	violar ₁ , violate ₁ [Constitutionality]	violate ₁ , violar ₁ [Constitutionality]
116.	violar ₂ , infringe ₂ [Compliance]	violate ₂ , violar ₂ [Compliance]
117.	violar ₂ , violate ₂ [Compliance]	warrant ₁ , pressupor ₁ [Issues]