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METAPHOR IN WRITTEN ACADEMIC LEGAL DISCOURSE:
A CROSS-LINGUISTIC STUDY

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1. INTRODUCTION

Since the adoption of the cognitive approach to studying language in the late 1970s and the introduction of the Conceptual Metaphor Theory (hereafter, CMT) in 1980s, interest in metaphor as a linguistic, cognitive and communicative phenomenon has been ever-growing. Further research on metaphors has moved on to discuss the role of metaphor in specific discourses based on collections of authentic linguistic evidence, it has reconsidered the significance of linguistic aspects of metaphor use in naturally-occurring discourse (Cameron & Deignan 2006; Cameron & Low 1999; Goatly 1997, 2011; Semino 2008; Steen et al. 2010a, 2010b, 2010c; Zanoto et al. 2008), it has pointed out the significance of metaphor in communication (Steen 2008, 2011, 2013), and has advanced a great deal by introducing rigorous methodological tools for metaphor identification and its systematic analysis (Cameron 1999; Stefanowitsch 2004, 2006; Deignan 2005; Pragglejaz Group 2007; Steen et al 2010b; Berber Sardinha 2012). Scholars have shed light on the multimodal character of metaphor expression by providing evidence of its occurrence not only in language but also in visual / pictorial (Forceville 1996; El Refaie 2003; Forceville & Urios-Aparisi 2009, Bounegru & Forceville 2011) and gestural (Cienki & Müller 2008) modes. Scholarship into metaphorical conceptualisation based on linguistic data has been complemented by psycholinguistic research on figurative language and the role of metaphor in reasoning (Robins & Mayers 2000; Matlock & Gibbs 2001; Thibodeau & Boroditsky 2011, 2013, 2015; Thibodeau & Gehring 2015). Thus metaphor is studied from a multitude of perspectives, by applying increasingly more rigorous and replicable methodological tools and procedures, and it is approached by scholars from different fields in order to capture its realisation in different modes of expression.

To briefly review the most systematic and relevant (mostly linguistic) studies into metaphoricity in different types of discourse, researchers have examined metaphor in political discourse (Lakoff 1991a, 1991b, 1996; Chilton & Ilyin 1993; Chilton 1996, 2005; Semino & Masci 1996; Musolff 2004, 2007, 2014;

Charteris-Black 2005, 2006, 2009, 2011, 2013; Cibulskienė 2005, 2006, 2012; Goatly 2007; Arcimavičienė 2008, 2010, 2011, 2012, 2014; Ahrens 2009; Koller 2009; Koller & Semino 2009; Semino & Koller 2009; Stefanowitsch & Goschler 2009; Urbonaitė & Šeškauskienė 2007; Arcimavičienė & Jonaitienė 2015, inter alia) discourse of economics, business and finance (Boers 1999; Charteris-Black & Ennis 2001; Koller 2004; Urbonaitė & Šeškauskienė 2007; Alejo 2010; Cesiri & Colaci 2011; Cibulskienė 2013), scientific / academic discourse (Boyd 1979/1993; Bailer-Jones 2000; Baake 2003; Brown 2003; Aubusson et al. 2006; Šeškauskienė 2008, 2009, 2010, 2011, 2013; Steen et al. 2010a; Beger 2011; Herrmann 2013), conceptualisation of emotions (Kövecses 1990, 2005; Maalej 2004; Papurėlytė-Klovienė 2004, 2006; Aksan & Aksan 2012; Esenova 2011; Niedzviegienė 2013; Reali & Arciniegas 2015), discourse of health, illness and medicine (Sontag 1978; Arcimavičienė 2005; Wallis & Nerlich 2005; Semino 2008; Charteris-Black & Seale 2010; Charteris-Black 2012, 2016; Kvašytė & Papaurėlytė 2013; Semino et al. 2015; Demjén et al. 2016; Nie et al. 2016), advertising (Forceville 1996, 2000, 2007, 2008, 2012; Maalej 2001; Smetonienė 2006; Burgers et al. 2015), musical discourse (Johnson & Larson 2003; Šeškauskienė & Levandauskaitė 2013; Pérez-Sobrino & Julich 2014), religious texts (Jäkel 2002; Harrison 2007; Vaivadaitė-Kaidi 2011), among numerous other discourses.

Metaphor studies in the language of the law, on the other hand, have not been as prolific compared to studies of metaphor in other fields, especially from a cross-linguistic perspective. Among the most significant contributions offering valuable insights into the role of metaphor in legal thought and language are studies by Winter (2001/2003, 2007, 2008) and Johnson (2002, 2007) who were among the pioneers to discuss the role of metaphor in legal reasoning. Some studies were carried out in different fields of law such as intellectual property law (Loughlan 2006; Larsson 2011, 2013a, 2013b), penal policy texts (Armstrong 2009; Armstrong & Deignan 2015) and contract law (Lipshaw 2011; Twardzicz 2013a). Researchers have examined the rhetorical power of metaphor in law (Berger 2004, 2007, 2009, 2011, 2013; Koženiauskienė 2005, 2009a, 2009b; Smith 2007; Rideout 2010), metaphors have been studied in

legislative documents (Chiu & Chiang 2011; Imamović 2013), some researchers concentrated on metaphor in spoken legal discourse (Šeškauskienė & Stepančuk 2014). As regards studies of metaphoricity of the law based on naturally-occurring discourse in Lithuanian, the research is particularly scarce. Several studies drawing on Lithuanian language data have focused on the rhetorical function of metaphor as a means of persuasion used by attorneys in courtroom settings (Koženiauskienė 2005, 2009a, 2009b), metaphorical conceptualisation of legal notions of limits and limitations in scientific legal discourse (Gedzevičienė 2015), translation of metaphors in EU documents (Gražytė & Maskaliūnienė 2009), metaphors of crime and criminals in Lithuanian public discourse (Gedzevičienė 2016), and metaphors of criminal activities in EU texts and their translation into Lithuanian (Šeškauskienė et al. 2016). However, as can be seen from the brief review of current research on metaphor in legal discourse, some of these studies have been mainly supported by qualitative examinations, the majority of them drawing on evidence from one language, while contrastive metaphor research in legal discourse is still rather limited.

This dissertation presents a contrastive corpus-driven study of metaphor in written academic¹ legal discourse, extracted from two specially-designed corpora of research articles on criminal law, criminal justice, and criminology in English and Lithuanian. The study relies on the contemporary cognitive approach to metaphor as a linguistic, cognitive and communicative phenomenon (Steen 2008, 2011, 2013), it follows the understanding of metaphor as words or phrases used in the context in other senses than their basic physical, more concrete senses (cf. Deignan 2005: 34; Pragglejaz Group 2007; Semino 2008: 1; Steen et al. 2010b), i.e. when the physical / concrete sense of a lexical unit provides the basis for understanding the contextual meaning by way of analogy, similarity and comparison, the word or phrase is treated as metaphorical. Following the contemporary cognitive view of

¹ In this dissertation the terms 'academic discourse' and 'scientific discourse' are used synonymously.

metaphor (see Semino 2008: 1), in this dissertation it is held that metaphor in language, potentially, is a realisation of metaphorical conceptualisation.

The object of the research. The object of the analysis are metaphors in written academic legal discourse in English and Lithuanian as they occur in metaphorical patterns in research articles on criminal law, criminal justice and criminology. To carry out a systematic metaphorical pattern analysis (see Stefanowitsh 2004, 2006), which could yield insights into quantitative and qualitative properties of metaphorical patterning in English and Lithuanian legal research articles, the study has been limited to law-related metaphors, i.e. metaphors which pertain to the conceptualisation of legal phenomena; therefore, metaphorical expressions have been extracted from concordances of twenty most frequent law-related nouns as target domain items in each corpus.

Data and methodology. This study is based on linguistic data collected from research articles on criminology, criminal justice and criminal law in English and Lithuanian. The English corpus consists of 50 research articles which make up 381,212 words, while the Lithuanian corpus consists of 70 research papers which constitute 383,517 words. The research articles were collected from peer-reviewed journals on criminal law, criminology and criminal justice in English and Lithuanian in a timespan from 2010 to 2015. This research is a corpus-driven analysis of metaphors extracted from corpora applying corpus linguistics tools, the study adopts the principles of Metaphorical Pattern Analysis and MIP(VU) for metaphor identification, it applies quantitative and qualitative research methods as well as the method of contrastive linguistics. The cross-linguistic analysis of metaphors presented in this dissertation has been carried based on 8,130 metaphorical patterns identified in the corpora, of which 1,733 represent metaphors from the English corpus and 6,397 account for all metaphorical expressions identified in Lithuanian.

Research aim and objectives. The **aim** of the study is to analyse law-related metaphors in research articles on criminal law, criminology and criminal justice in English and Lithuanian in terms of the main source domains and identify language-specific trends of metaphoricity. Alongside, an attempt is made to

examine their linguistic expression focusing on lexical variation in each language and to account for language-specific similarities and differences of metaphor occurrence in the two languages.

To reach the aim of the thesis, the following **objectives** have been set:

1. to design corpora in English and Lithuanian representative of written academic criminal law and criminology discourse from which metaphorical expressions will be extracted by applying corpus linguistics tools;
2. to identify metaphorical patterns by analysing the concordances of most frequent legal lexis in order to obtain all cases of linguistic metaphors that are related to legal phenomena;
3. to reconstruct metaphors from linguistic metaphorical patterns, identify the prevalent source domains structuring academic legal discourse and to provide a contrastive distributional characterisation of metaphors according to their source domains in English and Lithuanian;
4. to carry out a contrastive analysis of metaphors in terms of quantitative and qualitative parameters by identifying the main trends of metaphoricity in each of the two languages;
5. to examine the linguistic realisation of metaphors and their lexical variation with an attempt to disclose language-specific features;
6. to interpret the tendencies in the light of prior metaphor studies and discuss their wider implications.

The novelty and relevance of the research. This study is the first extensive cross-linguistic analysis of metaphor in written academic legal discourse in English and Lithuanian. Current metaphor studies have highlighted the significance of examining metaphor in specialist discourse (see Herrmann & Berber Sardinha 2015). Such studies show great variation of metaphor use, its functions, linguistic expression in the discourse practices used by discourse communities from different areas of expertise. In addition, consideration of genre and register as significant parameters in metaphor analysis is a particularly relevant area of examination which reveals that metaphor varies depending on the

genre, register and other settings of language use. The application of corpus tools and methodologies in metaphor research has been a relatively recent trend and is thus a promising area which enables metaphor researchers to quantitatively and qualitatively better account for metaphor use and variation in and across different genres and registers as evidenced from large collections of naturally-occurring language. A contrastive study of metaphor in research articles on criminal law in English and Lithuanian is a significant contribution to the scarcely-researched field of metaphoricality in specialist legal discourse which reveals the most prevalent conceptual metaphorical patterns in criminal law discourse evidenced by their occurrence in a specific genre. In addition, the study allows disclosing cross-linguistic variation in metaphor as a linguistic, cognitive, and communicative tool used for different functions in this specific type of discourse in English and Lithuanian.

Claims to be defended

1. The most frequent metaphorical patterns in research articles on criminal law in English and Lithuanian rely on objectifying and personifying the law as well as metaphorically treating it in terms of nature.
2. The dominant source domains via which academic legal discourse is constructed in both English and Lithuanian are OBJECT, PERSON, SUBSTANCE, CONTAINER, MACHINERY, STRUCTURE, INSTRUMENT, FIGHT AND COMPETITION, NATURE and HEALTH.
3. As regards the cross-linguistic distribution of specific source domains structuring specialist criminal law discourse, Lithuanian tends to predominantly rely on the source domain of OBJECT; whereas the distribution of the source domains shaping academic legal discourse in English is more even.
4. The measures of lexical variation reveal that academic legal discourse in Lithuanian tends to repeat the same metaphorical patterns, while English research articles on criminal law and criminology contain different metaphorical patterns which occur less frequently.

5. Comparing and contrasting metaphors in English and Lithuanian according to the source domains shows that apart from the shared aspects of the same source domains, these languages commonly foreground different elements of the same source domain which are realised linguistically via different lexemes.
6. Metaphors in written academic legal discourse in English and Lithuanian are predominantly conventional and a substantial part of them constitute specialist terms and other discipline-specific metaphorical expressions frequently repeated in discourse.
7. Apart from conventional metaphors, written academic legal discourse also employs potentially deliberate metaphors, which serve different purposes such as emphasis, argumentation, or, most prominently, expression of evaluation towards the target domain issue discussed in the research article.

Theoretical and practical value

The thesis contributes to metaphor studies in specialised criminal law discourse. This is one of the first attempts to systematically and exhaustively analyse metaphorical patterns in written academic legal discourse thereby adding to the knowledge of discursual, cognitive and linguistic properties of metaphor in this type of discourse. By analysing metaphor as a linguistic, communicative and cognitive phenomenon, the study adds to a growing body of research on multifaceted functions of metaphor. Moreover, the cross-linguistic aspect of the study has disclosed English-specific and Lithuanian-specific features of metaphors and their realisation, of which the Lithuanian component is of particular theoretical value as it sets the framework of research for further investigation of metaphoricity in Lithuanian.

Since the analysis has been carried out relying on contemporary metaphor research which stresses the significance of genre and register in metaphor variation, the study expands the knowledge of metaphoricity in a specific genre and may be useful for further studies of metaphor in and across genres, registers and text types. Having focused on metaphor occurrence in research articles on

criminal law, the dissertation might be beneficial to researchers working in the fields of genre analysis or those interested in the characteristics of legal discourse and the role of metaphor in law.

The findings of this study may provide valuable insights and implications for law researchers and criminologists, psychologists, legal translators, students and educators of language for specific (legal) purposes, researchers interested in cross-linguistic and cross-legal inquiry into metaphorical cognition in general and the role of metaphor in legal thought and legal language in particular.

The structure of the dissertation

The dissertation consists of five chapters. The introduction defines the object of the research, sets the aim and objectives, describes the novelty and relevance of the study, presents the claims to be defended, describes the theoretical and practical value of the dissertation and provides the list of publications and papers on the subject of the dissertation. Chapter 2 consists of five sections and aims at reviewing the most relevant research which serves as the theoretical framework of the dissertation. The first section focuses on the key tenets of the Conceptual Metaphor Theory, the second section provides an overview of relevant points of criticism expressed towards CMT. The third section reviews the main trends of contemporary metaphor research by shedding light on studies of metaphor in naturally-occurring language and methodological advances in metaphor research. The fourth section is devoted to a brief discussion of the role of metaphor in academic discourse, whereas the fifth section overviews research carried out in the field of metaphor and law. Chapter 3 is concerned with the methodology and the data of this study and provides information about the collection of the linguistic data for the analysis, corpus composition, extraction of metaphors based on keywords as target domain items and their concordances and the main principles applied in identifying metaphorically used language. Chapter 4, which is the most extensive part of the dissertation, presents the findings of the research and analyses metaphor in research articles on criminal law in English and Lithuanian with regard to quantitative and qualitative parameters of metaphoricity. The chapter is divided

into 4 sections: section 1 provides an overview of the most frequent target domain lexemes extracted from the corpora, Section 2 discusses the role of target domain lexis in metaphorical patterns, Section 3 presents major tendencies of metaphoricity in academic law discourse, whereas Section 4 analyses metaphors focussing on different source domains that structure academic legal discourse in both languages. An attempt is made to account for the most significant quantitative and qualitative properties of metaphors, their lexical variation and reveal similarities and differences in metaphorical conceptualisation and linguistic expression in the two languages. Finally, the dissertation draws conclusions based on the findings of the study.

Approbation of the research

The following **articles** were published on the basis of dissertation research:

1. Urbonaitė, J. 2015. A cross-linguistic study of metaphor in legal research articles: the case of criminal justice, *Thought Elaboration: Linguistics, Literature, Media Expression: TELL ME 2014. Collection of Scientific Articles*: 13–28.
2. Urbonaitė, J. 2015. Metaphor identification procedure MIPVU: an attempt to apply it to Lithuanian, *Taikomoji kalbotyra: 1–25*. www.taikomojikalbotyra.lt

Papers presented in conferences and seminars based on dissertation research:

1. *Metaphoricity of academic legal discourse: the case of criminal justice*. Paper presented in the *6th International Scientific Conference “Linguistic, Didactic and Sociocultural Aspects of Language Functioning”*. Lithuanian University of Educational Sciences, Vilnius, Lithuania, April 24–25, 2014.
2. „Metafora rašytiniame akademiniam teisės diskurse: gretinamasis tyrimas.” [Metaphor in written academic criminal law discourse: a contrastive study]. Paper presented in the seminar of doctoral students of linguistics. Vilnius University, Vilnius, Lithuania. June 6, 2014.
3. *Metaphors in research articles on criminal law: a cross-linguistic perspective*. Paper presented in the *10th Conference of the Association for Researching and Applying Metaphor: Metaphor in Communication, Science and Education*, University of Cagliari, Cagliari, Italy, June 20–23, 2014.
4. *Metaphor in academic legal discourse on criminal law and justice*. Paper presented in a research colloquium *Dynamic Multimodal Communication* in the Faculty of Social and Cultural Sciences,

- European University Viadrina, Frankfurt (Oder), Germany, December 9, 2014.
5. *Metaphor in (academic) legal discourse: a corpus-based study*. Presentation delivered in a workshop / doctoral research colloquium *Dynamic Multimodal Communication* in the Faculty of Social and Cultural Sciences, European University Viadrina, Frankfurt (Oder), Germany, March 3, 2015.
 6. *Corpus tools in metaphor research*. Presentation delivered in a workshop / doctoral research colloquium *Dynamic Multimodal Communication* in the Faculty of Social and Cultural Sciences, European University Viadrina, Frankfurt (Oder), Germany, April 24, 2015.
 7. *Metaphor Translation on Trial: Metaphors in the Criminal Code of the Republic of Lithuania and their Translation into English*. Paper presented in a specialised seminar of the Association for Researching and Applying Metaphor: Metaphors in/and/of Translation. Leiden University, Leiden, the Netherlands. June 10–12, 2015.
 8. *Erdvės metafora lietuvių kalboje: leksinių ir gramatinių raiškos priemonių nustatymo aspektai* ('Spatial metaphor in Lithuanian: on the identification of lexical and grammatical means of expression') (co-authored with Eglė Vaivadaitė-Kaidi). Paper presented in the *12th International Congress of Balticists*. Vilnius University, Vilnius, Lithuania. 28–30 October 2015.
 9. *From freedom to liberty to custodial sentence in the Criminal Code of the Republic of Lithuania, or some strategies of translating Lithuanian collocations with laisvė 'freedom' into English* (co-authored with Inesa Šeškauskienė). Paper presented in the *7th FLaRN (Formulaic Language Research Network) Conference*. Vilnius University, Vilnius, Lithuania. June 28–30, 2016.
 10. *Deprivation of liberty or imprisonment? Metaphors in the Criminal Code of the Republic of Lithuania and their translation into English* (co-authored with Inesa Šeškauskienė). Paper presented in *49th Annual Meeting of the Societas Linguistica Europaea (SLE)*. University of Naples Federico II, Naples, Italy. August 31–3 September, 2016.
 11. „Metafora akademiniamė baudžiamosios teisės diskurse: gretinamasis tyrimas“ [Metaphor in academic legal discourse: a contrastive study]. Paper presented in the seminar of the Lithuanian applied linguistics association LITAKA. Vilnius University, Lithuania. January 6, 2017.

2. Theoretical foundations and review of literature

The goal of this chapter is to set the background for this study and situate the dissertation within the context of most relevant research on metaphor. The first section presents the major principles and key concepts of the Conceptual Metaphor Theory (CMT); the second section focuses on some points of criticism of CMT expressed in contemporary approaches to studying metaphor, the third section reviews the main contemporary trends in metaphor research; the fourth section reviews prior studies on metaphor in academic discourse; the fourth section is devoted to the discussion of the role of metaphor in legal discourse; whereas the fifth section discusses the role of metaphor in constituting field-specific terminology.

2.1. Conceptual Metaphor Theory: general principles and key concepts

More than three decades after the introduction of the Conceptual Metaphor Theory (hereafter, CMT), metaphor studies are still attracting researchers from a vast array of disciplines including literature, linguistics, communication, psychology, philosophy, law, mathematics, gesture studies, advertising, visual arts, and many other domains. It has been generally accepted that the view of metaphor as a cognitive phenomenon was firmly established by the seminal work *Metaphors We Live By* which is sometimes said to have revolutionised metaphor studies (Fusaroli & Morgagni 2013: 1; Nerlich & Clarke 2003: 556; Steen 2011a: 585; Sullivan 2013: 1, Twardzisz 2013b: 64, *inter alia*). Although the ideas which the co-authored volume presents were not entirely new and autonomous² what the monograph provides is a systematic and detailed account of the cognitive aspects of metaphor as an instrument of thought and the diverse ways of its manifestation in language. Although the theory has also been criticised for some methodological shortcomings and lack of documentation of empirical linguistic data to validate the existence of the posited assumptions about metaphoricity (CMT-directed criticism is briefly presented in Section 2.2), its fundamental principles have generally been

² For a more detailed account of earlier contributions which developed similar ideas to the ones proposed by Lakoff and Johnson see Jäkel (1999) and Semino (2008: 9).

accepted and adopted in numerous metaphor studies carried out after the introduction of the CMT.

One of the central contributions of the cognitive view of metaphor is that its principles are generally considered to have challenged the traditional view of metaphor (Kövecses 2002; Lakoff & Johnson 1980 / 2003; Lakoff 1993). Traditionally, metaphor was treated as a figure of speech used for decorative / rhetorical purposes. In the classical view, the term *metaphor* was typically used with reference to the figurative use of language in such fields as literature, whereas conventional metaphors were considered “dead” because of their weak semantic force as a result of their high degree of conventionality and the difficulty for language users to recognise such instances of “metaphors” as metaphorical (Black 1993: 25). Consider Black’s account of “dead metaphor”:

A so-called dead metaphor is not a metaphor at all, but merely an expression that no longer has a pregnant metaphorical use. A competent reader is not expected to recognize such a familiar expression as ‘falling in love’ as a metaphor [...] (ibid.).

Metaphor was treated “a figure of speech³ which concisely compares two things by saying that one is the other” (McArthur 1992: 653), i.e. a linguistic comparison, a phenomenon of language. However, this view to metaphor was challenged by cognitive linguists.

In the view of early cognitivists, metaphor is a feature of human cognition and reasoning. They claim that metaphorical language is only possible due to the underlying metaphorical structures in the human conceptual system. As Lakoff puts it:

[M]etaphor is not just a matter of language, but of thought and reason. The language is secondary. The mapping is primary, in that it sanctions the use of source domain language and inference patterns for target domain concepts. The mapping is conventional; that is, it is a fixed part of our conceptual system (Lakoff 1993: 208).

The essential aspect highlighted in the cognitive view of metaphor is that meaning is produced, communicated and processed largely depending on cross-domain mappings (Lakoff & Johnson 1980/2003; Lakoff 1993; Kövecses 2010). Thus, in CMT metaphor is defined as understanding something in terms

³ Emphasis added.

of something else (Lakoff & Johnson 1980/2003: 4). According to Lakoff and Johnson, metaphors are based on a conceptual structure or a conceptual mapping in which one domain (the *target domain*, typically more abstract and complex) is conceptualised in terms of another domain (the *source domain*, typically more concrete). Such conceptual mappings enable and facilitate the conceptualisation of abstract and complex phenomena by providing structure based on more concrete and easier-to-understand terms.

To illustrate the key claims and concepts introduced by CMT, it might be useful to consider a linguistic example. The following excerpt comes from a book that is intended to provide advice to PhD students in beginning, revising and finishing their dissertations:

When you sit down to begin a piece of writing, your first aim ought to be to make a mess – to say anything that comes to your mind, on the subject or off it, not to worry at all about whether your stuff is connected logically, to play with your subject the way you used to build mud pies, to do no fine detail work, to spell poorly if that's your natural inclination, and to generally forget about standards altogether (even about split infinitives!). (Bolker 1998: 34⁴)

In the view of CMT, the excerpt above contains numerous metaphorical expressions which are a surface linguistic manifestation of metaphorical thought / conceptualisation. Thus following CMT, the underlined words and phrases used in the passage above, are treated as a linguistic manifestation of a few conceptual metaphors underlying our conceptualisation of the process and product of writing. In the framework of CMT, the underscored linguistic expressions are treated as linguistic evidence showing that people conventionally think of writing as if it was an object which enables us to say that we produce a *piece* of writing, whereas, the process of the early stages of writing may be seen as a place that is disorganised and dirty, realised in language by the metaphorical expression *make a mess*. The process of writing is metaphorically perceived as an oral verbal activity (“*say anything*”), ideas are seen as living beings that can *come* to mind which is metaphorically seen as a container that can hold them and be open for new ideas. Ideas that are related to the topic are seen as being either *on* topic or *off* it, as if they were physical

⁴ Emphasis added.

objects that may be positioned in space and interact with other “objects” such as a topic in the spatial domain. Even the infinitive is seen as a physical entity that can be divided, i.e. *split*. Thus the predominant source domains (the domain that lends the structure to the target domain in the metaphorical transfer) that shape the understanding of writing in the above excerpt are SPACE⁵, OBJECT, CONTAINER, and VERBAL ACTIVITY. They allow us to reconstruct the following conceptual metaphors: (PROCESS OF) WRITING IS VERBAL ACTIVITY, (PRODUCT OF) WRITING IS AN OBJECT, TEXT IS SPACE, IDEAS ARE OBJECTS, and MIND IS A CONTAINER.

A significant notion used in the CMT framework is that of a *conceptual mapping* which is defined as “a set of systematic correspondences between the source domain and the target” (Kövecses 2010: 5). By way of illustration, the mapping that presumably structures the metaphor (PROCESS OF) WRITING IS VERBAL ACTIVITY includes systematic correspondence where writers are seen as speakers, written sentences as utterances, graphical representation of text as voice, etc. These are some of the key concepts introduced by the initiators of CMT and a brief and simple illustration of how it works in practice and analysis of real language use.

Evidently, by the above principles the linguists emphasise the fact that human thought is structured metaphorically, where more abstract ideas are conceptualised in terms of more concrete domains, the basis of which is very often human daily experience (physiological, kinaesthetic, visual, sensimotor, ideational, social, cultural, etc). Lakoff and Johnson call this principal model of human experience and metaphor the principle of *embodiment* (Lakoff & Johnson 1999: 462–463), which means that in metaphorical reasoning the properties of human bodies are projected onto entities and ideas that are more abstract. In other words, metaphors emerge in the system of conceptualisation on the basis of analogies drawn between abstract notions and knowledge and experience humans gain from their bodily, physical, and social experiences.

⁵ Conventionally, reference to conceptual domains in text is marked typographically by using small capital letters whereas conceptual metaphors are written in text by the formula TARGET DOMAIN IS SOURCE DOMAIN or A IS B / X IS Y.

Conceptual embodiment is “the idea that the properties of certain categories are a consequence of the nature of the human biological capacities and of the experience of functioning in a physical and social environment” (Lakoff 1987: 12) or, to put it differently, that “reason has a bodily basis” (Lakoff 1987: xi). What the notion of embodied thought and experiential basis of metaphor includes, according to the cognitive view, is not only the body-based sensimotor experience but also experience gained via social interaction (Lakoff 1987: 267).

In the early versions of CMT, cognitive linguists differentiate between the terms *conceptual metaphor* and *metaphorical expression* (Kövecses 2002: 6; Lakoff 1993: 203), whereby they use the term *conceptual metaphor* for a conceptual mapping and *metaphorical expression* for its linguistic manifestation, for example, a word, phrase, or sentence which is considered linguistic realisation of a metaphorical mapping. Kövecses (2002: 6), for example, maintains that metaphorical linguistic expressions are much more concrete and that they manifest deeper cognitive processes of human reasoning. He holds that conceptual metaphors and linguistic metaphors are two distinct phenomena, i.e. “it is the metaphorical linguistic expressions that reveal the existence of the conceptual metaphors” (ibid.).

To sum up, the essential points to be emphasised by scholars who have brought CMT to prominence is that metaphorical conceptualisation is primary and much deeper, whereas its linguistic expression is secondary and more on the surface. After the establishment of CMT, an immense body of studies have reported results that are in support of its theoretical claims. However, as mentioned in some passages above, the theory has also been criticised for a number of drawbacks and methodological insufficiencies. The next section of this chapter concentrates on the key points of criticism of the CMT and will set the context for the presentation of the work that has been carried out in the 35 years or so after the Lakoffian view was presented and established. The more recent work on metaphor, though not denying the validity of the main principles of the cognitive functioning of metaphor, have argued for the need

to shift back from the cognitive level of metaphor to the language of metaphor and the immense diversity of its realisation as well as the variety of functions it may have in and across different discourses, genres, languages, etc. The presentation of the shortcomings of CMT is necessary in order to establish what serves as a theoretical basis for the present dissertation and which claims are not to be taken for granted and will not be adopted in the dissertation.

2.2. Criticism of CMT

The widespread application of CMT principles in metaphor research has been a sign of its acceptance by linguists, especially metaphor researchers. Despite its safety and efficacy, CMT has suffered from several major drawbacks. Critique towards CMT is commonly directed towards the claim of the cognitive status of metaphor. In addition, numerous concerns have been voiced regarding the methodological and empirical status of the cognitive account of metaphor (see Dobrovil'skij & Piirainen 2005: 123–144; Deignan 2010a: 55–56; Gibbs 2007: 7; Gibbs 2011: 533–537; Low & Todd 2010: 217–229; Steen et al. 2010a, 2010b, Stefanowitsch 2006: 1–16; Svanlund 2007: 52, *inter alia*). Based on the review of criticism expressed to the theory, a few most commonly addressed points may be discerned.

First and foremost, numerous scholars have questioned the conceptual nature of metaphor, i.e. CMT's strong claim that metaphor is a matter of thought. Views have been expressed that these claims need more empirical support from non-linguistic evidence obtained from psycholinguistic research (Gibbs 1994; Glucksberg & Keysar 1990, 1993). In addition, some contemporary metaphor scholars (see Steen 2011: 30) contend that metaphors may or may not be activated in processing of language since the use of conventional metaphors, for example, does not necessarily activate metaphorical conceptualisation. Refuting Lakoffian claim that the use of war-related lexis in English means that we conceptualise arguments in terms of war, Steen (*ibid.*) asserts that the use of these war-related lexemes in the context of argumentation “does not entail that when they are used in their metaphorical sense they also always reflect the presence and use of metaphorical conceptual systems in on-going metaphorical

cognition.” Therefore, a more comprehensive account of the cognitive status of conventional metaphors is via an alternative, i.e. historical explanation which treats that such metaphorical mappings might have been active in human conceptual system in the development of metaphorically motivated polysemy, yet, their conventional nature means that in processing such metaphorical language conceptual activation of such cross-domain mappings is no longer relevant for contemporary language users (*ibid.*). Thus a much more comprehensive approach would be to treat metaphor in language as potentially but not necessarily conceptual, i.e. depending on metaphor conventionality and other contextual aspects of metaphor use, metaphorical expressions may or may not instantiate conceptual cross-domain mappings.

In addition, CMT is commonly criticised for relying solely on introspection as a methodology of data collection and analysis⁶. The problematic status of linguistic data as evidence in metaphor studies is particularly relevant. Many contemporary linguists who are concerned with the application of methodologically reliable tools and procedures believe that it is not a valid tool in either collecting data or analysing it. For example, Svanlund (2007: 52) argues against the application of introspection in metaphor studies which, unfortunately, has been done in too many studies conducted following the introduction of CMT. Similarly, Steen proposes that “introspection does not seem to be very helpful in the collection of the data about knowledge of language” (Steen 2009: 247). What these critical remarks share is the view that introspection is not a valid approach to analyse metaphor; however, it is also important to note that the wider implications of the criticism are that introspection alone does not provide an objective picture of the patterns that could emerge applying more rigorous techniques or following more methodological procedures in identifying and analysing metaphor in language and thought.

⁶ It is relevant to point out, however, that some scholars still treat introspection as a valid methodology and source of linguistic data in scientific procedures (see Kövecses 2011: 24; Mischler 2013: 27, 29).

It is fair to argue that a potential compromise that can solve many methodological issues could be a meaningful combination of methodologies for data retrieval and analysis, such as, for instance, corpus analysis for obtaining vast amounts of data against which results of an introspective primary analysis could be carried out (in this regard, one could apply the corpus-assisted discourse analysis approach (Partington, 2006 discussed below and/or Metaphorical Pattern Analysis (Stefanowitsch 2004, 2005, 2006)). Introspection should not be a “persona non-grata” in scientific approaches, but rather it should be combined with other methodologies depending on the research aims and available tools. This view is echoed by some corpus linguists as well, for example:

[...] introspection is vital to corpus linguistics. The categories chosen for study, the actual analysis of those categories, and, of course, the hypotheses that the study will test are all a result of introspection. It is not that empirical research replaces introspection, rather introspection is used to propose hypotheses, which then need to be tested by operationalizing the questions and designing a study that will adequately answer those questions (Glynn 2010: 16).

In the context of metaphor research, Semino is in accord with the view that as long as linguistic evidence supports the claims made about underlying conceptualisations, the claims made by CMT pioneers are absolutely valid. In her words, “if the existence of particular conceptual metaphors is primarily reflected in the presence of conventional and pervasive patterns of metaphorical expressions in language use, a corpus-based methodology is eminently appropriate for CMT” (Semino 2008: 200).

In addition to scepticism regarding the use of introspection, numerous scholars criticise CMT developers for relying on intuitions and making up examples that are hardly used in authentic language. To give an example, in a workshop on the use of corpora in metaphor studies conducted in Leiden in June 2015 as part of the programme of the seminar organised by the Association of *Researching and Applying Metaphor*, conductors of the workshop Lettie Dorst and Gill Philip (2015) demonstrated that almost all examples that are provided by Lakoff and Johnson in their seminal work as a usual way to speak about love in terms of a journey either do not occur in a large corpus of English, are used

extremely rarely or, if journey-related phrases do emerge in real use, they are often not about love or any other (romantic) relationship but relate to different target-domain concepts. More precisely, Dorst and Philip looked for the examples claimed by Lakoff and Johnson to be used daily by English speakers to refer to love in terms of a journey. The specific expressions the search of which was run in the BNC included the following:

- (1) *Look how far we've come.*
- (2) *We're spinning our wheels.*
- (3) *Our relationship is at crossroads.*
- (4) *Our marriage was on the rocks.*
- (5) *The relationship isn't going anywhere.*

Apparently, corpus data did not correspond to Lakoff and Johnson's claim that the source domain of a JOURNEY is productive when speaking about love and romantic relationships, i.e. at least the source domain is not instantiated by the specific phrases provided by Lakoff and Johnson⁷. As a theory, CMT was developed with the key aim of demonstrating how metaphorical human conceptual system is, yet, unfortunately choosing made-up sentences or more or less randomly selected linguistic expressions that are actually not so often used by native speakers does not support the strong claims made with regard to the way people speak about love or any other phenomenon. The argument goes that in order to make claims about the way our language reflects the processes of the mind in a scientifically valid way, scholars should go the other way around, i.e. make generalisations and conclusions regarding human cognitive system only drawing on representative linguistic data collected from samples of naturally-occurring language use.

Acknowledging the need to rely on authentic linguistic data that is representative, numerous scholars have addressed the above-mentioned weakness of CMT and emphasised the significance of analysing metaphor in discourse which, in the broad sense is understood as naturally occurring

⁷ It is important to note, though, that Dorst and Philip referred to the BNC as a source and different results could be obtained when checking for the same examples in the corpora of American English, especially bearing in mind that Lakoff and Johnson relied on their intuition as native speakers of American English. In any case, the point of such reference is clear – a large collection of naturally-occurring language demonstrated that the claims made by the proponents of CMT do not stand on empirically valid grounds.

language use, i.e. “real instances of writing or speech which are produced and interpreted in particular circumstances and for particular purposes” (Semino 2008: 1). In a similar vein, Koller (2008: 216) asserts that “if metaphoric models are dispersed within and between discourse communities, then we need to look at authentic data and could benefit from investigating large amounts of it.” What Koller’s view adds to the validity of linguistic data for studies to indicate relevant generalisations is also the size of the texts to draw upon so that generalisations and conclusions made are indeed based on representative samples of real instances of language use in context.

In support of corpus linguistic tools, Deignan (2005: 96) contends that there is discrepancy between the expressions that metaphor analysts would come up with as an illustration of a given metaphorical mapping and the expressions extracted from authentic corpus data. Thus, in order to make valid generalisations of metaphor occurrence in language, introspection as a methodology is hardly valid and, therefore, using corpus data allows adequately accounting for the different features of metaphor expression in discourse. In a similar line, Stefanowitsch posits that “the focus on the cognitive or conceptual nature of metaphor and metonymy has led to [...] a disregard of many aspects of the *linguistic* nature of metaphor” (Stefanowitsch 2006: 6, emphasis in original). What is in common among the cited critical observations is the conviction that intuition alone is by no means valid in scientific procedures since it may never indicate aspects of metaphor use the way actual, attested use of language does and neither can it lead to grounded generalisations and implications. Furthermore, metaphor is a context-sensitive matter and examples collected and analysed on the basis of intuition and introspection cannot account for context-induced aspects of metaphor both at the conceptual and linguistic levels.

In expressing their criticism to CMT, scholars also indicate the fact that initial works of CMT often provide decontextualized sentences as examples of metaphorical expressions which is a serious weakness, since metaphor functions differently in different genres, registers, text types (see Deignan et al. 2013;

Gibbs 2010: 3). The developers of CMT make generalisations about the cognitive functioning of metaphor (and other tools such as metonymy) based on linguistic examples that are not referenced and whose source is not indicated and not supplied with any linguistic or extra-linguistic context. Because recent metaphor research shows the immense impact of genre- and register-related factors on emergent metaphorical patterns, it is crucial to analyse metaphor and its aspects carefully considering their contextual environment. In the words of Steen, “people use language on particular occasions in specific roles, for particular goals, about particular topics, in particular settings, and against the background of specific norms and expectations” (Steen 2007: 352–353). Decontextualised (as long as they are authentic) linguistic examples presented on a stand-alone basis as proof of the existence of metaphor in mind might be taken as an illustration of the existence of metaphor at the conceptual level; however, they cannot say a lot about significant other aspects such as the role/function of metaphor in a particular context and communicative situation as well as its linguistic form which, as current studies of metaphor have shown, is largely context-dependent. In summary, to use Gibbs’s words, “real-world metaphor research should aim to be ‘ecologically valid’”, i.e. “it should not base its conclusions purely on constructed, decontextualized examples” (Gibbs 2010: 3).

Another aspect of scientific criticism may also be found among metaphor researchers who have investigated the understanding of metaphor diachronically. This type of criticism is of a different character since it opposes the presentation of CMT as a totally autonomous and novel approach. Some scholars point out that the theoretical ideas proposed by Lakoff and Johnson were not autonomous since there had been earlier studies which had pointed at the pivotal role of metaphor in cognition (see Jäkel 1999: 9; Semino 2008: 9). Jäkel, for example, argues that the foundation of the conceptual metaphor theory was laid much earlier and he infers that some philosophers and linguists, in particular Kant, Blumenberg and Weinreich “have been anticipating the central tenets and findings of the cognitive theory of metaphor” (Jäkel 1999: 9). According to him, certain aspects of the cognitive view of metaphor have

their roots in the works of the mentioned philosophers and linguistics. Along similar lines, Kövesces states that the grounds of the cognitive theory of metaphor were laid by many scholars in the past two thousand years, including Locke, Kant and others (Kövesces 2002: x).

In conclusion, most of the critical remarks expressed with regard to CMT address the linguistic data used in the theoretical works to exemplify underlying mental cross-domain mappings as well as methodological procedures applied in pioneering CMT works. In addition to these two aspects, some criticism has also been expressed in relation to some conclusions that the developer of CMT make in their treatises.

2.3. Further development of metaphor studies

Relying on some of the principles of CMT while also addressing certain weaknesses that the early version of the theory tends to suffer from, contemporary research on metaphor has developed a great deal, especially in empirical and methodological terms. This section presents some of the key trends in metaphor research today that have developed and incorporated valuable methodological tools and followed new approaches to the study of metaphor, many of which remedy weak spots of CMT.

2.3.1. Focus on metaphor in naturally-occurring language / discourse

Realising the diversity of metaphor's functioning in language, numerous linguists approached the inquiry into metaphoricity from the perspective of applied linguistics. The rationale for studying metaphor in context lies largely in the view of language as a social, context-bound and context-sensitive phenomenon and the argument that context needs to be given proper scientific attention in the study of metaphor. In the words in Zanotto et al. (2008: 1), "it is timely for researchers to approach metaphor as social and situated, as a matter of language and discourse, and not just as a matter of thought", since the "understanding of [this] multi-faceted phenomenon [...] would be incomplete without knowledge of how metaphor operates in its discourse environment" (Zanotto et al. 2008: 2). While relying largely on CMT, the applied linguistics

approach to metaphor thus at the same time challenges it by claiming that the language of metaphor with its all contextual aspects is a crucial factor that bears theoretical implications and imposes significant requirements on the methodological tools and approaches of metaphor research.

This section aims to describe the key developments in the research of metaphor and the most significant trends in current metaphor studies. Current metaphor research can be said to follow two very general trends: the first trend can broadly be given the label of the cognitive approach, in which the key focus is on the mental representation, structures, and processes that are present in the production and interpretation of metaphor, whereas the second approach pays most attention to metaphor in context or, as it is commonly termed, metaphor in naturally occurring language (Deignan et al. 2013: 5–7). Addressing some of the empirical and methodological issues identified in CMT, contemporary metaphor researchers have resorted to reliable empirical data before making any introspection-based generalisations, others have turned to more rigorous tools of identifying metaphor in language, yet others have applied experimental methodology in metaphor research to make studies more valid and reliable. A few aspects in the development of contemporary metaphor research may be distinguished.

Firstly, if the cognitive turn in metaphor research in the 1980s shifted the attention to the ways metaphor functions at the level of thought paying less attention to language as its surface realisation, in contemporary research (especially in the so-called European school (see Šeškauskienė 2012: 66–67) or the Anglo-European approach (Alexander 2011: 16)) of contemporary metaphor studies language has regained the important status as a starting point of any linguistic study of metaphor. In other words, some metaphor scholars recognised early enough that the linguistic evidence is but a crucial factor before making any conclusions about the status of metaphor at the level of thought. Acknowledging how “messy [the] reality of metaphor use” is (Gibbs 2010: 6) as well as the impact of genre and text-type on the emergent patterns of metaphor use, contemporary scholars argue that metaphor researchers could

make their studies more comparable if they “adopted a coherent theoretical framework within which to situate each text-type or corpus studied” (Deignan et al. 2013: 51). This, the scholars argue, can “enable researchers to determine commonalities and differences, and ultimately establish more accurately how these co-occur with particular patterns of metaphor in use” (ibid.).

In conclusion, the focus on metaphor in the actual use of language in discourse, register and genre can be said to be one of the latest trends in contemporary metaphor studies. The shift from introspective to empirically more sound methodologies and the focus on language in use and its analysis, metaphor researchers have had to deal with a number of methodological issues. As a result, methodologies of identifying metaphor in language and dealing with large amounts of data have been developed and improved. This may also be seen as an immensely significant recent trend that metaphor scholars all over the world enthusiastically work on.

2.3.2. Metaphor in thought, language, and communication

By focusing on the two dimensions of metaphor, i.e. metaphor in thought and metaphor in language, Lakoff and Johnson and their followers did not pay enough attention to the communicative function of metaphor. This has been fixed by current metaphor researchers who have addressed the highly under-researched aspect of metaphor. As a response to this gap, Steen developed a three-dimensional model of metaphor (2008; 2011; 2013), i.e. metaphor in thought, metaphor in language, and metaphor in communication. In acknowledging the three integral aspects of the way metaphor operates, Steen proposes three functions of metaphor with regard to the three dimensions (Steen 2008: 231). According to him, the linguistic function of metaphor is to fill lexical gaps in the language system (which he calls *naming*); the conceptual function of metaphor is to provide conceptual frameworks for those concepts that may need indirect understanding (*framing*); whereas the communicative function is to create an alternative perspective on a given topic or referent (which he calls *perspective changing* or just *changing*) (ibid.). It is therefore important to take into account all three functions of metaphor as existent in

language, thought, and communication in approaching metaphors in authentic language. Any analysis of metaphor in use should therefore be mindful of all three functions of metaphor which may account for numerous aspects metaphor variation in linguistic forms and functions used in different texts produced for different communicative purposes.

2.3.3. Discourse, genre and register in metaphor studies

Current metaphor studies often aim at tracing patterns of metaphor use in a specific type of discourse and they sometimes tend to use the terms ‘genre’, ‘register’, ‘discourse’ and sometimes ‘text-type’ interchangeably. In addition, a related concept one can commonly encounter in metaphor research texts is that of a ‘discourse community’. While it may be less important to be very precise in definitions and aspects of these terms in some studies, for the purposes of clarity and transparent theoretical and methodological framework, these notions are briefly discussed in this section to provide some clarity about these related but distinct concepts.

Contemporary metaphor studies have highlighted the significance of examining metaphor by taking into consideration genre, register, and discourse since they directly correlate with and largely determine the functions, forms and linguistic features of metaphors (Cameron & Low 1999; Caballero 2006; Semino 2008; Deignan et al. 2013, among others). Of the three notions, *discourse* is the broadest since it refers to the social practice of language use. Following the trend of contemporary metaphor studies, the notion of *discourse* in the broad sense is understood as naturally occurring language used by participants of communicative situations for specific purposes. Semino (2008: 1), for example, defines the term *discourse* as “real instances of writing or speech which are produced and interpreted in particular circumstances and for particular purposes.” Two other notions, i.e. *genre* and *register* are slightly more specific. As proposed by Lee (2001: 46), the notion of *register* is used “when we view a text as language: as the instantiation of conventionalised, functional configuration of language tied to certain broad societal situations, i.e. variety according to use.” Based on Biber and Conrad (2009: 6), register is

understood as a variety of language determined by or associated with a specific situation of use which involves specific communicative purposes. So while both discourse and register are associated with language use, discourse has to do with the social contexts which involve extralinguistic factors, whereas register is concerned with the characteristics of language, i.e. with linguistic contexts. Finally, the notion of *genre* refers to a “specific text-type used by a specific community of speakers for specific purposes” (Deignan et al. 2013: 40). In a similar line of reasoning, Lee (2001: 46) suggests that we use the notion of genre “when we view the text as a member of a category, [...] a grouping of texts according to some conventionally recognised criteria”. It follows, then, that it is best to view genre as a category established by consensus in a given culture (ibid.).

In relation to the previously discussed notions, another relevant term is a *discourse community*. Since metaphor studies often aim to disclose metaphors that are shared by (groups of) people united by a subject matter and used in particular contexts for particular purposes, a definition of such a notion is also inevitable. This thesis largely relies on the following definition of a discourse community proposed by Barton (2007, cited in Deignan et al. 2013: 41–42):

A discourse community is a group of people who have texts and practices in common, whether it is a group of academics, or the readers of teenage magazines. In fact, a discourse community can refer to several overlapping groups of people: it can refer to the people the text is aimed at; it can be the people who read a text; or it can refer to the people who participate in a set of discourse practices by both reading and writing.

Following this definition, the key characteristics that make a group of language users a discourse community is shared expertise, knowledge, or interest in a subject matter; it may include both producers and receivers and processors of texts and speech and it is defined by their participation in discourse situations. Relying on this definition, the authors as well as the readers of research articles on criminal law and criminal justice, for example, are also a discourse community in the sense that they share similar (but varying) knowledge of the subject matter; they participate in the discourse situation as authors and readers of texts and share other discourse practices such as, presumably, participate in

academic conferences, and, also, assumingly, write and read other types of texts in the discipline (dissertations, monographs, textbooks, etc).

After the key trends of current metaphor studies have been reviewed, it is relevant to turn to a brief discussion on how contemporary scholars define metaphor and provide its working definition which is adhered to in this dissertation. While Lakoff and Johnson define metaphor as “understanding and experiencing one kind of thing in terms of another” (Lakoff & Johnson 1980/2003: 5), contemporary researchers tend to be more cautious about the cognitive status of metaphor and, rather, define it by taking into account the manifold aspects pertaining to metaphor such as its different functions, linguistic manifestation, and the role it performs not only as a cognitive but also as a communicative tool. Following Semino (2008: 1), metaphor in this dissertation is understood as a “pervasive linguistic phenomenon, which is varied in its textual manifestations, versatile in functions it may perform, and central to many different types of communication.” As will be shown in the analysis of metaphors presented in Chapter 4, metaphor functions in discourse by serving different functions from filling lexical gaps to expression of evaluation. As far as the definition of linguistic metaphors goes, this dissertation relies on the understanding of linguistic metaphor proposed by Deignan (2005: 34), i.e.:

A metaphor is a word or expression that is used to talk about an entity or quality other than that referred to by its core, or most basic meaning. This non-core use expresses a perceived relationship with the core meaning of the word, and in many cases between two semantics fields.

Metaphors occur in different linguistic forms, signalled by single lexemes or extended phrases. Their use can be conscious and, possibly, deliberate, which can be marked by typographic or other linguistic markers. These and other aspects of metaphor use in naturally-occurring language are taken into consideration in the characterisation of metaphor provided above which serves as a working definition for this dissertation.

As regards the conceptual nature of metaphors, this dissertation relies on the contemporary approach to metaphor by treating linguistic metaphors as *potentially* but not necessarily conceptual (See Semino 2008: 1; Steen 2011:

30ff). Both conventional and novel metaphors may be interpreted in the framework of CMT by describing the metaphorical language in terms of reconstructed conceptual metaphors; however, no claims are made in this dissertation about the cognitive nature of linguistic metaphors in the processing or use of metaphorical language since such claims would require psycholinguistic or other experimental methodology to substantiate them in a valid manner.

2.3.4. Methodological advances in metaphor research

Inquiry into metaphorical language has developed greatly in terms of more accurate methodological tools used in identifying metaphorical language in context as well as analysing metaphor by applying corpus linguistic tools. This section focuses on two areas of such advancement by briefly discussing a recent methodological tool developed for reliable, rigid and replicable procedural protocol of metaphor identification in language and presenting the key trends in corpus-based approaches in metaphor studies.

2.3.4.1. Metaphor identification in language

In the context of CMT, metaphorical expressions are treated as a linguistic realisation of conceptual metaphors, whereas the question of what makes a metaphorical expression and how to identify it in language is not discussed at all. However, the language of metaphors and what should and what should not be treated as metaphorical expressions in language has been a serious issue in contemporary metaphor research. Over the last several decades, metaphor scholars have addressed this problem in a more systematic and explicit way (see Cameron 2003; Deignan 2005; Stefanowitsch 2004, 2006; Steen et al. 2010a; Berber Sardinha 2012, among others). To have a wider agreement of what to treat as (non-)metaphor in language is significant for different reasons, for example, to measure metaphor density in and across texts, to better replicate the results of metaphoricity in terms of their distribution, and to carry out research in a more systematic and explicit manner. Among the most systematic procedures for metaphor identification currently used by numerous metaphor researchers is the so called MIP (which stands for “Metaphor Identification

Procedure) developed by a group of researchers (Pragglejaz Group 2007) and its improved version known under the name of MIPVU (see Steen et al. 2010b). The next section presents the procedural protocol in more detail.

Lexical disambiguation approach: from Pragglejaz to MIPVU

This section presents the methodology of metaphor identification in language that has been developed by a group of metaphor scholars in order to make metaphor studies more transparent in terms of methodological procedures in deciding which lexis is metaphorically used in a certain (con)text. The development of a more reliable and clearly defined procedure of detecting metaphor in language was triggered by substantial methodological weaknesses of the widely used CMT framework whose primary focus tended to be the conceptual level of metaphor, whereas the linguistic metaphor and its diverse forms of manifestation were not so critically approached. In recognition of serious methodological shortcomings in terms of metaphor identification in language, some methodological tools have recently been developed to tackle the insufficiently reliable ways of treating what is (non)metaphorical. A group of researchers under the name of the Pragglejaz Group⁸ (2007) introduced a new method to identify metaphor in texts which they called MIP (which stands for ‘Metaphor Identification Procedure’). The procedure deals with the linguistic analysis of metaphorically used words (lexical units) in discourse. After a few years the procedure was extended and refined and its updated version was given the name of the MIPVU⁹ procedure. The procedure works as an instrument to identify metaphor-related words (the conventional way to refer to lexical units that express metaphors in the MIP(VU) framework is metaphor-related words (MRWs) (Steen et al. 2010b: 94)) and consists of the following steps (Pragglejaz 2007: 3; Steen et al. 2010b: 5–6):

1. Read the entire text/discourse to establish a general understanding of the meaning.

⁸ The title is formed from the initials of the first names of the researchers who developed the procedure, i.e. **P**eter Crisp, **R**ay Gibbs, **A**lan Cienki, **G**erard Steen, **G**raham Low, **L**ynne Cameron, **E**lena Semino, **J**oseph Grady, **A**lice Deignan and **Z**oltan Kövecses.

⁹ “VU” stands for the university (Vrije Universiteit) in Amsterdam where the work of extending and refining the steps of analysis was carried out.

2. Determine the lexical units in text / discourse.
3. a) For each lexical unit in the text, establish its meaning in context, i.e. how it applies to an entity, relation, or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit.
- b) For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one in the given context. For our purposes, basic meanings tend to be:
 - more concrete; what they evoke is easier to imagine, see, hear, feel, smell, and taste;
 - related to bodily action;
 - more precise (as opposed to vague);
 - historically older.

Basic meanings are not necessarily the most frequent meanings of the lexical unit.

- c) If the lexical unit has a more basic current/contemporary meaning in other contexts than the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it.

4. If yes, mark the lexical unit as metaphorical.

To illustrate the practical application of the procedure, it is worth analysing a stretch of text by going through all the procedural steps in determining the metaphoricity of one lexical unit. The following sentence comes from a Lithuanian research article on criminal law:

(1) *Analizuojant baudžiamąsias bylas matyti, kad plėšimas dažniau yra padaromas asmenų grupės* (LT29)

~ In analysing criminal cases it is seen that robbery is more often committed by a group of people.

‘The analysis of criminal cases reveals robbery to be more often committed by a group of people’.

According to the MIP(VU)¹⁰ guidelines, having read and established the general understanding of the text, the next step is to demarcate the lexical units in the text. The above excerpt would thus be divided into a stretch of the following lexical units: *Analizuojant / baudžiamąsias / bylas / matyti / kad / plėšimas / dažniau / padaromas / asmenų / grupės*; thus each lexical unit is (in most cases) a single word. The next step in the procedure is to analyse each lexical unit by determining its contextual meaning and to decide if whether it has a more basic (physical, concrete) contemporary meaning used in other contexts. For illustration, let us analyse the word *matyti* ('to see') in example (1).

The contextual meaning of the word, which is also found in the Dictionary of Contemporary Lithuanian [*Dabartinės lietuvių kalbos žodynas* in Lithuanian] (hereafter, DLKŽ_e) is 'to understand, to realise'. But the word also has other meanings, some of which may be considered more basic. One of the other meanings of the word *matyti* is, as given in the dictionary, 'to capture the sight of an object by using your eyes, to behold' (DLKŽ_e). Since this latter meaning is directly related to the bodily action of humans (or other animals), it gives grounds for considering the word as having a more basic meaning used in other contexts. Finally, an analyst needs to make a decision if the contextual meaning contrasts with the basic meaning and can be understood in comparison with it. The two meanings of the word *matyti* clearly contrast and the process of understanding can definitely be understood by comparing it to physical sight. Since the answer to the last question (if the contextual meaning contrasts with the basic meaning but can be understood by comparing it to the basic sense) is 'yes', we mark the word *matyti* as used metaphorically and being an instantiation of a metaphor UNDERSTANDING IS SEEING, which is prominent in many different languages and cultures (see Deignan & Cameron 2009; Lakoff & Johnson 1980/2003; Sweetser 1990; Yu 2004).

¹⁰ The abbreviation MIP(VU) is used here to refer to the main procedure of metaphor identification which in both the original and the modified versions follows the same principles. MIPVU differs from MIP in that it expands the procedure by adding more detail to the protocol which allows identification of metaphor in more forms with directly used language, e.g. similes, analogies, and expressions of counterfactual reality (Nacey 2013; Steen et al. 2010b).

MIP(VU) is not the only methodological tool for the retrieval of metaphorically used words; however, it is the only such precise method whose reliability has been formally tested to make it replicable and available to other researchers (Steen et al. 2010c: 166). It is especially valuable in studies which aim at measuring metaphor density across texts, genres, discourses, languages, etc. especially because its application provides basis for reliable comparison of metaphoricity in terms of number of occurrences. It is important to note that the approach of the Pragglejaz Group and Steen et al. (2010b) and the way they perceive metaphor is different in significant ways from the traditional cognitive approach because within the MIPVU framework the main focus is on the linguistic forms of metaphor expression rather than identification and exploration of conceptual mappings, i.e. linguistic metaphors are regarded as potentially but not necessarily motivated by conceptual metaphorical structures (see Steen et al. 2010b: 8).

2.3.4.2. Corpus approaches to metaphor research

The significance of studying metaphor based on extensive samples of naturally-occurring language has led to increased use of corpus-based approaches in metaphor identification and analysis. Since corpora can provide more accurate results of actual language use, their application in metaphor studies is also capable of providing significant insights that introspective methods could never capture. As pointed out by Stefanowitsch, corpus-based approaches such as Metaphorical Pattern Analysis (presented below in this section) can “identify metaphors more systematically and more exhaustively than non-corpus approaches” (Stefanowitsch 2006: 69). To add, research techniques employing corpus linguistics tools can yield facts about linguistic aspects of metaphor which refute previous claims made on the basis of linguistic data derived intuitively (Deignan 2008b: 281).

Depending on research aims, one can choose from a variety of corpus-based approaches and methodologies. It is possible to distinguish at least three very general types of corpus-based approaches that may be applied in metaphor research (Semino 2008: 199). First, researchers can resort to general-purpose

corpora when their research aims are to examine the general patterns of metaphor use without a specific focus on discourse, genre, text type, etc. and, on the basis of the observed patterns make inferences about the possible conceptual metaphors that are at play. Current metaphor researchers tend to use general-purpose corpora in order to test the validity of other studies that used no linguistic data to account for the theoretical claims. In addition, corpora may also be used to test the validity of a small-scale study carried out mainly by relying on introspective methods (Partington 2006; Semino 2008). Secondly, corpora are an especially valuable source in studies that deal with observing patterns of metaphor use in a particular genre at a particular time in history. As a rule, such corpora are typically smaller and are often compiled by researchers themselves and they are particularly useful in revealing similarities and differences in the patterns of metaphor use across genres, discourses and historical periods.

In addition, Gries and Stefanowitsch (2006) maintain that there are certain formal principles and requirements that should be observed by cognitive linguists when applying corpus approaches. The most common formal requirements in performing corpus analyses are summarised by Gries in the following list of criteria (adapted from Gries & Stefanowitsch 2006: 4):

- 1) the study is based on a corpus or corpora of naturally-occurring language;
- 2) the data have to be machine-readable to enable a researcher to retrieve the search patterns in a computerized way;
- 3) the corpus or corpora are representative of the language / modality / register / variety / etc. that the study aims to investigate;
- 4) the analysis should be exhaustive and systematic in the sense that the whole corpus is taken into consideration without liberal choice of which aspects to address and which to neglect;
- 5) statistical data are used to account for the phenomena under investigation to cover both prototypical and less frequent/typical cases of language use;
- 6) the analysis is carried out on the basis of frequency lists, concordance lines, collocations, etc.

Corpus approaches to metaphor have been applied by some metaphor researchers. Koller and Semino, for example, report the results of two case studies on metaphor use by (wo)men politicians and their attempt to detect potential gender-induced variation of metaphor and its use in political discourse (Koller & Semino 2009; Semino & Koller 2009). In both studies they combine quantitative and qualitative methods of metaphor identification and

analysis. In order to observe the differences in the prominent lexis used by the two politicians and obtain contrast in their sub-corpora, they employ the keyword facility, which generates frequency lists. Then they proceed by selecting a subset of their corpora and analyse it manually following the metaphor identification procedure introduced by the Pragglejaz Group (2007), which lets them collect a list of metaphorical expressions used by the politicians and identify recurrent source domains. They make a deliberate choice of excluding from analysis very general metaphors such as TIME IS A CONTAINER or MORE IS UP/LESS IS DOWN (Koller & Semino 2009: 16) and only focus on the most prominent metaphors that are used to conceptualise political activity, such as JOURNEY and WAR. As a next step, they subsequently return to the corpus tool (WordSmith Tools) and to the whole of their data and run concordances for those expressions that they identified as a result of manual metaphor identification and checking them for the metaphoric use of the word(s) in question. They considered metaphorical usage was relevant when it referred to political activity and when it involved an individual or collective human actor. Based on their results, they then calculated:

- the number and percentage of types realised for each of both source domains in order to see how productive the use of specific metaphor by each politician is;
- the value of metaphorical type-token ratio in order to ascertain the variety with which each metaphorically used lexeme is realised. This allowed them to see how often different metaphorical expressions occurred in the corpus and to measure variance of metaphor;
- the metaphor density per 1,000 words to measure the frequency with which the metaphorical tokens in question are used by the two politicians (Koller & Semino 2009: 16–17).

A study relying on accounts of both quantitative measures as well as qualitative, context-based metaphor analysis is deemed favourable since this gives more in-depth insights into the usage of metaphor and prevents one from making

overgeneralisations or drawing too general conclusions which is likely if only one of the approaches were chosen.

In one of their studies the scholars investigate the use of metaphor in a corpus of interviews and speeches delivered by Gerhard Schröder and Angela Merkel and focus on two prominent source domains that occur in the politicians' language, i.e. JOURNEY and WAR (Koller & Semino 2009). They demonstrate that the use of journey- and war-related metaphors in the two politicians' speeches and interviews is different in both quantitative terms (e.g. in type-token ratio of war-related lexis) and qualitative aspects (e.g. differences in the rhetorical function that the same metaphors have or persuasive purposes that they are employed to achieve) and conclude that the observed variation in metaphor use may also be induced by other factors such as party membership, personality, and professional background (Koller & Semino 2009: 27-28).

Corpus-assisted discourse studies

The use of combined methodologies in metaphor studies by first investigating of a smaller corpus manually and then analysing the results of the former in a large(r) corpus as a reference is proposed by the advocates of the corpus-assisted discourse studies (CADS) approach. The CADS method was proposed by Partington (2006) and it consists of the following procedures:

- (1) develop a research question;
- (2) choose or create a corpus for data collection of linguistic items;
- (3) choose or compile a reference corpus (for comparison to the main corpus created in step #2);
- (4) compile frequency lists of keywords and conduct comparisons of the key words;
- (5) determine the existence of multiple instances of key items;
- (6) investigate the context of use of the key items in the corpora.

Partington (2006: 267–268) contends that corpus techniques in metaphor studies may yield at least two important insights. Firstly, in line with the arguments of other proponents of the use of corpora in researching figurative language, he states that corpora may help reveal recurrent patterns of the

systematic use of metaphorical language; and secondly, and rather simply, corpora provide access to large amounts of naturally occurring language, i.e. language use in context. He also emphasises that earlier studies of metaphor which were qualitative in character were typically reliant on a small dataset, a single text or a rather small sample selected to represent the discourse under investigation. However, he argues that these types of studies would too frequently be “distinguished by a predilection for inventing suitable examples which, from the point of view of modern data-based linguistics, constitutes as unwarranted intrusion of the analyst into the data field” (Partington 2006: 268). As a result, such researcher bias precludes seeing the real picture of metaphor occurrence in discourse and adds to the “unnecessary confusion of the observer with what is being observed” (ibid.). In order to avoid intruding into a study and distorting the results by affecting the study, researchers are suggested to combine both the qualitative and the quantitative approaches. Incorporating corpus analysis and tools into metaphor research thus allows verifying the results of earlier studies carried out in an exclusively qualitative manner as well as apply relevant quantitative analysis such as frequency analysis and concordancing to uncover more aspects of the occurrence and expression of metaphor in a given discourse.

There is another important motivation for using corpora in metaphor studies that may be regarded as the rationale for the present study. What the influential work of Biber and his colleagues (1999) suggests, in very general and simplified terms, is that the use of language differs in a myriad of ways depending on the register, genre, communicative purposes, etc. What they do in extensive corpus-based works is compare the different varieties of English and delve into the characteristics on these varieties and the use of language in them. Taking into consideration the fact that language use shows significant differences depending on the genre, register, text type, function etc, one is easily convinced that metaphor use is also affected by genres, registers, language varieties, communicative purposes (what has already been shown in many contemporary metaphor studies, e.g. Caballero 2003a, 2003b, 2006; Goatly 1997, 2011; Deignan et al. 2013; Semino 2008, Semino et al. 2013; Steen et

al. 2010a, 2010c; inter alia). For example, Deignan et al. maintain that “the forms and functions of figurative language can differ significantly from genre to genre and across registers” (Deignan et al. 2013: 1). A similar argument is put forward by Steen (2011a: 587) who asserts that “recent corpus-linguistic research [...] has shown that the distribution of metaphorically used words can be explained, to a large extent, by the general association between word class and register” which suggests that “metaphor is largely a matter of fairly automatic word choice, as well as word combination, in conventionalized language varieties” (ibid.). Evidently, corpora are among the most suitable sources and corpus tools may be particularly beneficial in analysing metaphor in a given discourse in order to obtain a picture of a genre- or register-specific metaphoricity.

In conclusion, currently published metaphor research does not underestimate the use of corpora for the study of metaphor and continues to develop corpus tools to enable researchers apply them in identifying metaphor and analysing it in a more systematic manner. Although metaphor scholars acknowledge that corpus-metaphor studies are still a rather new area (Semino 2008: 191), the way corpus linguistic approaches cater for metaphor studies are particularly valuable and have an enormous potential. Such approaches to metaphor research can offer numerous advantages in terms of data coverage, systematic and exhaustive results and possibility to measure metaphor density in a given (con)text, however, it is also fair to state that they work best in combination with qualitative approaches.

Metaphorical pattern analysis (MPA)

The aim of this section is to present the method of Metaphorical Pattern Analysis (hereafter, MPA), proposed by Stefanowitsch (2004, 2006), which will be one of the main methodological tools of extracting metaphor in the present study. To remedy methodological shortcomings which arise in introspection-based cognitive studies of metaphor, Stefanowitsch (2006: 64–65) proposes systematic use of corpora in extracting metaphors associated with target domains in question. In rather simple terms, the essence of the method lies in

the following procedure: first the analyst needs to select a relevant lexical item or a set of lexical items which designate or are related to the target domain and extract a sample of its occurrences in a corpus. Next, he/she analyses the concordances to identify the metaphorical expressions that the node word is a part of. Next, the analyst needs to classify them into coherent groups which represent general mappings. This is the basic idea of how the method works; however, in practice it is not as straightforward as the above description may imply. The details of the application of this method are presented and discussed in the next chapter; however, it is relevant at this point to note that this method, firstly, is superior to introspection and other eclectic ways of identifying metaphor in language. Secondly, such an approach opens new avenues for studying metaphor by enabling researchers to quantify the frequency of occurrence of metaphorical mappings and use the statistical data to reveal associations between metaphorical mappings and individual lexical items. Finally, but perhaps less importantly for the present study, Stefanowitsch also demonstrates how this methodological approach allows delving into differences in the “metaphorical behaviour of antonyms and near-synonyms” which reveals subtle characteristics of different target-domain lexis in relation to specific metaphorical patterns (Stefanowitsch 2006: 65).

As has been pointed out in the previous passage, MPA is not as simple as its description above may suggest. First of all, it is well known from existing metaphor research that metaphorical mappings are not necessarily linked to specific lexical items and it is common to find metaphorical expressions which contain no target-domain lexis. To illustrate, based on Lakoff and Johnson, Stefanowitsch (2006: 65–66) provides two conceptual metaphors that bear significant differences in their lexical expression. Both are based on the source domain of WAR which in the first set of examples shapes the target domain of argument, while in the second it gives conceptual structure to the notion of love. Consider:

(1) ARGUMENT IS WAR:

- (a) Your *claims* are indefensible.
- (b) His *criticisms* were right on target.
- (c) He shot down all of my *arguments*.

(2) LOVE IS WAR:

- (a) He is known for his many rapid conquests.
- (b) He fled from her advances.
- (c) He is slowly gaining ground with her.

While the examples in (1) contain the lexical presence of both the target and the source domain, in the set of examples instantiating the LOVE IS WAR metaphor in (2) we can only detect source-domain lexis. The expressions which contain both the source and the target domain lexemes are referred to as *metaphorical patterns*. A metaphorical pattern is defined as

a multi-word expression from a given source domain (SD) into which one or more specific lexical item from a given target domain (TD) have been inserted (Stefanowitsch 2006: 66).

Returning to the two examples provided above, all of the examples in (1) are a case of metaphorical patterns, whereas those listed in (2) are not (*ibid.*). As one can already infer, what this methodological approach is mostly valuable for are corpus-based studies which are target-domain oriented. The method allows obtaining large numbers of instances of the target-domain lexis in its natural discourse environment and by analysing the concordances retrieve exhaustive metaphorical patterns that are linked to the target-domain item in question.

Certainly, this method does not allow identification of *all* metaphorical expressions in the corpus but only those that occur in text in the form of metaphorical patterns, however, the advantages that it provides are multiple and outweigh its potential drawbacks. The advantages of this approach over mere introspection and other less systematic metaphor retrieval methods are multiple. First and, arguably, most crucially, it allows “quantifying the importance of any given metaphorical pattern for particular (sets of) lexical items” (Stefanowitsch 2006: 66). Such a methodological procedure of metaphor identification, retrieval and quantification can yield significant insights and allow making generalisations regarding the significance of conceptual metaphors that underlie the identified metaphorical patterns. In addition, the fact that some scholars may regard the methodological decision

to anchor firmly to the lexemes of the target domain in question may also be perceived as a strength that prevents researchers from confusion and uncertainty in extrapolating conceptual metaphors from linguistic data (Stefanowitsch 2006: 67). Evidently, in cases such as (2) above, when the target domain is not evoked by any lexis at all, the metaphorical mapping can only be derived from the context, and hence the identification of the target-domain concept is highly subjective or sometimes even can be difficult to determine. For instance, all the three examples that, supposedly, instantiate the LOVE IS WAR metaphor in (2) are likely to cause confusion since what exactly is meant at the conceptual level may be LOVE but also LUST, PASSION, DESIRE, ADORATION, etc. (ibid.). Thus extrapolating conceptual metaphors from such instances is always subject to individual decisions which are highly intuitive and therefore cannot lead to comparability across studies. MPA, on the other hand, precludes researchers from such decisions allowing them to anchor onto the existing lexis and therefore, in the words of Stefanowitsch (ibid.), metaphorical patterns “do not present us with such uncertainty” since “the target domain is spelled out explicitly by the target domain lexis.”

The second strength of MPA and extracting metaphorical patterns is the fact that apart from being clear cases of the instantiation of general mappings, metaphorical patterns at the same time reflect specific paradigmatic relations that are established between the items of the target domain and those of the source domain that would otherwise be predicted to occupy the slots in non-metaphorical cases of language use (ibid.). Thirdly, the examination of metaphorical patterns yields important insights into the conventionality of metaphorical mappings because it is able to disclose cases in which target domain vocabulary is more likely to occur than source-domain lexis. For instance, if we are interested in the target domain of IDEAS and look at the expression *wealth of NP* which is an instantiation of a source domain of MONEY, some of the concordances may contain such source domain vocabulary as *money* and *possessions*, however, most of them reveal that in considerably more cases the combinability patterns include target domain lexis such as *ideas*, *information*, *experience*, *knowledge* and other similar vocabulary that is not

related to literal wealth (ibid.). An opposite example is the expression *to elucidate NP*, the examination of which shows that its combinability with the source-domain lexis is extremely rare. Stefanowitsch provides the example “Could you elucidate your remarks?” in which the target domain is the same, i.e. IDEAS, and the source domain is, LIGHT. However, the verb occurs with other source domain items very rarely, e.g. the sentence exemplified below has been found in usage, yet to most speakers it sounds unacceptable and might be considered an unsuccessful attempt to produce a sentence in a literary style (Stefanowitsch 2006: 68).

2.4. Metaphor in academic discourse

Metaphor has been shown to be central in scientific language and reasoning with extensive research revealing its significant role in very diverse disciplines from linguistics to physics and law (Boyd 1979/1993; Brown 2003; Gentner & Jeziorski 1993; Hallyn 2000; Herrmann 2013; Kuhn 1993; Nuñez 2000; Radman 1997; Šeškauskienė 2008, 2009, 2011, 2013; Winter 2001/2003, inter alia). This chapter presents and discusses in the wider context the role of metaphor in science, education and in academic discourse in general by focusing on the functions metaphor tends to perform, features of its linguistic expression, its creative potential in scientific and educational activities and some other relevant aspects. This section does not intend to provide an exhaustive overview of metaphors used in science, research, and education but rather to give an overview of the most relevant studies in the field, present the key functions that metaphors serve in scientific thought and educational activities and give a few examples of metaphor uses in the language of scientific and educational character¹¹.

To illustrate the pervasiveness of metaphor in scientific discourse, let us look at a short extract from a randomly selected book in a library, particularly in the linguistics section. Let us consider just a few examples that come from a single

¹¹ It is important to note that the terms ‘scientific discourse’ and ‘academic discourse’ are used interchangeably though they may be defined differently by different scholars depending on their approaches and foci. Both phrases are used here to mean the general scientific and educational activities (realised by oral, written or multimodal medium).

source (in fact, a single page) – the contents page of the volume *Phraseology in Foreign Language Learning and Teaching* edited by Meunier and Granger (2008: vii–viii; emphasis added), in which almost every title of a chapter appears to contain a metaphor-related word (MRW). Consider:

- *Phraseology: The periphery and the heart of language.*
- *Extracting and describing phraseological units.*
- *Essential collocations for learners of English: The role of collocational direction and weight.*
- *Exemplification in learner writing: A cross-linguistic perspective.*
- *Multiword expressions and the digital turn.*
- *Phraseology in learners' dictionaries: What, where and how?*
- *Concluding remarks.*

The above examples suggest that it is rather usual to conceptualise and describe language in terms of location (*periphery*) or a living body (*heart*), the procedure of obtaining relevant linguistic data is understood via an analogous procedure of removing a substance from another substance or an object from a particular place. As in other scientific fields, an approach may metaphorically be conceived through the notions of sight (*perspective*) and location as well movement in space (*where, direction, turn*).

Most of the above-exemplified titles contain very conventional use of metaphor which is characteristic to other fields and is not limited to the conceptualisation of phraseology and its various issues. Just like in this particular context, the metaphors SCIENTIFIC APPROACH IS A DIRECTION, SIGNIFICANCE IS A ROLE, IMPORTANCE IS HEART are likely to occur in more general contexts, whereas the more specific metaphorical rendering of data acquisition through the source domain of the process of extraction is more of a field-specific metaphor. Perhaps in a somewhat simplistic way, just by looking at the examples provided above one can draw a rather general conclusion that like any other scientific or non-scientific field, the linguistic discipline of phraseology cannot escape metaphor and use of metaphorical lexis.

It is relevant to start the discussion by defining academic discourse and specifying how it is different from scientific discourse. The term “scientific discourse” is a rather vague notion. Researchers tend to use the term when speaking about the “language of science”, the “register of science” or “scientific

register”. The terminological problem and complexity of defining such a notion lies in the fact that science and “scientific discourse” encompasses various types of text or scientific genres (abstracts, research articles, textbooks, monographs, etc) as well as spoken science-related language production (conference presentations, lectures, symposia, round-table discussions, theses’ defence, etc). The term “scientific discourse” is commonly used in relation to and sometimes interchangeably with a number of other terms such as *genre*, *text type*, *register*, *style*. A similar point is made by Halliday, who also highlights the complex nature of scientific discourse:

There is of course no single register of science; there are numerous scientific discourses, not only covering different disciplines and sub-disciplines but also, and more significantly, different participants in the processes of science: specialist articles (including abstracts), textbooks, science for lay readers and listeners and so on. These have in common the function that they are extending someone’s knowledge in some technical domain: the audiences being addressed may be anywhere from high level professionals to complete novices, but the text is organised so as to tell them something that they don’t already know, with ‘telling’ covering a range of interpersonal attitudes from a tentative suggestion to an aggressive attempt to persuade (Halliday 2006: xv).

Academic discourse bears some specificity which may presuppose specificity in the use of metaphor. The specificity of academic discourse lies, first of all and what is most relevant with regard to metaphor, in the use of highly technical vocabulary since scientific and academic texts are mostly written to be read by other members of the discourse community.

It is natural that, like any other type of discourse, academic discourse is also rich in metaphoricity. This has been recently revealed by reliable empirical data. A group of researchers at the University of Amsterdam carried out a quantitative study by applying the MIPVU procedure to detect metaphor in language in order to measure and compare metaphor density across four registers¹² of English (based on the evidence from the BNC). Rather surprisingly, of the four registers analysed (news, fiction, conversation and academic register) academic discourse displayed the highest degree of metaphoricity: the percentage of metaphorically used words in academic

¹² The term ‘register’ is used here not relying on any definition but rather the original wording that the authors used in reporting their results.

discourse was the highest reaching 18.5%; it was followed by the news discourse which appeared to be 16.4% metaphorical and which “outperformed” even fiction (11.9%) which used to be associated with the greatest potential to display high degree of metaphoricity and, finally, the discourse of conversation turned out to be least metaphorical by reaching only 7.7% of metaphorically used lexis (Steen et al. 2010a).

The reason of such a high degree of metaphoricity of academic texts in comparison to three others may be multi-faceted. First of all, academic texts usually deal with complex and relatively abstract matters, which, according to the cognitive approach to figurative language, tend to be expressed and described by resorting to more concrete concepts, usually based on human bodily experience such as navigation in space, manipulations of various objects, sensory experience, etc. In addition to the need to resort to metaphor for explicatory purposes in dealing with complex scientific subjects, metaphor has been shown to have a theory-constitutive role (Boyd 1979/1993) which gives rise to new scientific concepts and generates field-specific lexis.

Research into the role of metaphor in academic discourse based on Lithuanian data cannot boast popularity, yet some studies have been conducted. Šeškauskienė (2008, 2009, 2010, 2011) is among the few researchers who have investigated this type of discourse from the point of view of metaphor. In one of her studies (2008), the scholar demonstrates how pervasive two mechanisms of meaning extension – metaphor and metonymy – are in English and Lithuanian. Relying on two rather small-scale corpora in the two languages collected from two scientific journals and the principles of a contrastive analysis, Šeškauskienė reveals that metaphor is much more pervasive in academic discourse in comparison to metonymy whereas English articles tend to be slightly more reliant on meaning extension than Lithuanian. In addition, the most common metaphorical patterns identified are language (analysis) / reasoning is a BUILDING / STRUCTURE, LANGUAGE (RESEARCH / LEARNING) IS A MEASURABLE ENTITY, LANGUAGE (LEARNING) IS AN ECONOMIC ACTIVITY, LANGUAGE (ANALYSIS) WRITING IS A PERFORMANCE/PLAY, LANGUAGE (LEARNING / RESEARCH) /

REASONING IS A JOURNEY / SPACE / MOVEMENT. As far as metonymic models are concerned, the most prevalent pattern in both languages has been the use of an inanimate subject with an active verb, e.g. *this paper argues*, *the results of the study show*, etc. Interestingly, the results of the study also reveal that metonymic patterns are also more frequent in English as compared to Lithuanian. The scholar confirms her hypothesis that academic discourse on linguistics is prone to metaphorical and metonymic extension of meaning and, in addition, reveals an interesting fact that “metonymy has interestingly been given preference by some authors and absolutely evaded by others” (Šeškauskienė 2008: 278). Most of the two patterns proved to be shared by the two discourse communities, however, some minor patterns proved to be highly culture- and language-specific. The present research is significant since it contributes to the research of metonymy which is much less commonly studied in comparison to metaphor. Moreover, it reveals the way the two patterns function in academic language of research articles and provides a source of reference for other similar studies to be compared to and enables comparison of results of similar prospective studies.

In another study on the metaphoricity of academic discourse in English and Lithuanian, Šeškauskienė (2011) revealed the underlying metaphorical structuring of the concept of an argument and scientific argumentation. Her cross-linguistic corpus-based study focused on metaphors based on concordance results with the lemma *argument** in English and Lithuanian and in this study the researcher revealed that both languages share a considerable number of metaphors such as RESEARCH / ARGUMENT IS AN OBJECT, RESEARCH / ARGUMENT IS A BUILDING / STRUCTURE, RESEARCH / ARGUMENT IS A PERSON, RESEARCH / ARGUMENT IS VERBAL COMMUNICATION and some others. In addition, language-specific features also emerged, since the two languages demonstrated their own preference of a more specific image to render the notion of an argument. The researcher shows that while in English academic discourse priority is taken by the ‘embodied’ argument, Lithuanian discourse community tends to resort to objectifying arguments. In addition to discrepancies in some conceptual metaphors, the study also reveals interesting language- and law-specific features in the linguistic realisation of metaphors.

Both analyses reviewed above contribute to the research of academic discourse by revealing the most common patterns of metaphorical and metonymic conceptualisation and, in addition, rely on the most recent methodological trends, such as application of corpus-based approach and the notion of metaphorical pattern which is particularly important in disclosing the pivotal role of combinability in the linguistic expression of both, metonymic and metaphoric mechanisms of cognition in scientific and academic discourse.

As can be inferred from the brief review of research into metaphoricity of academic discourse, different discourse communities have their own sets of metaphors which tend to shape their discipline-specific discourse. Academic / scientific *legal* discourse has not yet been tackled from the point of view of metaphoricity, as no extensive studies have been carried out in the field. Thus this dissertation aims to fill this niche by carrying out a contrastive study of metaphor in written academic legal discourse based on research articles on criminology and criminal law in English and Lithuanian.

2.5. Metaphor and terminology

In the context of scientific / academic discourse, one of the fundamental properties of metaphor is its role in constituting discipline-specific terminology. Boyd (1993: 485ff) was one of the first scholars to show that metaphor in science performs two major roles, namely, an exegetical / pedagogical role and a theory-constitutive role. As the terms may suggest, *exegetical metaphors* may be used in explicating theories or teaching, while *theory-constitutive* metaphors “constitute an irreplaceable part of the linguistic machinery of a scientific theory” (Boyd 1993: 486). Most of theory-constitutive metaphors, according to the scholar, are cases of metaphorical expressions which have no literal paraphrases (ibid.). To illustrate, in physics, for example, its technical terminology reveals that some of the theory-constitutive metaphors rely on the source domain of a FLUID / LIQUID SUBSTANCE, as suggested by such terms as *wave of electricity*, *wave of light*. Some metaphors may develop in the process of ‘migration’ of terms from one discipline to another one, for example, the term *valency*, which is a chemistry-related term,

has been borrowed and become an established term in linguistics. Borrowing of terms due to analogy between concepts and relationship between different domains of knowledge is an intrinsic part of the development of theories. It shows a common process in such elaboration of science, namely “migration of metaphoric terms between disciplines” (Muşat, 2003, p. 327).

To see how metaphor has shaped our knowledge and terminology of computers and their interfaces, it is enough to look at everyday language of computers and electronic medium. The invention of the computer and the Internet gave birth to numerous new concepts along with the development of language to name the electronic reality. As a result, the discourse of computing and the electronic space has abounded in metaphors represented by such linguistic items as *desktop, copy, paste, folder, recycle bin, notepad, wallpaper, to surf the net, homepage, to navigate, torrents, social network, piracy, virus, window, to send /attach a file, mouse, menu, World Wide Web*, etc.

As can be inferred from the given examples, the discourse and language pertaining to the Internet contains lexis which is a linguistic realisation of such metaphors as INTERNET IS SPACE, INTERNET IS A SEA / WATER, INTERNET IS A HUMAN / LIVING BEING, while the understanding of the abstract computer space is based on the COMPUTER IS A WORKING PLACE. Like in our physical office space and typical work setting, while performing computer work, we also have *desks* and their *tops*, we may have *folders* and store *documents* in them; when a *document* is no longer necessary we can *drag* it into the *recycle bin*; we make notes by using a *notepad*; we can move *back* and *forward*, as well as *up* and *down* which is enabled by the mapping of the physical space domain onto the abstract computer space domain. In all of these cases instigated by the metaphorical equation COMPUTER IS A WORKPLACE, the knowledge and the experience of our physical working environment as well as our orientation in space is crucial in understanding and manipulating in the abstract realm of computers and the electronic medium. Moreover, the above examples also point to an important function of metaphor, i.e. meaning extension. Instigated by the conceptual projection grounded in the COMPUTER IS A WORKPLACE

metaphor many of the lexical items denoting office-related objects acquired new meanings, i.e. those denoting their computing-related meanings, for example, the newly-born meaning of the word “notepad” was added into English dictionaries.

Thus an important role that metaphor serves in general language and language of science is providing linguistic resources to refer to (new) scientific concepts, phenomena and subjects which may also be called the function of filling lexical gaps, i.e. it serves well in order to “plug lexical gaps, to give a label and a name to new concepts, new experiences, new objects” (Goatly 1997: 91). In the same line of argumentation, Boyd asserts that the function of metaphors in science is “to remedy gaps in vocabulary” (Boyd 1993: 481) where metaphors are used to create new scientific terms for newly discovered theoretical knowledge (ibid.). Thus metaphor is a significant tool which may give rise to new scientific terminology and perform several functions from explication of scientific knowledge to giving rise to new vocabulary. All in all, metaphors play a vital role in our ability to reason in abstract terms and thus construct and develop our knowledge system. In “incorporating” new concepts into the existing knowledge system, the reliance on familiar concepts such as the physical reality and the existing linguistic expressions is fundamental. Finally, as a cognitive tool, metaphor may function as a significant motivational factor for semantic change, including the development of discipline-specific terminology.

As has been discussed in the previous passages, a significant part of the metaphorically-induced lexis consists of specialist terms and professional jargon. Specialist discourse and language for specific purposes are areas which abound in metaphorical terminology. Some metaphor research has been carried out focussing on terminological metaphors.

One such study analysed metaphorical terminology in the field of economics from a cross-linguistic perspective (Silaški & Kilyeni 2011). The research focussed on LIQUID metaphors in English, Serbian and Romanian to examine if the MONEY IS A LIQUID metaphor permeates economic terminology in all three languages. Based on data retrieved from specialist dictionaries and

glossaries, the researchers investigated how terms resting on MONEY IS A LIQUID metaphor were translated into Serbian and Romanian. The study confirmed the hypothesis that liquidity metaphor is to a large extent shared by the three languages (Silaški & Kilyeni 2011: 70) to structure the target domains of MONEY and FINANCE. Interestingly, however, the study also found that in translating conventionalised, “theory laden” metaphors from English, LIQUID metaphors were retained in Serbian and Romanian, whereas some of the more recent terms relying on the same metaphor were translated non-metaphorically (ibid.).

To proceed with the discussion of the role of metaphor in terminology, an illuminating study was carried out by Ureña and Faber (2010) who investigated the terminology of marine biology focussing on resemblance metaphors and discovered that that the terms of marine biology predominantly rely on two types of metaphors, namely image metaphors and as behaviour-based metaphors (Ureña and Faber 2010: 142). In the case of image metaphors, the most significant factor in the metaphorical motivation of terminological metaphors is the resemblance of the shape between the target and the source (e.g. *seahorse*), in other cases the colour may be the crucial factor (e.g. *milkfish*), sometimes, however, both colour and shape are at play in motivating metaphoricity (e.g. *sea lettuce*). In all these cases the metaphors are based on visual perception (Ureña and Faber 2010: 126).

In contrast to image metaphors, other marine biology terms are based on the so-called behaviour models. For instance, the metaphorical term *hermitcrab* is based not on the visual resemblance between a crab and a hermit, but rather on the resemblance between the behaviour of hermits and that of crabs. The scholars demonstrate that the most pertinent features giving rise to metaphorical development of terminology are the shape, colour and behaviour of the source domains which are attributed to the target domains. These metaphors are based on resemblances which activate easily retrievable mental imagery in juxtaposing the target and the source domains (Ureña and Faber 2010: 133). As can be seen from the above description, this study shows that

the metaphorical terminology of marine biology is predominantly imagery-evocative, whereas the dominant general metaphor governing the discipline is a SEA ANIMAL IS A LAND ANIMAL (ibid.).

Legal terminology has been tackled from the perspective of metaphors in English recently (Kucheruk 2015). In her corpus-based study, the author concentrates on the key source domains which structure the specialist domain of law. The analysis shows that English legal language is predominantly shaped by the source domains of WAR, MEDICINE, SPORT, and CONSTRUCTION. The analysis is based on a preselected list of 20 lexemes that instantiate each of the pre-determined semantic fields, i.e. the source domains presented above (Kucheruk 2015: 184ff). The researcher demonstrates that WAR metaphors are constituted of both military vocabulary as well as lexemes related to martial activities of physical struggle: *courtroom battles, statutes have been attacked in state courts, to fight the “war” on corporate crime, plaintiff armed with funds and evidence, the bill was defeated, victory achieved in securing ratification of the Constitution*, etc. (Kucheruk 2015: 223ff). As for SPORTS metaphors, they are linguistically realised in English via the following expressions: *to win the case, to win acquittal in criminal proceedings, speed their way to federal court, to team with other branches of government, defendants bid for the price, courts may be skating on thin ice*, (Kucheruk 2015: 235ff).

Another large grouping of metaphorical expressions involves expressions based on the source domain of MEDICINE, e.g. *to infect a trial with errors, appellate court is fractured, judges regularly inject new legal issues, cure for judicial overreaching, healthy decision making process, constitutional injury, to injure public rights, symptom of an overworked or overburdened court* (Kucheruk 2015: 245ff). Finally, typical cases of CONSTRUCTION metaphors rely on such lexis as *build, construct, repair, paint, decorate, building, wall, window: to repair family law, construct and resolve legal and factual issues in the case, architecture of the constitution, legal foundation for parental rights, open the door to the admission of evidence* (Kucheruk 2015: 252ff).

From the quantitative point of view, the most numerously represented class was the WAR source domain, represented by 419 metaphorical expressions

thereby constituting 43 percent of all attested metaphors, followed by SPORTS (270 metaphorical expressions, 27 percent of all metaphorical expressions), MEDICINE (139 expressions, i.e. 15 percent of the overall number of metaphors), whereas the representative was the CONSTRUCTION source domain. What this study reveals, is the recurrent use of metaphorical language which has confirmed the author's hypothesis that the preselected source domains frequently shape the conceptualisation of legal matters. However, the method of analysis chosen for this study has a number of limitations.

First, since the analysis was carried out on the basis of a preselected list of metaphors representing the predetermined source domains (which the author calls "semantic fields:"), by revealing that these source domains commonly recur in legal texts, the study at the same time conceals other pervasive patterns of metaphoricity such as reification, personification or other metaphorical models commonly found in legal discourse. Secondly, some examples in this study seem to be related to the conceptualisation of not only law but also politics / business and other matters which makes the metaphors identified less representative of the legal discourse per se. A much more systematic approach to extracting metaphors related to law (even more so – "legal terminology", which is the title of the dissertation) would require an analyst to only tackle metaphors which contain law-related lexis to avoid ambiguity or overlap with other target domains such as politics or business. This has been highlighted by proponents of MPA (Stefanowitsch 2004, 2006). A more comprehensive study could incorporate the principles of the MPA to better account for metaphors which are prevalent in legal conceptualisation, as supported by statistical evidence of most numerous represented lexemes metaphorically used in combination with law-related target domain lexemes.

As has been demonstrated in this section, the role of metaphor in giving rise to new meanings in science and language for specific purposes cannot be underestimated. When metaphorical expressions are accepted by a discourse community, such metaphors become terms, over time they become lexicalised and therefore become conventionalised terms the metaphoricity of which is

hardly recognisable, especially by the members of the scientific discourse community.

2.6. Metaphor in legal discourse

In comparison to other public spheres such as politics, business, and science, metaphor studies in the field of law have not been as prolific. Possibly, the legal discourse has been tackled by metaphor researchers with less enthusiasm due to the specificity of the language of the law such as its extraordinarily long and complex structures, specificity of its jargon and other linguistic characteristics that make scholars refer to this type of language “bizarre and inaccessible” (Maley 1994: 14), “wordy”, “unclear”, “pompous” and “dull” (Melinkoff 1963: 24; cf. Butt & Castle 2001: 120) and even ridicule the legalese (Asprey 2003: 59; Trosborg 1997: 30). Some of these features are a myth (cf. Tiersma 2006) while others are a reality; however, what is clear is that legal reasoning and legal discourse deserve more attention from metaphor researchers.

The call for more attention on the metaphorical nature of legal conceptualisation has been acknowledged by some scholars and recent decades have been characterised by a growth in the interest of the language of the law in terms of figurative language. This chapter aims at providing a review of the most relevant and recent research into metaphor in law and its language and to set the background for the present thesis in order to have the context against which the results of the dissertation will be compared and discussed in the wider context of other similar research. By no means does it have the ambition to review all of the extensive work but rather to give an overview of the most important contributions in revealing the significant role and emergent patterns of metaphor in legal discourse reporting work by both legal scholars and linguists.

2.6.1. Rhetorical / communicative function of metaphor in law

Although legal discourse might seem to have enjoyed less attention from researchers in contemporary metaphor studies, rhetoricians and legal scholars have always acknowledged the significance of metaphor in the field of law,

especially in the practice of oral and written argumentation. The crucial role of metaphor in law has always been acknowledged since “the law is a profession of words” (Melinkoff 1963: vii; cf. Tiersma 1999: 1). Law, legal discourse and especially the use of language in courtroom are closely linked with the rhetorical function of metaphor and its usage for the purposes of persuasion. Judicial decision-making is always based on a combination of facts presented in the court as well as a narrative and story which presents those facts, therefore there is always an interplay between objective facts and subjective presentation of those facts. In Berger’s words, “metaphor [...] is most necessary and effective at [the] turning points in the law” (Berger 2002: 30).

Classical rhetoricians studied a lot of tools used in writing and speech that make legal arguments more persuasive. Metaphor was one such trope that had significant impact on the persuasive power of an argument and added to the general eloquence of the speaker or writer. Metaphor, according to rhetoric scholars, has been given special attention in legal contexts both in ancient times as well as modern legal education and practices (Berger 2004, 2007, 2009, 2013; Koženiauskienė 2005, 2009a, 2009b; Smith 2006, 2007; Trosborg 1997, *inter alia*). The “traditional” account of metaphor as a figure of speech the use of which requires special skills and metaphor needs to have a strong cognitive force and effect on the part of the audience still applies in the special use of language by lawyers in order to convince the judge or the jury to accept an imposed perspective. Such treatment of metaphor has been present since ancient times since especially then lawyers were educated and trained as a profession where rhetorical skill is one of the key requirements for lawyers since words are their “tools of trade”.

In addition to the persuasive potential of metaphor in presenting arguments in court to the jury and the judge, another area where it may serve an important function is when courts decide that the law needs to be changed (applicable mostly in the common law systems that are dominant in the USA, UK and other systems based on the English model). Berger argues that in such turning points in the law when it is necessary to show that what used to be good or true

or just no longer applies, judgements may be persuasive and make use of metaphor which, according to the scholar is “a critical component of the judge’s linguistic toolbox” and is able to “mould the future development of jurisprudence” (Berger 2002: 31). Because in the common law system judicial decisions are based on the past rulings and the judicial decisions rely on precedents, judges always have certain persuasive tasks such as convincing their readership that the system has operated properly, that the law applied has been legitimate, and that the court’s ruling has been just (Berger 2002: 32). This is one area where judges need to resort to some rhetorical means for the purposes of persuading the readers that their decisions have been fair and followed the relevant rule(s) of law. An additional persuasive task that judges are faced with are “when the court decides that the law should change or be reconceptualized” (ibid.).

The rhetorical function of metaphor in law based on the Lithuanian language has most extensively been researched by Koženiauskienė who has carried out a few studies focusing on the rhetorical use of metaphor by Lithuanian attorneys. In one of her studies (Koženiauskienė 2005) the researcher investigates the ethical aspect that lawyers’ use of metaphors may reveal. The scholar aims to demonstrate that not only do conceptual metaphors reflect certain aspects of the information provided by attorneys but they also provide insights into certain aspects of their personality such as experience, ethical values, and attitude towards criminal issues. Her study reveals that the most prominent source domains in metaphors used by Lithuanian attorneys in trials are WAR and FIGHT, ILLNESS and NATURAL FORCES, more specifically those that include the element of water. WAR metaphors are characteristic in explicating a complex and debatable phenomena, while HEALTH and ILLNESS metaphors tend to convey a negative evaluation of target concepts being dealt with (which are usually crimes and criminal activity). Finally, the group of NATURAL FORCES of water are closely linked to ILLNESS metaphors because they are also inclined to express negative evaluation and connotations that emerge from such notions as sinking, drowning, flood, and quagmire and they are used in structuring the target-domain notions of alcohol and substance use, libel,

gossip and other negative concepts. According to the scholar, one of the most prominent features of metaphor used by attorneys is their tendency to express a particularly negative evaluation of crime-related activities. Such metaphors tend to serve the function of creating a sharp contrast between the notions of good and evil, between justice and falsehood as well as the image of fight between light and darkness. Since these notions are based on the principle of contrast, they have the function of psychological argumentation. The scholar concludes that conceptual metaphors in this type of discourse reflect a certain image of the crime and its evaluation by attorneys and, presumably, by whole society and, in addition, they also reflect attorneys' norms of ethics which are often used to appeal to judges' reason and serve as the main means of argumentation in court.

By way of concluding this section, it is fair to state that the focus on the rhetorical function of metaphor, though sometimes is considered to be "traditional" in the sense of being used for rhetorical, persuasive, decorative purposes, in fact does not repudiate its role as a cognitive faculty. On the contrary, many scholars who discuss metaphor as an important rhetorical tool, at the same time acknowledge the conventionality and conceptual status of metaphor as a constitutive part of both language and thought in general, and the law, legal reasoning and legal argumentation, in particular.

2.6.2. Cognitive function of metaphor in law

A surprising fact to encounter when researching metaphor in legal discourse is that more research articles and volumes on the ubiquity of metaphor both as a tool used for rhetorical purposes and as a pervasive conventional cognitive element of legal reasoning have been produced by lawyers and legal scholars than by linguists (Dyer 2010; Winter 2001/2003, 2008). The pervasiveness of metaphor in the legal language and thought has been noted by legal scholars and philosophers early enough and has been the focus of many studies. One of the most prominent legal scholars that recognised the importance of the findings of cognitive linguistics for the field of law is an American law expert, legal scholar and educator Steven L. Winter. Among numerous other articles

and book chapters (1989, 2007, 2008), his volume *A Clearing in the Forest: Law, Life and Mind* (2001/2003) is the first one that systematically assesses and shows the importance of the most recent findings in cognitive linguistics for law and legal theory. The aim of this section is to present the cognitive linguistic theory of law that Winter introduced in this pioneering book.

The point of departure for Winter to discuss the implications that recent findings in cognitive science have for better picture of the law, legal practice, legal theory and the language of the law are two general conclusions in the cognitive theory, namely, that “imagination is central to the cognitive process” and that “imagination is embodied” (Winter 2001/2003: xi). According to him the implications of the pivotal role of embodied imagination which work in all aspects of cognition, language, and thought cannot be underestimated and, in fact are particularly momentous (ibid.). Winter starts the discussion on the role of metaphor in law and the need to transform some of still common misconceptions about its function and character by citing influential legal theorists and philosophers who treated metaphor as an unnecessary and even perilous figure of speech which should be largely avoided by lawyers since they are merely clichés. Winter introduces the famous statement by Benjamin Cardozo that embodies a very common belief among lawyers and legal scholars about figurative language “[m]etaphors in law are to be narrowly watched, for though starting as devices to liberate thought, they end often by enslaving it” (Cardozo, cited in Winter 2001/2003: 2). Winter goes on to claim that for most lawyers metaphors, which they often consider nothing more than clichés, are just a matter of expression that may be useful to fulfil rhetorical purposes but are unnecessary to reasoning. Such views, according to the scholar, have been prevalent not only among legal scholars but also many prominent philosophers since they believe metaphors are lacking in semantic content.

By dispelling common myths which surround the conception of law, such as a common image as an objective, impartial and rational domain, Winter introduces a totally different perspective which shows that like any other

human activity, law and its conceptualisation are subject to the general human cognitive processes. He maintains that

though we conceptualize it as an authority that rules over us, we will find that law is but one consequence of more pervasive cultural processes of meaning-making. And this insight will bring us face-to-face with the conclusion that what actually stands behind the majestic curtain of Law's rationality and impartiality is nothing other than ourselves and our own, often unruly social practices (Winter 2001/2003: xiv).

In addition, arguing against the earlier views the legal scholar shows that even the most conventional metaphors are in fact “rich in conceptual content, nonarbitrary in meaning, complex in structure, and systematic in operation” (ibid.: 2).

In arguing for the ubiquity of metaphor in the legal domain, Winter exemplifies by the most conventional phrases used to talk about law that we can hardly speak about it without metaphorically seeing law as an object which is resulted in descriptions of legal reality and activities: laws are “made”, law can be “broken”, whereas vigilantes “take the law into their hands” (ibid.: 4). Drawing on the works in contemporary cognitive sciences and the conceptual view to language, Winter (ibid.: 5–6) summarizes the key principles on which rests the cognitive view of human rationality by outlining three principle axes that ground this view. First, he shows that *human thought is irreducibly imaginative*¹³ which is to say that cognitive processes are not representational, propositional or computational but rather imaginative, associative and analogical, or, in other words – they are dynamic and adaptive. Second, *imagination is embodied, interactive, and grounded*, which essentially means that our interactions with the physical and social world shape the processes of thought and reasoning and imagination is therefore reliant on the ways in which human bodies operate and interact with the environment. Finally, *imagination operates in a regular, orderly, and systematic fashion*, i.e. the structure of imagination consists of mechanisms such as basic-level categorization, conceptual metaphor, metonymy, image schemas, and radial categories.

¹³ Emphasis in the original.

The above statements derive from cognitive sciences which have shown that human reasoning relies heavily on imaginative, associative and analogical processes since cognition is dynamic and adaptive; in addition, human thought and imagination are experientially grounded by making links with sensory and other bodily, social and cultural processes; and finally, mental operations are systematic and regular since they are subject to basic-level categorization, they rely on conceptual metaphor and metonymy, image-schemas, radial categories, idealised cognitive models, prototype effects, and other cognitive mechanisms and processes (ibid.). These very general claims rest on the findings of the cognitive sciences which have had great impact on the understanding of the mind but also of language and the way it functions which also served as an impetus to develop the conceptual metaphor theory and point at the pervasiveness of metaphor as a human conceptual instrument rather than a merely creative or unusual way of using language for rhetorical or decorative purposes.

According to Winter (2001/2003: 12–21), metaphor is a particularly suitable cognitive tool to illustrate that human rationality is imaginative and embodied as well as grounded and systematic in the way it operates. In order to illustrate how metaphor works in legal reasoning, how it helps make sense of legal phenomena, and how rich metaphors are in their semantic content, Winter draws on two examples found in Robert Bolt's play *A Man for All Seasons* used to speak about the abrogation of the law. One is a very conventional phrase "to break the law", whereas the other is "to cut a great road through the law." Both phrases are used in the sense of abrogation of the constraints of law (Winter 2001/2003: 14); however, as will be shown, they are used to mean different kinds of abrogation. Winter explains that the metaphorically used verb *to break* in the phrase "to break the law" should not be understood as destruction or elimination of the law but rather the breach or transgression of its limits. This can be verified when looking at what other metaphorical notions are and are not used in the same context. According to the scholar, it would be very peculiar to find phrases in the English language in accordance with the breaking as destruction pattern, e.g. such expressions as "to wreck", "to damage", "to

destroy”, “to demolish” or “to obliterate” the law do not sound right and are not used in legal contexts. Thus people cannot speak about “fixing”, “remaking”, “reconstructing”, or “reassembling” the law either. The language which *is* used in the context of the corrective action when law has been broken are phrases like “to re-establish law and order” and “to bring the malefactor to justice” (ibid.). Thus the “breaking” is used in the sense of “breaking out of the boundaries or constraints set by the law” which is supported by the presence of other phrases such as “within the bounds of the law”, “get around the law”, “to be outside the boundaries of the law” “technical loophole” and others (ibid.).

In contrast, the phrase “to cut a great road through the law” is used in a different context and means a different kind of abrogation. In the play *A Man for All Seasons*, the exchange between Sir Thomas More (who is Lord Chancellor and has legal powers) and Roper who is the future son-in-law of Sir Thomas More deals with the question of morality and fidelity to law when one faces evil. Having found out that his assistant, Richard Rich, may be disloyal to him and is likely to betray him, Sir Thomas More is advised by Roper to use his legal power and arrest Rich. Expressing his unconditional trust in the law, Sir Thomas More passionately responds to Roper’s suggestion: “*What would you do? Cut a great road through the law to get after the devil?*” (Bolt, cited in Winter 2001/2003: 1). In this way Sir Thomas More compares the laws to a forest of trees that stand firmly rooted and serve to protect man from devil. He goes on to express his faith in the law by saying that removing laws in the face of the devil would be the same as cutting down the trees in the forest and thus dangerously destroying the protective power of the laws:

Oh? And when the last law was down, and Devil turned round on you – where would you hide, Roper, the laws all being flat? This country’s planted thick with laws from coast to coast – man’s laws, not God’s – and if you cut them down – and you’re just the man to do it – do you really think you could stand upright in the winds that blow then? (ibid.).

In this context, the metaphor of cutting the laws as if they were trees in a forest *does* encompass the concept of destruction. The scholar explains that the conceptual mapping operating here bridges the constraint of the forest with the

restrictions imposed by the law, whereas the notion of cutting down all the trees in the forest is metaphorically mapped onto the overall elimination of those restrictions and therefore the whole metaphor, taking into account the context, is intended to mean the total obliteration of the law¹⁴.

Winter uses these examples to make two important points about metaphors; firstly, to demonstrate how metaphorical mappings determine the patterns of inference and, secondly, that these different metaphors are far from arbitrary in that they are both grounded in human embodied experience (Winter 2001/2003: 15). In relation to the first point, the contextual factors impose what is highlighted by the use of the metaphor of cutting down the road in the forest of trees, i.e. what Roper does by urging of Sir Thomas More to arrest the assistant who is likely to betray him is to use the power that he has as Lord Chancellor to eliminate legal constraints. This exact notion of such elimination of the laws gives rise to the mapping of the source domain of cutting down the trees in the forest that function as protection and shelter. For a man with an unconditional trust in the law this elimination of constraints such course of action is absolutely unacceptable.

The second point that Winter makes drawing on cognitive linguists' work is that both metaphors have an experiential basis and rest on embodied thought. Having obtained considerable "experience" by functioning in and interacting with the physical world, e.g. navigating in space, manipulating objects, experiencing the outer world through senses, etc., people use this experience in making generalised patterns that they apply in drawing analogies between the abstract and the concrete. The most common basic recurrent structures, conventionally called in cognitive linguistics literature *image schemas*, such as BALANCE, PART-WHOLE, OBJECT, CONTAINER, etc., help structure a lot of abstract concepts. In this context, the metaphor of "cutting a great road through

¹⁴ It is interesting to note that the metaphorical portrayal of the law as a tree with its roots firmly and deeply planted, though not a conventional image, highlights very similar aspects as other contemporary conventional metaphorsations, such as law as a construction. From the cross-linguistic point of view, the derivational analysis of the Lithuanian term *įstatymas* ('law, statute') which is based on the verb *(į)statyti* ('to establish, to set up') shows a similar conceptualization of law as a solid structure that is firm and, possibly, also erect.

the law to get after the Devil” is based, according to Winter, on the more general metaphor¹⁵ ACTIONS ARE MOTIONS. The metaphorical mapping bridges the conceptual structure of physical motion with the more abstract social and intellectual actions which means that the relevant elements of physical mobility are transferred to social (in)activity. The highlighted aspects of the source domain in the given example are the experience of blockage, containment, movement through space toward a physical destination as a physical object. They also presuppose the existence of at least a few related metaphors such as CONSTRAINTS ON ACTION ARE CONSTRAINTS ON MOTION, PURPOSES ARE DESTINATIONS, and IMPEDIMENTS TO PURPOSES ARE OBSTACLES TO MOTION (Winter 2001/2003: 16), which are also productive in other legal contexts. For example, there are a lot of linguistic clues of the metaphor ADJUDICATION IS MOVEMENT (ALONG A PATH) in English, which are linguistically realised in the following legal phrases: *judicial proceedings, a motion, to carry the burden of proof, to forgo the procedural right*, etc. (ibid.: 17).

To sum up, Winter’s example of the “forest of constraint” metaphor reveals at least four significant aspects of how metaphor functions in reasoning in law and generally. First, it demonstrates that the grounding of metaphors commonly derives from human basic bodily and socio-cultural experiences; second, metaphors are rich in semantic and conceptual content and are not mere decorations; third, metaphors make up an important part of human cognitive system; and fourth, metaphors are highly conventional, regular and systematic (Winter 2001/2003:18).

Another significant idea that Winter discusses, based on his own observations in reading legal scholarly literature is the power of metaphor and systematicity of metaphorical reasoning to give rise to conceptual creativity, which is in accord with what contemporary metaphor scholars commonly discuss and research, especially in metaphor and scientific reasoning. The scholar provides an example from a writing by legal scholar Duncan Kennedy who employs

¹⁵ Winter calls this a “general metaphor”, though in the cognitive view to metaphor this could be called a primary metaphor (see Grady 1997).

metaphor in explicating his views on the critique of rights by stating that concepts like *rights*

are like organic things that live and die, and this concept is dead. I think. Maybe next month a sprout will suddenly appear in the absolutely dried-out earth in the flowerpot, where you basically just put it down in the cellar thinking it wouldn't even be worth throwing the dirt out. You go down in the cellar, and by God, there's a green sprout. And right analysis once again has got some force and has some meaning for us (Kennedy, cited in Winter 2001/2003: 20).

The scholar relies on a conventional metaphor IDEAS ARE PLANTS, yet employs it in an unusual and creative way to strike attention and make his claim more vivid.

To conclude, the scholarly work and ideas presented in the articles and especially in the landmark volume (2001/2003) have immense impact on the contemporary understanding of the law and how it functions. Like *Metaphors We Live By* in cognitive linguistics, this volume has marked a revolutionary change in the way law is (to be) understood by legal scholars, legal professionals, legal translators and linguists.

The cognitive role of metaphor in law was also discussed by Johnson (2002, 2007). The scholar (2007: 845) emphasised the need to empirically approach the topic of metaphorical legal thought by stating that “cognitive science ought to give us insight into the nature of legal concepts and legal reasoning.” He goes on to suggest that the findings of cognitive sciences have significant implications for legal reasoning which are likely to transform the understanding of the ways law as a product of the human mind functions. He shows that much like any other categorisation and meaning making, legal categories are radial and show prototypicality effects (Johnson 2007: 848–852). For example, the concept of “harm” contains prototypical cases of physical injury to human organism which results in physical dysfunction and / or pain. However, other cases that fall into the category of harm are less prototypical and include emotional and psychological harm, social, economic, legal, or ethical harm (Johnson 2007: 852). Thus most categories have central, i.e. prototypical cases as well as other, more peripheral cases that form the category as a whole, i.e. they are radially-structured and manifest prototype effects.

2.6.3. Current linguistic research on metaphor in legal discourse

Moving on to more specific studies of metaphor in legal discourse based on empirical linguistic data, this section reviews some of the most relevant linguistic studies of metaphors in the language of the law. Hibbits (1994) investigated legal language focusing on two common types of metaphors, namely visual and aural metaphors. The scholar contends that there has been a contemporary shift of American legal culture from visual to aural metaphors. The visual sensory experience is evoked in such conventional legal expressions in English as *to review a court decision*, *to observe the law*, evaluating the claims *in the eye of the law* and many others which rely on the conceptualisation of the law as something one can look at such as a *body* of law, or a *structure*. Another aspect of realising visual metaphor in law occurs by attributing to legal concepts such properties as colour or hue (see also Winter 2001/2003, 2008), which can be illustrated by such expressions as *colour of title*, a *yellow-dog contract*, *to adhere to black letter rules*, etc. Aurally-evocative metaphors, which, according to Hibbits (1994: 229), are more frequently used by legal scholars, judges and practitioners tend to see law as a dialogue, a polyphony or a conversation, treating it as a matter of voice. Hibbits claims that aural metaphors are particularly common among Hispanic, African-American, Jewish, and feminist legal experts whose writings are full of the aurally-evocative metaphorical language used to communicate legal ideas. The cause of the shift from the seeing culture to the hearing culture in American legal contexts, according to the scholar, reflects complex processes of a changing tradition affected by a variety of interrelated factors. The scholar concludes that legal discourse will and should embrace both, aural and visual figurative language in order to transform and develop by inclusion and synergy of metaphors from the entire spectrum of sensory experiences.

Another study discussing the role of metaphor in legal reasoning was carried out by Thibodeau and Boroditsky (2011). Applying experimental methodology (the study was based on five experiments), the scholars explored how metaphors affect the way people conceptualise such complex issues as crime

and how they base their further reasoning on the presupposed metaphors in developing the discourse on those issues. Namely, the researchers chose the highly topical social issue, i.e. crime and in the five experiments in which participants were exposed to short texts describing crime, they tried to detect if metaphorical framing would affect participant's reasoning about crime and its legal and social remedies. According to the researchers, the metaphorical language underlying metaphorical understanding of complex issues such as crime has consequences for the way people conceptualise them. In other words, metaphors in language may function as metaphorical frames in imposing conceptual structures onto those complex issues and making people adopt them in their further conceptualisation about them. In order to better understand the instruments through which metaphors can shape people's understanding and reasoning about crime and its social remedies, Thibodeau and Boroditsky raise the following hypothesis: "If metaphors in language invite conceptual analogies, then different metaphors should bring to mind different structures and suggest different analogical inferences" (ibid.). In their study they empirically investigate if employing different metaphors in developing oral discourse on crime may lead people to take a different direction in reasoning about crime and, as a result of a different metaphorical framing, they are likely to offer different social remedies to the issue. They preselect two metaphors, i.e. crime as a virus and crime as a beast. The question they are concerned with is if the schematic representations of the concepts of a virus and a beast transfer to the reasoning of participants thus making them offer solutions that literal viruses and beasts are dealt with. In other words, when crime is presented as a virus, would people offer to diagnose the key causes and enact a social remedy such as a reform, and will they suggest hunting and jailing criminals and thereby "fighting back" to the crime when it is talked about in terms of a beast. To answer this question, the scholars ran five tests by asking participants to express their opinion on the most effective solutions in dealing with the crime issue. The overall results confirmed that metaphors that participants were exposed to in linguistic descriptions of crime affected the way participants responded in providing different solutions to crime. The study is particularly

interesting and important since it points at the fact that metaphors affect the way we reason about such issues as crime as well as might frame our perception of those issues.

In a follow-up study (Thibodeau & Boroditsky 2013), instead of asking participants to provide a solution to crime problem, the scholars asked people to choose what they thought was the best solution from a list of possible options. The study revealed that people's reasoning was affected by the metaphorical frames offered even if they had a choice of different options to compare and select from. In addition, the researchers looked at whether the participants of the study were aware of the metaphor and found that very few of them actually thought the metaphor was important in making their choice. The study also revealed that both, participants who had explicit memory and those who did not have it were equally affected by the metaphor, which shows that metaphorical frame can function in reasoning covertly. Finally, the study attempted to see if political affiliation had any effect on the way crime was conceptualised and the solutions selected in targeting crime. Like in other similar studies, the experiment also confirmed that contrary to Democrats and Independents who are affected by metaphor, Republicans tended to suggest law enforcement and punishment as a solution to crime and to be less affected by the suggested metaphorical frame. What these experimental studies show is that people are affected by metaphors when reasoning about complex issues in subtle and covert ways without their awareness of such influence.

Not many scholars have looked at spoken legal discourse. An interesting study was recently conducted by Šeškauskienė and Stepančuk (2014) who investigated metaphors that are constitutive of spoken legal discourse. They analysed patterns of metaphoricity detected in the use of language in courtroom based on transcripts of three arguments of criminal cases in the Supreme Court of the United States. Based on the theoretical claims made by Winter (2008) and the most recent studies of metaphor that have revealed variation in the patterning of metaphors across disciplines and discourses, the researchers hypothesise that the most productive ways of metaphorisation in the spoken

legal discourse are likely to be objectification and personification. The study employed metaphor identification developed by Pragglejaz Group (2007) and extended by Steen et al. (2010b) as well as the principles of metaphorical pattern analysis introduced by Stefanowitsch (2004), whereas CMT served as a general theoretical framework to interpret and discuss the obtained results. The results of the study gave clear evidence confirming the researchers' hypothesis, specifically, the most prevalent metaphorical patterns recognised were law is a person and law is an object (Šeškauskienė & Stepančuk 2014: 107). In comparison to the two prevalent patterns in metaphorically structuring legal notions, the articles contained a significantly lower number of other metaphors drawing on the source domains of PERFORMANCE, HEALTH AND ILLNESS, and others which accounted for only 5 percent of the overall results (Šeškauskienė & Stepančuk 2014: 115). The two dominant primary metaphors subsumed a lot of lower-level categories such as LAW IS A CONSTRUCTION, LAW IS A CONTAINER and others, whereas the personification gave rise to such metaphors as LAW IS A TEACHER, LAW IS COMPETITION, LAW IS A PERSON ON A JOURNEY. The findings of this research are highly consistent with a growing body of empirical work that has revealed the tendency of the legal discourse to be reliant on reification and personification (Hibbitts 1994; Urbonaitė 2015a; Winter 2001/2003).

Metaphorical conceptualisation of the law has been analysed drawing on the linguistic data of some oriental languages, such as Chinese. By applying a combination of theoretical frameworks (CMT, Critical Discourse Analysis and corpus linguistics) Chiu and Chiang (2011) examined FIGHT metaphors in Taiwan legislative documents and judgements. One of the key metaphors identified in their data is LITIGATION IS A FIGHT which, as they demonstrate, has become such common in judiciary judgements as a result of the amendment of the legal statute which was dense with the metaphorical expressions referring to battle, aggression and violence. The study is particularly interesting for disclosing the ways FIGHT metaphors in a legislative text can influence and change the conceptualisation of litigation and further development of this specific discourse by litigants and legal practitioners. The

researchers therefore suggest metaphors governing a legislative document or its amendment may in fact affect the legal culture and therefore they should be reconsidered carefully in oral and written language used by legal professionals. From the methodological point of view, the study was carried adopting corpus-based methodology, namely by pre-selecting 15 lexemes that linguistically realise the source domain of fight and checking for the occurrence of each of them in the total corpus (Chiu & Chiang 2011: 886–888). While the methodology is absolutely valid and suits the purpose of the study, the limitation of analysing metaphors by a limited number of lexemes realising the source domain of FIGHT precludes disclosing a full range of lexis instantiating the source domain in question which can be achieved by applying a different methodological approach.

Cross-linguistic studies on metaphor in legal discourse have also been rather limited; however, several are worth reviewing. A contrastive research into the metaphorical and metonymic language use manifest in legislative documents was carried out by Imamović (2013). She carried out an analysis of metonymies and metaphors in legislative texts (Higher Education Acts) from Bosnia and Herzegovina, the UK and the US. Based on a framework of contrastive metaphor studies, the researcher establishes the following categories of metaphors and metonymies used in the analysed higher education documents: a) those metaphors and metonymies that are shared by all three legislative systems in their conceptual mappings and linguistic expression; b) those metaphors and metonymies that are shared but have different linguistic manifestation; c) the source and the target domains of metaphors are the same but the elaboration and specification are different; d) existence of metaphor and metonymy identified in one language absent in another language.

The results of the study by Imamović (2013: 298) show that the most productive metaphors in all higher education legal acts make use of the source domain of a CONTAINER which is most pervasive in shaping the conceptualisation of the target domain of a LEGAL DOCUMENT, alongside other target domains which are not related to the law. In addition, all legislative

documents contained metaphorical expressions that are motivated by the source domain of an OBJECT which can be possessed, held, acquired, provided, transferred or otherwise manipulated (Imamović 2013: 299). A more specific object the properties of which are often mapped onto the target domain of a legal system is PHYSICAL STRUCTURE (ibid.). In addition, a shared metaphor identified in all three sets of legislative documents was LEGAL DOCUMENT IS AN INSTRUMENT (Imamović 2013: 301); however, its linguistic expression was different in English and Bosnian, Croatian and Serbian (the three official languages of Bosnia and Herzegovina). While in English INSTRUMENT metaphors were signalled by lexeme *instrument*, in the higher education acts from Bosnia and Herzegovina, the metaphors were expressed via the instrumental case, i.e. a grammatical category. It is interesting to note that by treating the grammatical case as a means of linguistic signalling of metaphorical meaning, the author suggests that grammatical cases should not be overlooked in metaphor analysis, which is a particularly relevant aspect of metaphor expression and identification. It is a pity, however, that the author does not explicate on the procedure of metaphor identification in her study and it remains unclear if other grammatical cases did not show a potential to express metaphorical meaning or they were simply not observed in metaphor identification procedure. Despite the fact that the analysis lacks precision regarding rigorous metaphor identification procedure, interpreting the Instrumental case as a category which expressed metaphorical meaning should be noted and taken further for suggesting that examining both lexical and grammatical means of expression in metaphor analysis is a significant methodological issue in metaphor analysis.

Other shared metaphors identified by Imamović are CONTROL IS UP and LACK OF CONTROL IS DOWN whereby acts legal documents are seen as being above and therefore in control (Imamović 2013: 303), whereas in the data from Bosnia and Herzegovina, the circumstances and terms and conditions are above, i.e. in control. Finally, the maximum contrast in the conceptualisation between the two datasets occurs in the use of metonymy face for person which was only identified in the legislation of Bosnia and Herzegovina. The English-

only metonymies found in the data were CROWN FOR THE MONARCH, MONARCH FOR THE INSTITUTION, and STATE FOR STATE AUTHORITY (Imamović 2013: 304). All in all, the study concludes that when classed at the generic level, metaphors in different cultural, linguistic and legal communities tend to show greater similarity, whereas the most prominent and interesting cross-linguistic differences can be observed by looking into more specific metaphors and their linguistic manifestation.

Research into metaphor in legal discourse in Lithuanian have been surprisingly limited. One such cross-linguistic analysis of metaphor in the legal sphere that draw on Lithuanian data is a study by Gražytė and Maskaliūnienė (2009) who focused on metaphor translation in the White Papers of the EU. First, the researchers establish a group of conceptual metaphors prevalent in the White Papers, namely, DEALING WITH A PROBLEM IS WAR, A PROBLEM IS AN ENEMY, A PROBLEM IS A BARRIER, ORGANISATION IS AN ACTOR, A FIELD OF ACTIVITY IS A STAGE, A SYSTEM IS A MACHINE, A SYSTEM IS A STRUCTURE / BUILDING, RESPONSIBILITY IS A BURDEN, A PRINCIPLE IS A ROAD SIGN, PROGRESS IS MOTION FORWARD, ACTION IS A PLANT. Next, the analysts focus on the translation of metaphorical expressions into Lithuanian and discover that numerous metaphors are preserved in the translated texts; however, their linguistic expression is sometimes different or displays different lexicogrammatical patterns. For example, while WAR metaphors are translated into Lithuanian by preserving the same source domain, the lexical variation of this metaphor is greater in English as compared to Lithuanian (Gražytė & Maskaliūnienė 2009: 74). Similarly, White Papers in English show richer lexical diversity of the problem is a barrier metaphor as compared to Lithuanian (Gražytė & Maskaliūnienė 2009: 77). In some cases of translating metaphorical expressions, the source domain is different from the original, e.g. where English documents encode a conceptual metaphor action is a plant, the Lithuanian translations are a realisation of a metaphor actions are buildings / physical structures (Gražytė & Maskaliūnienė 2009: 83). All in all, the small-scale study concludes that, first, metaphor is a characteristic feature of the EU White Papers which contain diverse conceptual mappings and, second, that in

the process of translating legal texts metaphors are often preserved by most often evoking the same source domains or, sometimes giving preference to a different conceptualisation and / or different lexico-grammatical means realising metaphor in language. Although the study is slightly lacking in explicit methodological procedures of metaphor identification and interpretation, this is one of the few attempts in filling the gap of studies into metaphoricity of legal language in Lithuanian.

Among the most recent works on metaphor in Lithuanian legal discourse is the analysis of two specific concepts, namely *slenkstis* ‘threshold’ and *lubos* ‘ceiling’, which are metaphorically used by legal experts in research articles with reference to legal concepts of limits and limitations (Gedzevičienė 2015). The main focus of the study is the controversy surrounding the evaluation of the use of these lexemes in the language of the law from the point of view of standardization. It is interesting to learn that while both concepts have been adopted by the discourse community of legal experts as a result of transfer from foreign languages, the metaphorical sense of ‘threshold’ is considered correct, whereas ‘ceiling’ remains to be treated as a semantic calque from the normative point of view (Gedzevičienė 2015: 108).

2.6.4. Prominent source domains structuring legal discourse

The review of a growing body of literature on metaphor in law points at the fact that some metaphorical patterns in legal discourse seem to be more pervasive than others. This section provides a brief overview of the most commonly encountered metaphors in different domains and different law-related naturally occurring language. A vast number of studies have revealed that two of the most ubiquitous metaphorical processes that are at the heart of conceptualising abstract phenomena in a variety of spheres from political issues to wine speak and musicology discourse are the objectification/reification and personification. This also holds true in the legal domain in which numerous abstract concepts such as rights, duties, punishments are seen as objects and legal institutions, documents and their parts are commonly treated as if they were human beings (Anesa 2012; Arms 1999; Berger 2004, 2007; Chiu &

Chiang 2011; Ebbesson 2008; Heffer 2005; Hibbitts 1994; Imamović 2013; Johnson 2002, 2007; Larsson 2011, 2013; Loughlan 2006; Makela 2011; Maley 1994; Mark 2006; Morra et al., 2006; Šeškauskienė & Stepančuk 2014; Twardzisz 2013a, 2013b; Urbonaitė 2015a; Winter 2001/2003, 2007). Therefore we can speak of *giving* or *obtaining* evidence, *breaking* the law, *laying down* the laws, *having* or *giving* rights, *looking* at convictions, speaking about the *weight* of evidence, a *degree* of murder or severity, *receiving* a death sentence, *constructing* laws, imposing penalties *under* the law, whereby the source domain of an OBJECT lends structure to all the more-or-less abstract legal domains, the primary metaphor of a PERSON gives rise to conventional conceptualisations of companies as persons and, based on this metaphor, jurisdictions can *prohibit* something or *protect* people from potential dangers, a statute can *tell* something, Courts can *interpret* something, etc. Definitely, the two primary metaphors that are central in conceptualising legal issues subsume diverse lower-level metaphors the analysis of which reveals greater richness of metaphorical patterns and diverse forms of linguistic expression as well as cross-linguistic, cross-cultural and cross-legal and other characteristics.

The OBJECT metaphor in the legal domain tends to rely on certain aspects that are more salient than others. As most physical objects can be seen and have dimensions of size and weight as well as qualities (bulkiness, roughness or softness, etc.), such aspects of the source domain of an object are commonly foregrounded in the metaphorical conceptualisation of legal matters via the object source domain. Interestingly, the aspect of visibility is particularly prominent in the discourse of law (a few examples are common legal expressions such as “to *observe* the law”, “judicial *review*”, “*bright-line* distinctions”, “*penumbras* of authority”, etc. (see Hibbitts 1994). The findings of the study carried out by Šeškauskienė and Stepančuk (2014) who also examined metaphors in American legal discourse, have disclosed very similar tendencies. In addition, some researchers also reveal that a closer look at the language of the law over a period of time may disclose the change in tendencies of the metaphorical reasoning in law and how legal cultures may shift in the prevalence of metaphors to structure the discourse. In this context, Hibbitts

(1994) demonstrates that American legal discourse has been reconfigured by the apparent shift from the dominant visually-evocative metaphorical conceptualisation towards more prominence of aurally-evocative metaphors and other figures of speech in shaping and representing law and legal practices, for example, making use of the source domains of a dialogue, a conversation and polyphony (ibid.).

Interestingly, the most pervasive metaphors that govern the way we understand legal reality may be so powerful as to affect that legal reality and ignite discussions of the validity of certain legal treatment. One such example is the personification of corporations which has been so ubiquitous in the law that it has gained a legal term – a *legal person* (as compared to a *natural person*). However, the effect of this metaphorical structuring of conceptualising corporations and other institutions in terms of persons has resulted in corporations' request to enjoy rights that natural persons may be granted. Personification of legal entities has also been criticised by numerous legal scholars and practitioners. For example, legal realist Felix Cohen (cited in Winter 2007: 871), disapproves of such a metaphor claiming that more than anything else, it creates problems and afflict formalist legal reasoning. Consider the following excerpt from Winter's book (ibid.):

Nobody has ever seen a corporation. What right have we to believe in corporations if we don't believe in angels? To be sure some of us have seen corporate funds, corporate transactions, etc. (just as some of us have seen angelic deeds, angelic countenances, etc.). But this does not give us the right to hypostatize, to "thingify," the corporation, and to assume that it travels about from State to State as mortal men travel.

Although legal scholars and practitioners may have inclinations towards acceptance or refusal of certain ways of seeing legal matters, personifying non-human legal matters has always been part of legal reasoning, argumentation and part of legal language.

In summary, the reviewed works are highly illuminating in revealing the different ways metaphor functions in legal thought and language that provide valuable insights into the intricate ways metaphor may serve a variety of functions such as persuasion, conceptualisation, explication, etc. On the other

hand, from the point of view of applied linguistics, not many contributions in the field, especially from legal scholars have drawn on extensive linguistic data to account for the most pervasive linguistic and conceptual metaphorical patternning but rather focussed on providing theoretical accounts based on introspection and their (as legal experts') observation of how metaphorical their linguistic repository is and propose implications of what impact legal metaphors may have.

A brief overview of research into metaphoricity of legal discourse shows that numerous scholars have paid attention to the role and functions of metaphor in legal discourse. They have approached the topic from a variety of disciplines, adopting different methodologies and drawing on data from an array of languages. Metaphors in legal discourse in Lithuanian, on the other hand, have been investigated very scarcely with just a few contributions into the field. This dissertation aims to fill this gap by contributing an extensive and systematic cross-linguistic study of metaphor in specialist legal discourse in English and Lithuanian drawing on linguistic data from a specific genre (research articles) on criminal law, criminal justice and criminology.

3. Data and research methodology

As indicated in earlier sections of the dissertation, the goal of this dissertation was to analyse metaphor in academic legal discourse in English and Lithuanian drawing on representative corpora of research articles on criminal law, criminal justice, and criminology using several methodological tools for metaphor extraction, identification, and interpretation. This chapter describes the procedural steps taken in data collection, building specialised corpora, principles of metaphor identification, reconstruction of metaphors from linguistic expressions identified in the data and the theoretical framework in which the analysis of metaphors was carried out. The analysis of metaphors was carried out within the contemporary cognitive trend of metaphor research presented in Chapter 2, the results are discussed in the light of relevant prior research into metaphor. Cross-linguistic features of metaphors were observed applying the contrastive method of research.

3.1. Data collection and corpus composition

To analyse metaphors in written academic legal discourse in English and Lithuanian, the study is carried out drawing on authentic empirical data, i.e. research articles on criminal justice, criminal law, and criminology. Table 1 below provides more specific details about the corpora compiled for the present study.

Table 1. Composition of corpora compiled for this study

Journal	Time span	No. of articles	No. of individual authors	No. of words
<i>Criminology and Criminal Justice</i>	2013–2014	25	129	198,682
<i>Journal of Criminal Justice</i>	2014–2015	25		183,212
Total in English	3 years	50		381,894
<i>Teisė</i> ('Law')	2010–2014	23	52	111,941
<i>Teisės problemos</i> ('Legal Issues')	2010–2014	23		160,152
<i>Jurisprudencija</i> ('Jurisprudence')	2011–2014	24		111,424
Total in Lithuanian	5 years	70		383,517

The main criterion of selecting research articles for this study has been the discipline or topic, i.e. all research articles deal with the issues of criminal law, criminology and criminal justice. The corpus consists of 50 research articles in

English and 70 in Lithuanian, which constitute roughly the same number of words, respectively. To meet the criterion of sufficient quality of research articles, they were collected from peer-reviewed journals. The English research articles were collected from two international journals, namely, *Criminology and Criminal Justice* (published by Sage journals) and *Journal of Criminal Justice* (published by Elsevier). Both journals cover a wide scope of research in the areas of criminology, criminal law and criminal justice. Research articles in Lithuanian were collected from three journals, namely, *Teisė* ('Law') published by Vilnius University, *Jurisprudencija* ('Jurisprudence') published by Mykolas Romeris University and *Teisės problemos* ('Legal Issues') published by the Law Institute of Lithuania. The decision to collect Lithuanian research articles from three rather than two journals was determined by the fact that numerous research articles in the field of criminal law and criminology in Lithuanian are written by the same authors. Collecting research articles from more journals in Lithuanian ensured greater variety of authors and thus minimized the effect of author-dependent factors emerging in the finalised corpus.

Since Lithuanian scientific journals cover research articles that are on a wide range of legal issues from different branches of law, the selection of research articles was manual, i.e. only research articles dealing with criminal law and criminology were included into the Lithuanian corpus. The English journals, on the other hand, only dealt with criminology, criminal justice and related matters, the selection of research articles for the English corpus was therefore random, except for one criterion, namely, the native language of the authors which had to be English in order to only select research articles written by native speakers of English. This may be quite a challenging task due to the fact that international peer-reviewed journals publish research articles in English written by both native and non-native speakers. Notwithstanding the fact that all research articles published in *Criminology and Criminal Justice* and *Journal of Criminal Justice* adhere to the requirements of correct academic English language and are professionally edited before publishing, extra efforts were made to check carefully for as much information about the authors of the research articles and their linguistic background and, additionally, their

affiliation countries and include into the corpus those research articles that have most likely been written by native speakers of English¹⁶. As a result, only research articles written by researchers whose academic affiliations are in English-speaking countries were included into the English corpus. Thus the research articles collected from *Journal of Criminology* were written by academics affiliated with institutions in the United States and several are linked with institutions in Canada. The journal *Criminology and Criminal Justice* includes research articles by authors affiliated with institutions in the UK, USA, Australia, Canada, and New Zealand. Since the main aim of the study was to compare metaphors in English and Lithuanian and since the study was not aimed at culturally-induced aspects of metaphors, the geographical language variety in this study was not considered to be a significant factor in selecting research articles for the English corpus¹⁷.

As Table 1 above illustrates, the English corpus comprises research articles dated from 2013 to 2015, whereas the Lithuanian corpus consists of research articles dated from 2010 to 2014. Timespan differences occur due to the fact that scientific journals in English were restricted to research articles on criminology, criminal law, and criminal justice and their coverage of the thematic scope of interest was considerably wider, whereas the Lithuanian journals were not specialised and, inevitably contained a considerably scarcer coverage of research articles on criminal law per issue. As a result, to obtain a corpus of a similar length required a longer coverage period for the Lithuanian material. The corpora compiled for this study are special purpose corpora (Bowker & Pearson 2002: 11–12; Deignan & Semino 2010: 162–163) since they are restricted to the subject field of criminal law, criminology, and criminal justice, to a specific genre (research article) and,

¹⁶ It should be taken into account, however, that in the globalised world it may be difficult to make valid judgements about someone being non-native or native speaker even after accurate check-up of available information related to affiliations and other backgrounds of the authors of articles included into the corpus.

¹⁷ By all means, the topic of metaphoricity across geographical language varieties is worth examining extensively in its own right.

naturally, they represent academic written language (academic written English and Lithuanian).

As far as corpus size is concerned, the two corpora are very similar in length, namely, the English corpus consists of 381,894 words, whereas the Lithuanian corpus of research articles on criminal law, criminology and criminal justice is 383,517 words. Corpus design experts have acknowledged that specialised corpora do not have to be as large as those of language for general purposes. Bowker and Pearson (2002: 48), for instance, maintain that “well-designed corpora that are anywhere from about ten thousand to several hundred of thousands of words in size have proved to be exceptionally useful in LSP studies.” In a similar vein, Deignan (2008b: 282) points out that in order to examine metaphorical language in specialised contexts, small corpora are sufficient in carrying out in-depth analyses of metaphors in their discursal and social contexts. Thus based on the principles of specialised corpus design (Bowker & Pearson 2002; McEnery & Wilson 2001), the size of the corpora of criminal law articles in both languages is sufficient and adequate for the purposes of this study.

3.2. Data processing

After the research articles were collected from scientific journals, the following steps were taken to process the data. Some Lithuanian research articles were only available in a paper format; therefore, they had to be scanned and converted into Microsoft Word files. This task was carried out using *ABBYY Finereader*¹⁸ followed by manual check-up of the texts. Once all research articles were digitalised into the machine-readable format, their manual revision was performed to delete irrelevant information such as numerical data in the tables, figures, lists of references, summaries or abstracts in a language other than the language of the research article. In addition to removal of irrelevant data from the research articles, numerous formatting issues had to be resolved manually, for example, hyphenation of words at column breaks,

¹⁸ <https://www.abbyy.com/en-apac/>.

deletion of irrelevant text from the original pdf texts such as headers and footers, page numbers, etc.

3.3. Extraction of metaphors from corpora

Motivated by the research goal and relying on a corpus-driven approach (Tognini-Bonelli 2001), it was decided to extract metaphors on the basis of the most frequent law-related lexemes in both corpora. After the corpora were digitalised, processed and cleared of irrelevant information, the next step was extracting target domain lexis using the corpus analysis toolkit *AntConc* (Anthony 2014), which was used to generate word frequency lists of the two corpora. In target domain oriented studies, metaphorical expressions are typically retrieved from concordances of a (set of) nouns signifying the target-domain concepts. Most often the selection of target domain lexemes is made subjectively by the researcher depending on the research aims, yet, for the purposes of this study and keeping the corpus-driven perspective in mind, the focus was the most frequent law-related nouns as they appear in the automatically generated frequency list. Due to extensive material to be covered, the study was limited to the analysis of concordances of twenty law-related nouns as target-domain items in each language in order to extract metaphorical patterns. The twenty lexemes in both corpora were selected according to their frequency, i.e. twenty law-related nouns which were highest in rank were selected as a starting point for metaphor extraction.

However, since both languages presented numerous cases of lexical ambiguity (polysemy and homonymy) and since the texts were not lemmatised or annotated semantically or morphologically, determining the most frequent nouns in the analysis of corpus data was not as straightforward as the above description may suggest, especially in the analysis of Lithuanian language data. As a result, an extensive amount of corpus data had to be analysed manually to discard irrelevant concordances and to determine the frequency of the nouns accurately. The following section describes the steps taken in the manual analysis of corpus data in both English and Lithuanian.

After the automated lists of the most frequent lexis were generated by the *AntConc* toolkit, the concordances of some lexemes required manual checking in order to discard instances of the use of such nouns in non-legal senses. This procedure was performed with such lexemes as *case*, *sentence*, *evidence*, *disorder* in English and *straipsnis* ('article') and *nuostata* ('provision' or 'attitude, belief, stance') in Lithuanian to weed out lines with irrelevant uses that do not realise the legal sense.

In addition, the English word *criminal* was also checked manually to eliminate from the analysis all cases of its use as an adjective. It turned out that the word *criminal* was most frequently used as an adjective in the English corpus, and the word was used as a noun infrequently in comparison to other law-related nouns. Such words as *arrest* and *assault* were also analysed manually to discard all cases of their verbal uses to only leave their nominal uses as target domain lexemes. In both languages, the singular and plural forms of the nouns had to be considered in establishing the frequency of the target-domain lexemes (the concordances of *offender* and *offenders*, *crime* and *crimes*, *įstatymas* ('law, statute') and *įstatymai* ('laws, statutes') with all other case inflections.

Apart from cases of lexical ambiguity, the Lithuanian corpus data called for extensive manual analysis because of numerous cases of grammatical disambiguation, mostly pertaining to coinciding forms of different grammatical cases. Sometimes, both semantic and grammatical ambiguity was fused in a single word. To illustrate, one such case in need of manual analysis was the word *teisė* ('law', 'right'). Since exactly the same word signifies either 'law' or 'right', it was necessary to disambiguate the two legal senses semantically by analysing each line manually and deciding from the context which sense is realised. Secondly, the word form *teisės* may either refer to the genitive case of the lexeme *teisė* ('law') or the nominative plural form of the word *teisė* ('right'). As a result, the concordance lines of all the grammatical cases (both singular and plural) of these words were manually checked and disambiguated. Only then the relevant concordance lines of the nouns signifying two distinct legal meanings in all their grammatical forms were copied to different

spreadsheets of Microsoft Excel to accurately measure their frequency in the Lithuanian corpus.

In addition to case inflections, some nouns designating people in law (victims, offenders, perpetrators) in Lithuanian were marked for grammatical gender which was also taken into account in compiling the lists of concordances of law-related nouns. For instance, concordance lines of both nouns *nukentėjusysis* (victim-NOM.SG.MASC.) and *nukentėjusioji* (victim-NOM.SG.FEM.) with all other grammatical case forms were listed together since in Lithuanian the masculine gender is usually the main form of the word (especially in legal language), which means it is used in texts when the gender is not specified. However, in some articles authors reporting cases which involved female victims used the feminine gender form. To account for all cases of the noun referring to a victim (*nukentėjusysis*, *nukentėjusioji*), both female and male gender forms were included into the list of the concordances. The same applied to the nouns as *nuteistasis* (convict-NOM.SG.MASC.) and *nuteistoji* (convict-NOM.SG.FEM.) and *kaltininkas* (perpetrator-NOM.SG.MASC.) and *kaltininkė* (perpetrator-NOM.SG.FEM. / perpetratoress).

Besides semantic disambiguation of words and manual analysis of certain Lithuanian lexemes the forms of which coincided in different case inflections, there were some more tasks to be performed to make sure accurate lists of frequency were compiled. Namely, some nouns in Lithuanian research articles were used in different forms, for instance a full word form, its shortened version or as an abbreviation. Namely, the noun *teismas* ('court') occurred in the Lithuanian corpus in its full form as well as in some abbreviations such as EŽTT (*Europos žmogaus teisių teismas* in Lithuanian 'The European Court of Human Rights'), LAT (*Lietuvos aukščiausiasis teismas* 'The Supreme Court of Lithuania') and LVAT (*Lietuvos vyriausiosios administracinis teismas* 'The Supreme Administrative Court of Lithuania'). Another noun *straipsnis* ('article') very frequently occurred in a shortened version *str.* which was also included into the frequency list. No cases of shortened versions or nouns appearing in an abbreviation were detected in English and this procedure was relevant to

Lithuanian data only. Finally, in the analysis of English data in some cases it was relevant to check for both British English and American English spelling to make sure all uses of the noun are retrieved from the English corpus. It was relevant in the extraction of all concordances of such words as *offense* and *offence* and *victimization* and *victimisation*.

The final lists of the law-related nouns displayed clear quantitative differences in the English and Lithuanian corpora, respectively. Table 2 below illustrates twenty most frequent law-related nouns and their frequencies in the two corpora.

Table 2. Twenty most frequent law-related nouns and their frequency in the corpora

English lemmas	Freq. (raw)	Freq. (normalised) /1,000 words	Lithuanian lemmas	Freq. (raw)	Freq. (normalised) /1,000 words
<i>CRIME</i>	1,715	4.4	<i>TEISMAS</i> ('court')	2,995	7.8
<i>POLICE</i>	1,540	4.0	<i>STRAIPSNIS</i> ('article')	2,904	7.5
<i>OFFENDER</i>	1,328	3.4	<i>KODEKSAS</i> ('code')	2,723	7.1
<i>OFFICER</i>	877	2.2	<i>VEIKA</i> ('(criminal) act')	2,487	6.4
<i>VICTIM</i>	830	2.1	<i>TEISĖ</i> ('law')	2,040	5.3
<i>CASE</i>	646	1.6	<i>ĮSTATYMAS</i> ('law, statute')	1,941	5.0
<i>VIOLENCE</i>	620	1.6	<i>NUSIKALTIMAS</i> ('crime, offence')	1,647	4.2
<i>JUSTICE</i>	613	1.6	<i>BAUSMĖ</i> ('penalty', 'punishment')	1,482	3.8
<i>OFFENCE</i>	549	1.4	<i>BYLA</i> ('case')	1,443	3.7
<i>ARREST</i>	324	0.8	<i>ATSAKOMYBĖ</i> ('liability, responsibility')	1,205	3.1
<i>PROBATION</i>	322	0.8	<i>TEISĖ</i> ('right')	831	2.1
<i>DRUG</i>	313	0.8	<i>LAISVĖ</i> ('freedom, liberty')	782	2.0
<i>DISORDER</i>	309	0.8	<i>PREVENCIJA</i> ('prevention')	708	1.8
<i>PRISON</i>	308	0.8	<i>NUSIKALSTAMUMAS</i> ('crime (rate)')	707	1.8
<i>ASSAULT</i>	294	0.7	<i>KALTININKAS</i> ('perpetrator, offender')	595	1.5
<i>LAW</i>	282	0.7	<i>NUOSTATA</i> ('provision')	544	1.4
<i>SENTENCE</i>	258	0.6	<i>NUTEISTASIS</i> (-oji) ('convict')	499	1.3
<i>GUN</i>	235	0.6	<i>NUKENTEJUSYSIS</i> (-ioji) ('victim')	414	1.0
<i>VICTIMIZATION</i>	225	0.5	<i>SMURTAS</i> ('violence')	405	1.0
<i>DELINQUENCY</i>	174	0.4	<i>NARKOTIKAI</i> ('drugs')	394	1.0
TOTAL	11,762		TOTAL	26,746	

As can be seen from the table, the overall frequencies were considerably higher in the Lithuanian corpus, which shows that law-related nouns are almost twice as frequent in Lithuanian legal research articles in comparison to English. Such differences had a significant impact on the overall numbers of concordance lines to be analysed for metaphor identification. While metaphorical patterns in English were identified by analysing 11,762 concordance lines in total, the twenty most frequent law-related lexemes in Lithuanian yielded 26,746 concordance lines to be analysed for metaphor identification. Following MPA, all concordance lines were analysed manually in order to examine all possible cases of metaphorical expressions and obtain accurate data about the metaphors related to the concepts designated by the law-related keyword word.

3.4. Metaphor identification and extrapolation of source domains

Metaphorical patterns were identified relying on a combination of the principles of Metaphorical Pattern Analysis (Stefanowitsch 2004, 2006) and the main procedure of the MIP(VU) (Pragglejaz Group 2007; Steen et al. 2010b). This work did not apply MIPVU to identify all metaphorical expressions in context but rather to identify metaphoricity of words surrounding the (law-related) node word through the manual analysis of concordances. As required by the MIPVU protocol, to identify basic meanings of words, analysts are instructed to use contemporary corpus-based dictionaries. In the MIPVU tradition, metaphor analysts working on English language data should consult *Macmillan English Dictionary for Advanced Learners* as a default source. *Longman Dictionary of Contemporary English* is recommended as a secondary source that metaphor researchers may refer to, whereas in cases which may need to consider the historical development of word senses, analysts are also allowed to refer to the *Oxford English Dictionary*. Following the requirements and recommendations of the MIPVU, in the present study the above dictionaries were consulted in identifying word meanings in the analysis of English, whereas the identification of the meanings of Lithuanian words was carried out relying on the *Dictionary of Contemporary Lithuanian* (hereafter, DCL) (DLKŽ_e) as a primary source and on the *Dictionary of the Lithuanian*

Language (hereafter, DLL) (LKŽ_e) as a secondary source consulted in order to search for meanings not found in the DCL.

Identification of metaphor in the analysis of collocations

Since numerous corpus-based studies on metaphoricity have shown that metaphor is often expressed in language via certain combinability patterns, including collocations (see Deignan 2005; Marcinkevičienė 2010; Stefanowitsch 2004, 2006; Šeškauskienė 2011, 2012, Vaičenonienė 2000, inter alia), it may be useful to briefly focus on the relationship between metaphor and collocation and explain how metaphor was identified in the analysis of collocations in this dissertation.

As defined by early corpus linguists (Firth 1957: 194–195; Sinclair 1991: 170–116), a collocation is a set or a sequence of words which frequently cooccur in close linguistic environment. The concept of a collocation rests on the notion that a word in a given language tends to prefer certain semantic / lexical contexts over others. For instance, the noun *branch* is typically used to speak about trees, whereas the verb *to fight* is constrained to the semantic context of physical struggle between opponents. Resting on the contemporary cognitive approach to metaphor which treats lexical units metaphorical when they are used in context in other senses than their concrete, physical senses (see Deignan 2005; Hanks 2006; Pragglejaz 2007; Semino 2008, Steen et al. 2010b; Stefanowitsch 2004, 2006), in the framework of this dissertation a collocation is considered metaphorical when a collocate of a law-related noun signals a semantic incongruity / tension between its contextual and physical senses (see Berber Sardinha 2016; Deignan 2005; Hanks 2006; Semino 2008; Steen et al. 2010b, among others) or, in other words, when it is used in another sense than its constrained collocational range (see also Deignan 2005; Hanks 2006; Marcinkevičienė 1999: 115; Vaičenonienė 2000: 145). To illustrate, in its collocational range of literal uses, the Lithuanian verb *grįsti* ‘to pave’ typically occurs in a pattern *grįsti+NP[Acc.]+NP[Ins.]*, whereby the noun in the accusative case refers to a construction (such as roads or pavements), whereas the noun in the instrumental case denotes material such as stones or bricks

which are the used to build such constructions as roads or pavements. However, the verb in Lithuanian is frequently used in other contexts, such as the following:

- (a) [...] *kaltinamieji ar nuteistieji savo nekaltumą dažnai grindžia tuo, jog padaryti nusikaltimus juos išprovokavo liudytojai* (LT7).
'defendants or offenders frequently **pave** their **innocence** (=argue for their innocence) **with** the fact (=claiming) that they were provoked into committing a crime by the witnesses'

As can be seen, in the above excerpt the verb *grįsti* 'to pave' is used in another sense than its literal (beyond its collocational range) thereby signalling a metaphor ARGUMENTATION IS CONSTRUCTION, which is instantiated in the collocation by the verb *grįsti* which collocates with a law-related noun *nekaltumas* 'innocence'. As is evident from this example, the meaning of the collocation is not arbitrary but metaphorically motivated suggesting an underlying metaphorical conceptual structuring of arguments in terms of constructions. It is beyond the scope of this dissertation to discuss the range of combinability patterns in the linguistic realisation of metaphorical meaning; however, in accordance with the contemporary corpus approaches to metaphor, the semantic relations between elements of collocations as well as other stable multi-item units often prove to have a metaphorical (as well as metonymic) basis. The contemporary approach to metaphor and collocation described in this section serves as the basis of approaching numerous collocational patterns identified in the process of analysing concordance lines and determining what counts as a metaphorical collocation.

After the identification of metaphorical patterns, they were grouped into coherent classes of metaphors according to the source domains they are a surface realisation of. This procedure has been carried out by adopting the inductive approach of metaphor identification in thought (see Steen 2013: 46), which means that the identification of metaphor at the conceptual level is carried out by reconstructing metaphorical mappings from metaphorical

expressions collected independently which are grouped into coherent classes of linguistic metaphors¹⁹.

This study was carried out combining both qualitative and quantitative research methods. To establish statistical significance of quantitative differences of metaphor occurrence in the two corpora, the log likelihood (Rayson 2004) test was used. Among other tests to estimate statistical significance, the log likelihood (LL)²⁰ test allows measuring the statistical significance of quantitative differences displayed by corpora that are being compared. The test enables analysts to making valid judgements about the differences in the data by measuring if that the results are (not) due to chance. The log likelihood value is expressed in numbers with either a plus or minus before the number. A plus indicates overuse while a minus indicates underuse in corpus 1 relative to corpus 2. The critical value of the LL value is 3.84, which means that if the value is 3.84 or higher, the difference is statistically significant and the result is not due to chance. The higher the value, the more significant is the difference. If the LL value is lower than 3.84, then the result might have occurred due to chance. In this study the log likelihood test was used to measure the statistical significance of the frequency of most frequent law-related nouns, the tokens of overall metaphorical patterns in the two corpora, and the tokens of metaphorical patterns across specific metaphors in the two datasets. For the calculation of the log likelihood, I used absolute frequencies of law-related nouns, of metaphorical patterns and the number of words of the two corpora.

To determine the significance / role of each source domain in structuring criminal law discourse and identify cross-linguistic differences, normalised frequencies of metaphors 10,000 were calculated. To reveal the lexical diversity of metaphor expression, metaphorical type-token ratios were calculated for each source domain grouping. The values of the type-token ratios were

¹⁹ An opposite of the inductive approach is the deductive approach the essence of which is looking for linguistic metaphors that represent a predetermined group of conceptual metaphors (see Steen 2013: 46-47).

²⁰ The values were calculated using the LL calculator available from <http://ucrel.lancs.ac.uk/llwizard.html>.

calculated using the following formula: Type-Token Ratio = (number of types, i.e. individual metaphorical patterns / number of tokens, i.e. the number of instances of individual metaphorical patterns) * 100.

4. Quantitative and qualitative analysis of metaphors in written academic legal discourse: English versus Lithuanian

This chapter presents the results of the study and analyses them in the framework of contemporary cognitive approach to metaphor. The analysis accounts for the most significant quantitative tendencies of metaphoricity in English and Lithuanian research articles on criminal law and is largely focussed on the qualitative discussion of metaphors which have been established in the data analysed. The chapter is divided into four sections: section 1 presents and briefly discusses the most frequent English and Lithuanian law-related lexemes which are the target domain items in this study; section 2 examines the role of target domain lexemes in metaphorical patterns by looking into their degree of metaphoricity; section 3 provides a brief account of the overall quantitative tendencies of metaphoricity of academic criminal law discourse, whereas section 4 presents a detailed qualitative analysis of metaphors in English and Lithuanian academic legal discourse.

4.1. Most frequent law-related lexis: overview of the results

This study was carried out relying on the principles of Metaphorical Pattern Analysis (hereafter, MPA) (Stefanowitsch 2004, 2006) which is particularly suitable for target-domain oriented studies of metaphoricity. MPA allows analysing a large amount of data of (sets of) target domain items by providing an exhaustive list of metaphorical patterns that the target domain item is a part of. Since the main focus of this research was on the analysis of metaphors of the target domains related to crime and law (such as crime, law, punishment, justice, violence, court, liability, code, provision, etc.), most frequently discussed by researchers of criminal law, the starting point of analysing corpora was identifying the most frequent law-related lexis. The results of the frequency count in both corpora revealed that the lists of most frequent legal lexis predominantly consist of nouns. As a result, a decision was made to limit the

study to 20 most frequently used law-related nouns in each corpus as target domain items and then analyse their concordances to identify metaphorical patterns. This section presents the frequency count results and discusses the most prominent differences in the semantics of the most frequent legal nouns in the two corpora.

As shown in Table 2 above, the distribution of most frequent law-related lexemes in the two corpora presents a number of differences, especially in quantitative terms. As can be seen from the data in Table 2, the Lithuanian corpus has considerably higher frequencies of law-related nouns in comparison to English. Namely, while the overall frequency of the twenty most frequent legal nouns in English was 11,762, the frequency of the twenty most frequent law-related nouns in the Lithuanian corpus was 26,746. Although substantial frequency differences can be observed from the raw frequency scores provided in Table 2, Table 3 below reveals that the differences are statistically very significant.

Table 3. Comparison of the frequency of target-domain lexemes in English and Lithuanian legal research articles

	English corpus	Lithuanian corpus
Overall frequency of 20 most frequent law-related nouns	11,762	26,746
	English corpus vs Lithuanian corpus	
Log likelihood score	- 5923.95	

As the log likelihood score in Table 3 above reveals, in comparison to the Lithuanian research articles collected for this study, the English corpus shows very strong underuse of law-related nouns. Several factors might have contributed to such profound quantitative differences observed in the two corpora regarding the frequency of law-related lexis. Firstly, one of the reasons could have been the structural differences of English and Lithuanian, namely, the fact that Lithuanian is characteristic of rich inflectional morphology while English contains more function words. As a result, the distribution of the frequencies of function words and lexical words in English and Lithuanian were uneven due to these structural differences of English and Lithuanian.

Secondly, another cause of such sharp differences of repeating law-related nouns in the two corpora could be concerned with different legal systems between English-speaking countries and Lithuania. Since the Lithuanian legal system is codified and relies on written laws, legal scholars and researchers often refer to such documents, their sections, specific articles, such as *kodeksas* ‘code), *straipsnis* ‘article’, *įstatymas* ‘law, statute’, *nuostata* ‘provision’. By contrast, the legal system in English-speaking countries is based on case law rather than written statutes and therefore reference to written laws or their sections in legal research articles is not common or is largely absent. Due to such differences in the legal systems, legal research articles in Lithuania and in English-speaking countries tend to have different writing traditions. Namely, in Lithuanian academic legal discourse, traditions require constant references to documents and institutions and thus boost the frequencies of the law-related nouns. This is largely supported by the high frequencies of such legal nouns in the Lithuanian corpus as *straipsnis* (‘article’), *kodeksas* (‘code’), *įstatymas* (‘law, statute’), and *nuostata* (‘provision’). The frequency of the noun *teismas* ‘court’ in Lithuanian research articles has also been partly determined by the fact that court proceedings and decisions taken in courts are frequently analysed in research articles; also reference is made to the decisions of European courts. In many cases courts are referred to as an institution in general or as a specific court by its acronymic form such as *LAT* (‘the Supreme Court of Lithuania’), *EŽTT* (‘the European Court of Human Rights’), and *LVAT* (‘the Supreme Administrative Court of Lithuania’).

In comparison to Lithuanian, in the English corpus the five most frequent law-related nouns denote people and, depending on the context, institutions (for example, the noun *police* is used either with reference to an institution or officers working there). The nouns *police*, *offender*, *officer*, and *victim* were among the most frequently used in the English dataset, thereby suggesting that the primary focus of legal researchers’ interest in their texts is on the social aspects of the crime and law, on individuals who are either wrongdoers, victims or officers working in different legal institutions. The list of most frequent legal nouns in Lithuanian also contained lexis referring to people in the law, i.e.

kaltininkas ‘perpetrator, offender’, *nuteistasis (-oji)* ‘convict-MASC²¹.’ (‘convict-FEM.’), *nukentėjusysis (-ioji)* ‘victim-MASC. (‘victim-FEM.’), but they appear at the bottom of the list of twenty most repeated nouns in the Lithuanian corpus. These results suggest that the nature of research articles written by criminology and criminal law researchers in English-speaking countries is more human-oriented, whereas Lithuanian research articles reflect the prominence of codified law and an inclination of Lithuanian criminal law experts to focus on legal issues arising from the problematicity of written laws and their application in criminal law and criminal procedure.

As far as semantic aspects are concerned, both corpora have displayed high frequencies of legal notions which are fundamental in criminal law and could be considered as rough semantic equivalents such as *crime* in English and *nusikalimas* ‘crime, offense’ and *nusikalstamumas* ‘crime rate’ in Lithuanian, *drug* and *narkotikai* ‘drug’, ‘narcotics’, *violence* and *smurtas* ‘violence’, *law* and *teisė* ‘law’ as well as *įstatymas* ‘law, statute’, *sentence* and *bausmė* ‘punishment, penalty, sentence’, *case* and *byla* ‘case’ and some others. Some of the most frequent legal nouns in both languages signify rather concrete items such as *drug*, *gun*, and *prison* in English and *narkotikai* ‘narcotics, drugs’ in Lithuanian. Other notions are very abstract, e.g. *justice*, *law*, *crime*, *violence*, *probation*, *teisė* ‘law’, *teisė* ‘right’, *laisvė* ‘liberty, freedom’, *atsakomybė* ‘liability, responsibility’, *nusikalstamumas* ‘crime rate’, *smurtas* ‘violence’, etc.

Other frequent nouns designating legal concepts were rather different in English and Lithuanian, which reveals clear differences in high-frequency legal terminology in the two datasets. A considerably higher frequency of lexemes denoting different bodies of law enforcement such as the police, probation services and officers serving in these institutions in English as compared to Lithuanian suggests a more profound focus of the English-speaking discourse community on different persons and institutions that are part of the legal system. Lithuanian criminal law experts, in contrast, tend to concentrate mostly

²¹ In Lithuanian, the masculine gender is the main form of the word, which is why it is used in texts when the gender is not specified.

on matters deriving from substantive and procedural criminal law which is reflected in such frequently used nouns as *straipsnis* ‘article’, *kodeksas* ‘code’, *įstatymas* ‘law, statute’, and *nuostata* ‘provision’.

4.2. The role of target domain lexis in metaphorical patterns

The next stage of the study involved manual analysis of the most frequent law-related nouns in both corpora in order to identify metaphorical patterns relying on the principles of MPA (Stefanowitsch 2004, 2006) and MIPVU (Steen et al. 2010b). In this procedure some uses of the most frequent law-related nouns occurred in combination with source domain lexemes and were thus marked as metaphorical, whereas others were labelled as non-metaphorical. For example, in the following two excerpts the noun *violence* occurs in a metaphorical pattern in (c) whereas no metaphor is detected in the contextual linguistic environment of the noun in (d):

(c) *Such behaviors can also be the **source of violence** [...].*

(d) *surveys have suggested that interpreting **violence** as increasingly prevalent overestimates the severity and scale of the problem.*

The procedure of manually analysing all instances of the most frequent law-related nouns for identification of metaphor allowed measuring which of the target-domain lexemes were most frequent constituents of metaphorical patterns. Thus, the methodology enabled measuring the degree to which legal nouns were part of metaphorical mappings thereby suggesting that certain legal nouns tend to occur in metaphorical patterns more frequently. To a certain extent, this provides insights as to which of the concepts designated by nouns are most and least metaphorical in English and Lithuanian. Table 4 below shows the percentages of the occurrence of legal nouns in metaphorical patterns in the two datasets analysed.

Table 4. Percentage of metaphorical concordances of target-domain lexemes in English and Lithuanian corpora

EN	Degree of metaphoricity	LT	Degree of metaphoricity
<i>justice</i>	42.5%	<i>laisvė</i> 'freedom, liberty'	74%
<i>case</i>	32.1%	<i>nusikaltimas</i> 'crime, offence'	45.8%
<i>law</i>	29.8%	<i>bausmė</i> 'penalty, punishment'	45.2%
<i>gun</i>	26.4%	<i>atsakomybė</i> 'liability, responsibility'	43.56%
<i>disorder</i>	26.2%	<i>veika</i> '(criminal) act'	41%
<i>delinquency</i>	24.1%	<i>nuostata</i> 'provision'	38.8%
<i>sentence</i>	22.5%	<i>teisė</i> 'right'	38%
<i>arrest</i>	17.5%	<i>narkotikai</i> 'drugs'	34.9%
<i>offence</i>	16.9%	<i>smurtas</i> 'violence'	30.4%
<i>victimization</i>	15.5%	<i>teisė</i> 'law'	28.6%
<i>crime</i>	15.3%	<i>nusikalstamumas</i> 'crime rate')	22.7%
<i>offender</i>	9.6%	<i>įstatymas</i> 'law', 'statute'	20.7%
<i>drug</i>	8.6%	<i>teismas</i> 'court'	14.2%
<i>police</i>	8.5%	<i>straipsnis</i> 'article'	11.9%
<i>probation</i>	7.1%	<i>prevencija</i> 'prevention'	11.9%
<i>violence</i>	5.8%	<i>nuteistasis(-oji)</i> 'convict'	9.4%
<i>officer</i>	3.3%	<i>kodeksas</i> 'code'	6.1%
<i>victim</i>	3.0%	<i>byla</i> 'case'	6%
<i>prison</i>	2.9%	<i>nukentėjusysis(-ioji)</i> 'victim'	5.1%
<i>assault</i>	2.3%	<i>kaltininkas (-ė)</i> 'perpetrator, offender'	4.4%
AVERAGE	15.99%	AVERAGE	26.65%

As can be seen from Table 4 above, the highest percentages of law-related nouns' being part of metaphorical patterns mostly occur when those nouns signify rather abstract concepts such as *justice*, *case*, *law*, *disorder*, *delinquency* in English and *laisvė* 'liberty, freedom', *bausmė* 'penalty', *nusikaltimas* 'crime, offence', *atsakomybė* 'liability', *teisė* 'law' in Lithuanian, which suggests that these concepts tend to be most metaphorical in the two corpora. In the context of the contemporary cognitive approach to metaphor such findings are far from surprising since one of the key arguments of CMT is that metaphor is most pervasive in abstract thought in which more concrete source domains are mapped onto abstract target domains. On the other hand, some of the more concrete concepts designated by such nouns as *drug*, *gun*, and *narkotikai* 'drugs' also display a high degree of metaphoricity alongside other nouns designating persons such as *nuteistasis* 'convict, offender' and *offender*, which have also proved to be treated in metaphorical terms rather often. Thus while it is true that abstract legal concepts are more prone to metaphorical conceptualisation, concepts that designate rather concrete legal matters are also

frequently described in metaphorical terms and occur in linguistic metaphorical patterns.

The highest degree of metaphoricity in Lithuanian occurred with the noun *laisvė* 'liberty, freedom' which, in fact, was part of metaphorical patterns more often than in constructions that were non-metaphorical. Namely, 74 per cent of all cases of its use turned out to be metaphorical. As the analysis of the most common source domains that shape legal discourse will show in further sections, the target domain item *laisvė* 'liberty, freedom' is most often reified by describing it as a tangible object that can be manipulated, possessed or taken away. Two other nouns which revealed a high degree of metaphorisation are *nusikaltimas* 'crime, offense' and *atsakomybė* 'liability'. Presumably, one reason why these particular nouns were involved in metaphorical expressions with such prominence is their abstractness.

Other factors also come into play, for example, the fact that these lexemes are constituents of some very frequently used metaphorical legal terms. For instance, the legal term *laisvės atėmimas* 'deprivation of liberty', 'imprisonment', lit., 'taking away of liberty / freedom' encodes the conceptual metaphor LIBERTY / FREEDOM IS AN OBJECT generated by a clash of meanings of 'liberty' (an abstract concept) and noun *atėmimas* 'deprivation, taking away' which is only used in its literal sense when the noun it collocates with refers to a physical entity. Similarly, metaphorical expressions *sunkus nusikaltimas* ('serious offense, grave crime', lit. 'heavy crime', *apysunkis nusikaltimas* 'less serious crime', lit., 'somewhat heavy crime', *nusikaltimo sudėtis* 'elements of crime, composition of crime' are also legal terms that turn out to be metaphorical and are also used with high frequency in legal researchers' papers. Finally, the noun *atsakomybė* 'liability' is part of a metaphorical legal expression *patraukti baudžiamojon atsakomybėn* 'to incur criminal liability', lit. 'to pull / draw someone into criminal liability', and *užtraukti atsakomybę* 'to incur liability', lit., 'to draw / pull liability (onto sb)' which are metaphorical legal terms realising conceptual metaphors LIABILITY IS A CONTAINER and LIABILITY IS AN OBJECT. Logically, research articles on criminal law in

Lithuanian contained numerous such terms in this way increasing the number of occurrences of metaphorical expressions the above-discussed nouns are part of.

In the English data, the highest degree of metaphoricity was observed in the concordance of the noun *justice*, primarily because of the pervasiveness of the metaphorical expression *justice system* (the noun *system* has a physical sense of ‘a set of connected things that work together for a particular purpose (Macmillan Dictionary²², hereafter MacmD_e), therefore the expression *justice system* is a linguistic manifestation of the conceptual metaphor JUSTICE IS MACHINERY / MECHANISM), whereas the noun *case* often collocates with the spatial preposition *in* which signals metaphorical conceptualisation of case as a CONTAINER. It therefore follows that the degree of metaphoricity of the most recurrent legal concepts which the most frequent law-related nouns designate has largely been determined by the metaphoricity of the terminology which these nouns were part of. It is thus fair to conclude that the degree to which specialised terms are metaphorical (which are likely to be used with high frequencies in research articles) has direct impact on the degree of metaphoricity of some key notions of that field when measuring and comparing the metaphoricity of the most prominent concepts of a specific discipline such as criminal law.

Among the least metaphorical target domain items were a group of nouns that designate persons in the law, for example, *victim*, *officer*, *police*, and *offender* in English and *nuteistasis (-oji)* ‘convict, offender’, *nukentėjusysis (-ioji)* ‘victim’, and *kaltininkas* ‘perpetrator, offender’ in Lithuanian. Some of the factors that might have determined a lower degree of metaphoricity of these nouns is the fact that their meanings are more concrete. Secondly, these nouns were often used when reporting crimes and their circumstances, providing

²² As indicated in the Data and research methodology section, under the guidelines of the MIPVU the main tool for the analysis of word meanings is the online *Macmillan Dictionary*, while *Longman Dictionary of Contemporary English* is used as a second opinion dictionary and the *Oxford English Dictionary* is to be used when a clear decision regarding the word meanings and their contrast could not be established using the first two dictionaries of contemporary English (see Steen et al 2010b and the website of the Metaphor Lab and VU Amsterdam Metaphor Corpus BNC Baby, <http://www.vismet.org/metcor/documentation/MIPVU.html>).

details about peoples' actions which often requires reference to physical reality, which also results in lower probability of metaphorical language use. In addition, since abstract concepts designated by nouns are often personified via syntactic and semantic linguistic means (discussed in greater detail in further sections), it is natural that nouns that refer to human beings do not have the possibility of a very common type of metaphorisation via personifying abstract concepts.

The tendency of certain legal nouns to be more metaphorical than others depending on their abstractness is in line with what other scholars reported about the semantic "behaviour" of different word classes across registers and their probability to be involved in (non)metaphorical constructions. Biber et al. (1999: 266) state that nouns are typically used in non-metaphorical senses in contexts that deal with concrete objects, persons and physical circumstances. In texts that deal with abstract notions such as academic discourse, for example, nouns designating abstract concepts are often used in linguistic patterns, which signal their metaphorical conceptualisation in terms of animate beings (for example, via constructions of inanimate agents in subject position followed by active verbs) or objectified entities. Herrmann (2013) and Steen et al. (2010a) also report that in comparison to other registers (fiction, conversation, and news), academic register contains more nouns used in metaphorical constructions, presumably, due to the abstractness and complexity of topics that the discourse deals with.

In sum, the results of the degree to which law-related nouns are parts of metaphorical expressions shows that nouns designating abstract legal concepts have the highest tendency to be part of metaphorical patterns, although some nouns that denote concrete concepts have also shown rather high extent of metaphoricity. In addition, the analysis of metaphorical patterns that involve law-related lexemes has also revealed that the degree of metaphoricity may largely be determined by the frequency of metaphorical legal terminology that these nouns are part of. Finally, lower degree of metaphoricity of nouns designating people in crime and law is determined by their concreteness and

the fact that they tend to most often occur in discourse concerned with the physical details of crime and law enforcement procedures.

4.3. Metaphoricity of academic criminal law discourse: quantitative tendencies

The analysis of the concordance lines with twenty most frequent law-related nouns in both corpora resulted in identification of 8,130 instances of metaphorical patterns in total in both corpora. Some metaphorical patterns showed very high frequency (for example, *laisvės atėmimas* ‘deprivation of liberty’ in Lithuanian occurred 504 times), while others were less frequent. All metaphorical expressions²³ identified were grouped into classes representing specific source domains such as OBJECT (general reification), SUBSTANCE, MACHINERY, HEALTH, FIGHTING AND COMPETITION etc., which are subsumed by three generic metaphors, namely LAW IS AN OBJECT / SUBSTANCE, LAW IS A PERSON / ANIMAL, and LAW IS NATURE. There were some ambiguous metaphorical expressions whose source domains could not be established clearly because the meanings provided in dictionaries gave rise to ambiguous interpretation regarding the source domain that they are motivated by. In addition, there were some metaphorical expressions which were instantiations of other source domains (such as SUPERNATURAL POWERS) but they were represented by single or very few instances. As a result, such metaphorical expressions were grouped in a separate category of ‘other’ metaphors which contain examples of ambiguous metaphorical expressions or metaphors that represent minor cases of metaphorical patterns not ascribed to a clear source domain.

The results of the study indicate a clear tendency of legal matters to be objectified and personified by way of metaphorical reasoning. Of the total 8,130 metaphorical expressions, 6,818, i.e. over 80 per cent, are based on general and specific reification. The second largest class of metaphorical expressions are

²³ Since this study was carried out within the framework of MPA which allows identification of only those metaphorical expressions that contain the lexemes of both the target and the source domains, in this dissertation the terms *metaphorical pattern* and *metaphorical expression* are used synonymously. It should be noted, however, that under different approaches to metaphor the term *metaphorical expression* may have a different meaning, e.g. in other frameworks metaphorical expressions may not necessarily involve lexemes of the target domain.

realisations of metaphor LAW IS A PERSON /ANIMAL, represented by 972 metaphorical expressions that constitute almost 12 per cent of all metaphorical patterns. Finally, law and crime are also conceptualised in terms of NATURE which was a minor class in comparison to the OBJECT / SUBSTANCE and PERSON metaphors with the total of 106 metaphorical expressions that are its linguistic manifestation. Table 5 below shows the overall distribution of metaphors identified in legal research articles in English and Lithuanian.

Table 5. Cross-linguistic distribution of metaphorical patterns across different types of generic metaphors and specific source domains

Generic metaphors	Specific source domains	No of MPs (tokens) in EN	Norm. freq. /10,000 words	No of MPs (tokens) in LT	Norm. freq. /10,000 words
LAW IS AN OBJECT / SUBSTANCE	OBJECT	472	12.35	4,346	113.31
	SUBSTANCE	230	6.02	403	10.50
	CONTAINER	166	4.34	332	8.65
	MACHINERY	262	6.86	205	5.34
	STRUCTURE	42	1.09	185	4.82
	INSTRUMENT	21	0.54	154	4.01
	SUBTOTAL	1,193		5,625	
LAW IS A PERSON / ANIMAL	PERSON	275	7.20	466	12.15
	FIGHT / COMPETITION	16	0.39	88	2.29
	HEALTH	43	1.12	9	0.23
	THEATRE / SCENE	31	0.81	3	0.07
	MUSIC	3	0.07	14	0.36
	ANIMAL	12	0.31	2	0.05
	BUSINESS / MANAGEMENT	7	0.18	3	0.07
SUBTOTAL	387		585		
LAW IS NATURE		27	0.70	79	2.05
Other		126	4.89	108	3.88
	TOTAL	1,733		6,397	

It is important to observe the profound quantitative difference in terms of the overall number of metaphorical patterns identified in the two corpora. As can be seen from data provided in Table 5, the analysis of the concordances of most frequent law-related nouns in the English corpus yielded 1,733 tokens of metaphorical patterns whereas in the examination of the concordances of the most frequent legal lexemes in Lithuanian, 6,397 tokens of metaphorical patterns were found. To measure the statistical significance of the frequency of metaphorical tokens in English and Lithuanian, the Log likelihood (LL) score was estimated. This score is provided in Table 6 below.

Table 6. Comparison of overall frequency (tokens) of metaphorical patterns in English and Lithuanian legal research articles

	Overall frequency (tokens) of metaphorical patterns	Normalised frequency / 1,000 words	Lithuanian corpus versus English corpus
Lithuanian corpus	6,397	16.67	LL
English corpus	1,733	4.53	
			+ 2826.28

As the LL value suggests, the difference between the frequencies of metaphorical expressions in the two corpora is statistically very significant with Lithuanian corpus of legal research articles displaying significantly more metaphors in comparison to the English corpus. The normalised frequency of metaphorical patterns per 1,000 words is 3.6 times higher in the Lithuanian data in comparison to English.

To account for these results, the sharp quantitative differences were first and foremost determined by the fact that the 20 most frequent law-related nouns in Lithuanian generated 26,746 concordance lines²⁴, whereas the English data was limited to 11,762 concordance lines to be analysed manually for metaphor identification. Since a comprehensive account of the metaphorical patterns of target domain items requires examination of all concordances, it is natural that the analysis of twice as many Lithuanian concordance lines as compared to English resulted in returning a higher number of metaphorical expressions.

In addition, as has been indicated in previous sections, the Lithuanian corpus of legal research articles contained a significantly higher overall frequency of law-related nouns. The analysis of the concordances of the most frequent legal nouns has shown that these nouns are very frequently parts of metaphorical patterns thereby also boosting the overall frequency of metaphorical tokens in the Lithuanian data as compared to the English corpus. These results therefore suggest that Lithuanian tends to be more metaphorical in comparison to English, most probably due to high degree of repetitiveness of some

²⁴ The size of both corpora was very similar, namely 381,894 words in English and 383,517 in Lithuanian.

metaphorical terms and other metaphorical expressions conventionally used in legal research articles.

To move on to the distribution of specific source domains subsumed by the generic metaphors presented above, the distribution of metaphorical patterns according to the source domains in each language is presented in this section. First of all, it has to be emphasised that the greatest quantitative tendency in Lithuanian was to rely in the metaphorical structuring on reification of the law, since object metaphors were the dominant metaphorical model; whereas other classes of metaphors were represented by significantly lower frequencies. Consider the distribution of metaphorical patterns according to the source domains in the Lithuanian dataset presented in Figure 1 below.

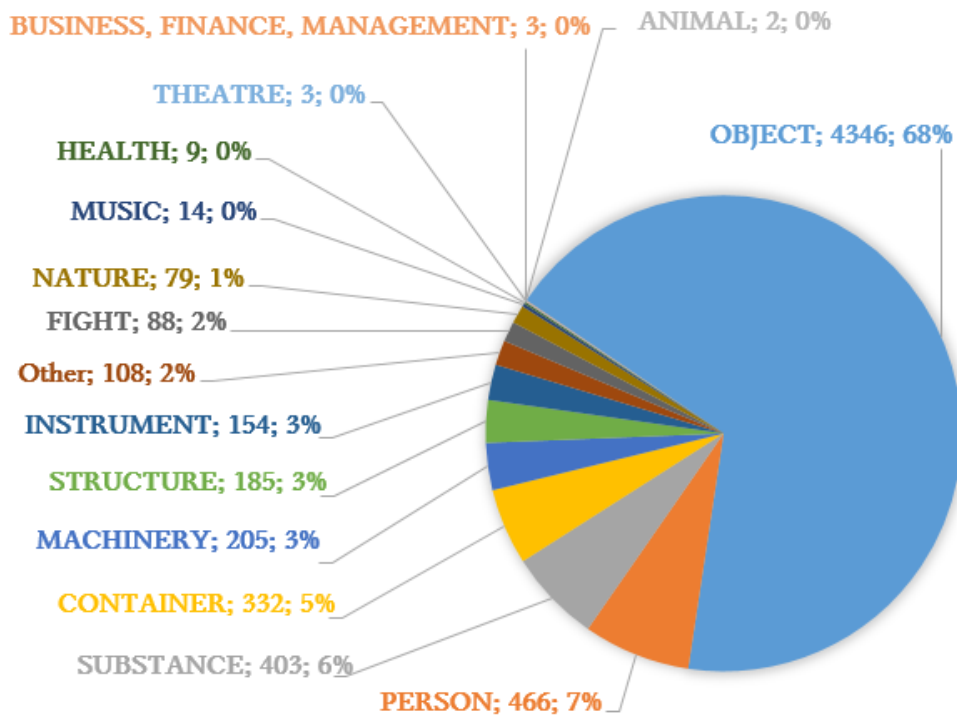


Figure 1. Distribution of metaphors according to source domains in Lithuanian.

As can be seen from the chart, an absolute majority of the metaphors in Lithuanian are grounded in the object source domain, which makes up almost 70 percent of all occurrences of metaphors. The second largest grouping was person metaphors, which make up 7 percent of all metaphorical patterns, followed by substance and container metaphors the shares of which were 6 and

5 percent, respectively. Finally, the other source domains were considerably less numerously represented in the Lithuanian dataset.

With regard to metaphor distribution in the English corpus, the results differed considerably, in comparison to Lithuanian. Figure 2 presents the distributions of metaphors according to the source domains in English.

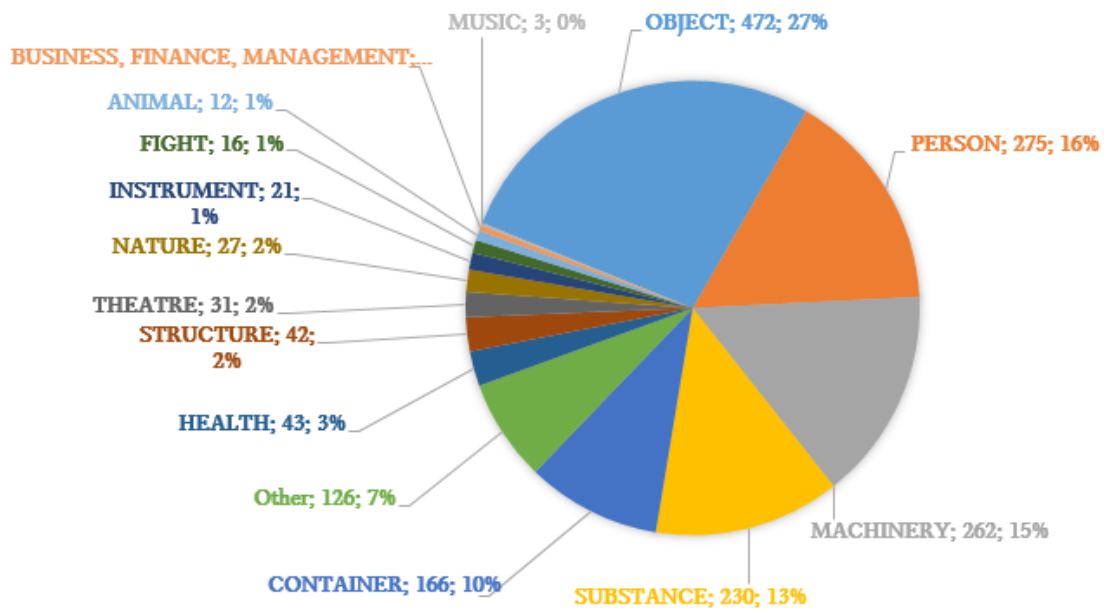


Figure 2. Distribution of metaphors according to source domains in English.

Figure 2 reveals that the distribution of the source domains in English was more even. Like in Lithuanian, OBJECT metaphors were a dominant grouping; however, the percentage differs considerably, i.e. this class constitutes 27 percent of all metaphors, next goes the source domain of PERSON which made up 16 percent of all metaphorical patterns. The other most representative groups of metaphors were substance (13 percent) and container (10 percent), while other groups of metaphors accounted for less than ten percent.

As evident from the comparison of the data presented in the figures, the distribution of specific source domains presents a greater set of differences in quantitative terms. The most prominent quantitative difference has been in the numbers of metaphorical patterns pertaining to the source domain of OBJECT which was significantly more frequent in Lithuanian as compared to English. Thus while it is characteristic of both English and Lithuanian legal research

articles to objectify the law in terms of OBJECTS, Lithuanians are prone to employing this metaphor with significantly greater prominence. Conceptualising the law in terms of a PERSON, i.e. attributing human qualities to (abstract) legal notions was slightly more pervasive in English, as the shares of 15.64% in English and 7.08% in Lithuanian, respectively, show. The results also indicate that mapping onto law the source domain of MACHINERY is more common in English in comparison to Lithuanian. Similarly, in the English data the share of SUBSTANCE metaphors was greater than in Lithuanian. In Lithuanian all other metaphor groupings constituted very small shares due to the prominence of object metaphors, whereas in English the other source domains contained slightly larger portions of all the metaphorical patterns.

To measure the statistical significance of the frequency of metaphorical patterns representing specific source domains, the Log likelihood scores of each metaphor grouping was performed. The results are presented in Table 7 below.

Table 7. Comparison of the frequency of metaphorical patterns representing specific source domains in English and Lithuanian legal research articles

Source domain	LT corpus versus EN corpus
	LL value
OBJECT	+ 3573.55
INSTRUMENT	+ 113.61
STRUCTURE	+ 96.95
CONTAINER	+ 55.70
FIGHTING AND COMPETITION	+ 54.57
PERSON	+ 48.99
SUBSTANCE	+ 47.16
NATURE	+ 26.43
MUSIC	+ 7.68
Other	- 1.46
BUSINESS AND FINANCE	- 1.66
MACHINERY	- 7.22
ANIMAL	- 7.97
HEALTH	- 24.32
THEATRE	- 26,96

As can be inferred from the LL scores, in 9 out of 15 metaphor groupings according to the source domains, the Lithuanian corpus showed considerable overuse of metaphorical patterns as compared with the English data. As could be anticipated based on the presentation of the cross-linguistic / contrastive

distribution of metaphors in the previous section, the most significant difference is observed in the marked tendency for the Lithuanian academic discourse to rely on general reification as compared to English discourse in which the source domains distributed more evenly. In addition to reification, Lithuanian research articles contained more frequent occurrence of metaphorical patterns which represent the source domains of INSTRUMENT, STRUCTURE, CONTAINER, FIGHTING AND COMPETITION, PERSON, SUBSTANCE, NATURE, and MUSIC. In English, on the other hand, four source domains were more pervasive in comparison to Lithuanian, namely, metaphorical patterns which rely on the source domains of MACHINERY, HEALTH, ANIMAL AND THEATRE. The frequency of metaphorical patterns motivated by the source domain of BUSINESS AND FINANCE and the general category of ‘other metaphors’ did not differ significantly across English and Lithuanian corpora, as suggested by the LL scores. Thus the quantitative differences in the distribution of metaphorical patterns across specific source domains in the two corpora also reveal a strong tendency for Lithuanian research articles to contain significantly more frequent occurrence of almost all classes of metaphors in comparison to English research articles on criminal law, criminal justice and criminology.

One of the tasks of this study was to measure the variety of the linguistic expression of metaphors and compare the data cross-linguistically focusing on lexical variation of metaphors in English and Lithuanian. For this purpose, the metaphorical type-token ratio (mTTR) was calculated. Table 8 below presents a comparison of lexical variety values across the two datasets.

Table 8. Comparison of lexical variety of metaphors in English and Lithuanian

	English	Lithuanian
Metaphorical patterns (types)	521	790
Instances of metaphorical patterns (tokens)	1,733	6,397
mTTR	30.06 %	12.34 %

As revealed by the overall metaphorical type-token ratio, the variety of the linguistic expression of metaphors was more than twice higher in English in

comparison to Lithuanian. This was determined by the fact that in Lithuanian numerous metaphorical patterns constituted legal terminology frequently used by the discourse community, which boosted the overall frequency of metaphorical expressions and reduced the lexical variation of metaphor use to a great extent. In the English dataset, on the other hand, the metaphorical patterns did not repeat as frequently and in numerous cases were represented by few or single instances. As a result, the overall variety was greater in English in comparison to Lithuanian.

The metaphorical type-token ratio of each metaphor grouping was also performed in this study and they will be commented on in further sections of the analysis of metaphors representing specific source domains. However, a look at the comparison of the lexical variety of each source domain in English versus Lithuanian may be useful before moving on to the qualitative analysis. Table 9 provides the comparison of mTTR across each of the source domains in each language.

Table 9. Comparison of the lexical variety of each source domain grouping in English and Lithuanian

	mTTR (%) in English	mTTR (%) in Lithuanian
OBJECT	41,52	8,46
SUBSTANCE	20,00	6,20
CONTAINER	17,46	12,65
MACHINERY	12,21	15,12
STRUCTURE	57,14	22,70
INSTRUMENT	66,66	7,14
PERSON	34,90	36,05
FIGHT AND COMPETITION	68,75	36,36
HEALTH	34,88	88,88
THEATRE	22,58	66,66
MUSIC	100	71,42
ANIMAL	33,33	100
BUSINESS, FINANCE, MANAGEMENT	57,14	100
NATURE	48,14	22,78

It can be seen from the data in Table 9 above that in most groupings the lexical variety of metaphor expression was greater in English except for machinery, person, health and minor groupings, which were represented by single

instances, therefore their mTTR was 100 percent. Due to significantly larger proportion of OBJECT metaphors in Lithuanian as compared to English, the lexical variation of this grouping was almost five times lower in Lithuanian. Similarly, instrument and structure metaphors were expressed with greater variation in English, while the source domain of person was expressed with very similar lexical variation in both datasets. Those source domains which were represented by the least metaphoric expressions (see Table 5 and Figures 1 and 2 for exact numbers of tokens of each grouping) had similarly high mTTR values due to the fact that they were represented mostly by single instances. Further comparisons of each source domain's mTTR will be provided in the qualitative analysis of metaphors in section 4.4.

This section has presented the most prominent quantitative tendencies of metaphoricity in English and Lithuanian criminal law discourse. The next section turns to the detailed analysis of metaphorical patterning in English and Lithuanian by examining specific metaphors motivated by shared source domains which revealed numerous cross-linguistic features in the conceptualisation and linguistic expression of metaphors.

4.4. Qualitative analysis of metaphors in academic legal discourse in English and Lithuanian

The analysis of all metaphors which were briefly overviewed above is further subdivided into sections each of which will focus on the discussion of different categories of metaphors based on a specific source domain structuring legal discourse. Due to the rich diversity of metaphors that the generic classes subsume, both English and Lithuanian metaphors are discussed together, yet the sections will attempt to highlight significant cross-linguistic differences observed in the examination of metaphors from the point of view of conceptual elements and structure of mappings and linguistic realisation. Given that the very general target domain of law encompasses a rich variety of legal concepts treated metaphorically, the most comprehensive way of structuring the analysis is based on the source domains reconstructed from metaphorical patterns in both languages. Thus the discussion proceeds with the analysis of the generic

metaphor LAW IS AN OBJECT / SUBSTANCE which is subdivided into the analysis of metaphors based on general reification, followed by the analysis of metaphors of SUBSTANCE, CONTAINER, MACHINERY, PHYSICAL STRUCTURE and INSTRUMENT. Then, the analysis of the generic metaphor LAW IS A PERSON will be presented which is also subdivided into three sub-sections. The first sub-section analyses metaphorical mappings in which legal issues are attributed human-like qualities such as character traits, mental states, processes, attitudes, cognitive functions, agentivity, etc. The next part of the analysis proceeds to analysing metaphors structured by the source domains of HEALTH AND ILLNESS and FIGHTING AND COMPETITION which are human activities and also sub-classes of personified metaphorical reasoning. After that, the analysis examines the generic metaphor LAW IS NATURE.

4.4.1. Objectification of the law

This section focuses on metaphorical patterns motivated by an objectified view of the law. This generic class encompasses metaphors based on the source domains of OBJECT (general reification), SUBSTANCE, CONTAINER, MACHINERY, PHYSICAL STRUCTURE and INSTRUMENT. As regards OBJECT and SUBSTANCE metaphors, it is worth noting that since the two domains share many properties, numerous metaphor analysts discuss them as one domain, whereas other researchers distinguish between the two while not denying the fact that they overlap. In this dissertation the two source domains are viewed as sharing many properties and showing a significant degree of overlap; however, since numerous metaphorical patterns identified in the corpora were related to chemical properties, in classifying metaphorical patterns an attempt has been made to identify properties that prototypically relate either to objects or to substances in relation to their physical and chemical properties and therefore to discuss metaphors motivated by the OBJECT and SUBSTANCE domains separately.

4.4.1.1. General reification

A vast body of literature on metaphors has revealed that the conceptualisation of numerous abstract notions is commonly grounded in reification, i.e.

metaphorically treating non-objects in terms of physical objects. Therefore, different target domains may acquire the conceptual properties of objects such as shape, height, weight, colour, etc. Objectification allows rendering abstract concepts in terms of measurable objects, manipulation of objects, their position in space, physical properties, etc. A marked tendency to objectify abstract concepts, according to cognitive linguists, lies in the embodied cognition hypothesis, i.e. an argument that we tend to objectify abstract concepts due to the pervasiveness of spatial, force-dynamic and other physical and bodily interaction with the environment (Johnson 1987: xv; Johnson 2007: 852-864; Kövecses 2008: 393; Lakoff 1987: 267; Winter 2001/2003: 22-42). Metaphorical concepts therefore commonly have an image-schematic basis, i.e. they derive from certain knowledge structures that have formed from various recurrent experiences with the physical world.

The results of the present study have revealed that metaphorical rendering of law-related concepts in both corpora most commonly takes place by relying on the different aspects of physical objects, their location in space, manipulation and other aspects pertaining to them. In quantitative terms, OBJECT metaphors were most numerous represented in both English and Lithuanian, namely, 472 metaphorical patterns relying on this source domain were identified in English and 4,346 in Lithuanian, respectively. As shown in Figure 1 and Figure 2 above, in the English dataset OBJECT metaphors therefore constitute 27.23% of all metaphorical expressions, whereas in Lithuanian this class accounts for 67.94% of all metaphors. This difference may be accounted for by at least one significant factor, namely, that the Lithuanian corpus contained numerous metaphorical patterns with a particularly high number of tokens, for instance, there were 504 tokens of the pattern *laisvės atėmimas* ‘deprivation of liberty’, lit., ‘taking away of freedom/liberty’, 396 tokens of metaphorical expression *(pa)daryti (nusikalstamą) veiką* ‘to commit a (criminal) act/offence’, lit., ‘to do/make a (criminal) act’²⁵, 378 tokens of the metaphorical pattern *aukštesnysis*

²⁵ The verb *(pa)daryti* (‘do’, ‘make’) is a delexicalised / light verb which may make metaphor identification slightly problematic because such verbs have less semantic content which they have lost in the process of delexicalisation (Semino 2008: 14; Biber et al. 1999: 1027-1029, Huddleston & Pullum 2002: 290). However, a more basic sense of the verb *daryti* as defined by the Dictionary

/ aukščiausiasis teismas ‘higher / supreme (lit., ‘highest’) court’, 251 instances of *(pa)daryti nusikaltimą* ‘to commit crime/offense’, lit., ‘to do/make crime/offense’, 236 tokens of *teisės pažeidimas* ‘breach of law’, lit. ‘(physical) damage (done) to the law’, 163 instances of the metaphorical expression *pagal X straipsnį* ‘under Article X’, lit., ‘alongside Article X’ etc. All of these metaphorical patterns realise metaphors of general reification.

Arguably, the high frequencies of these and some other metaphorical patterns, some of which are legal terms and titles of institutions have ultimately led to a particularly high percentage of reification-based metaphors in the overall classification of all metaphorical patterns identified in the Lithuanian corpus. The English dataset did not show a similar abundance of metaphorical tokens of the metaphorical patterns representing the source domain of an OBJECT and therefore resulted in a significantly lower number of overall metaphorical expressions conceptually grounded in the OBJECT source domain.

Among the most frequent metaphorical patterns are those that contain lexis which denotes different aspects of manipulating objects which are used in combination with law-related nouns, patterns that had lexis referring to physical properties such as weight, height, measurement, size, etc., and those that dealt with some kind of spatial relationships, mostly linguistically expressed through prepositional phrases. The following patterns are the most numerous represented in Lithuanian: *laisvės atėmimas* (504 tokens), *(pa)daryti veiką* (396 tokens), *aukštesnysis / aukščiausiasis teismas* (378 tokens), *(pa)skirti baudmę* (296 tokens), *(pa)daryti nusikaltimą* (251), *pagal X straipsnį* (163), *teisės pažeidimas* (236), *sunkus nusikaltimas* (150), *veikos (pa)darymas* (128), *turėti teisę* (95), *bausmės (pa)skyrimas* (93), *nusikaltimo (pa)darymas* (63), *pagal įstatymą* (60), *bausmės dydis* (47), *pažeisti teises* (45),

of Contemporary Lithuanian is ‘to make, produce a concrete object’ (DLKŽ.) which is a clear contextual indicator of the realisation of an OBJECT metaphor. Such verbs are delexicalised by definition, but for the purposes of this study they were considered to be realisations of metaphors as long as contrast could be established between their contextual and basic meanings provided in dictionaries of contemporary English and Lithuanian. A decision to treat such cases as metaphorical was also determined by the MIPVU procedure, the main principle of which is consider that a lexical unit is used in context metaphorically if the basic meaning provided in a dictionary of contemporary language helps understand its contextual meaning.

atsakomybė (iš)kyla (40), *užtraukti atsakomybę* (35), *apysunkis nusikaltimas* (27), *priimti įstatymą* (26), *straipsnio pažeidimas* (23), *atsakomybės riba / riba tarp atsakomybės ir X* (22), *atleisti X nuo atsakomybės* (22), *atleidimas nuo atsakomybės* (22), *laisvės (ap)ribojimas* (22), *lengvinti atsakomybę* (21). Among the most frequent patterns in English were the following: *violence against X* (29), *form of violence* (22), *crime reduction / reduction in crime* (15), *high crime* (14), *to place / put X on probation* (14), *to make arrest* (12), *to use force on / against the victim* (12), *(un)detected offense* (11), *measurement of arrest* (10), *increase in violence* (10), *crime against X* (9), *measure of arrest* (8), *measure of delinquency / delinquency measure* (8), *to receive a sentence* (7), *victimization measure / victimization measure* (7).

As regards the lexical variety of this source domain, as reflected in Table 10 below, the metaphorical type-token ratio suggests that the lexical variation of OBJECT metaphor was significantly higher in English in comparison to Lithuanian even though this category is so markedly underrepresented in the English material in terms of token frequencies. However, it should be borne in mind that Lithuanian contained numerous metaphorical patterns represented by specifically high numbers of occurrence. OBJECT metaphors were considerably less frequent in English research articles on criminology and most of them were represented by single or few occurrences in comparison to Lithuanian.

Table 10. Lexical variety of OBJECT metaphors in English and Lithuanian research articles

	Types of MPs	Tokens of MPs	Normalised freq. /10,000 words	mTTR
English	196	472	12.35	41.52%
Lithuanian	368	4,346	113.31	8.46%

This section proceeds to the qualitative analysis of OBJECT metaphors in English and Lithuanian in an attempt to disclose the most obvious tendencies of the use of OBJECT metaphors in legal research articles in English and Lithuanian. The analysis opens with patterns of metaphoricity which were common to both discourse communities and then turns to the analysis of

language-specific characteristics of metaphorical patterning and the linguistic expression of metaphors based on reification.

Among the most numerous metaphorical patterns systematically used in legal research articles are those in which the metaphorical structuring of legal abstractions relies on general reification. In the metaphorical model of reification, (typically abstract) legal matters are seen as something tangible, something that can be produced, possessed, accepted, acquired, given, taken away, destroyed, broken, bent, held in hands, dropped, looked at, delivered, etc. The first subgroup of metaphors to be discussed in this section encompasses metaphorical patterns realised by lexemes signifying acquisition, possession and deprivation. Such metaphorical structuring mostly applies to such target domains as rights and liberties but also laws and sentences. In English this group of metaphors is typically linguistically expressed through collocations with legal nouns in combination with such verbs as *have*, *get*, *give*, *provide*, *receive*, and *deliver*, whereas in Lithuanian the range of verbs that collocate with law-related nouns is wider and includes such metaphorically used lexis as *pri(si)imti* ‘to accept, to take’, *(pa)skirti* ‘to allocate, to give’, *gauti* ‘to get’, *atimti* ‘to take away, deprive of’, *turėti* ‘to have’, *įgyti* ‘to acquire, gain’, *pasisavinti* ‘to appropriate, embezzle’ and related nouns such as *(pa)skyrimas* ‘allocation’, *atėmimas* ‘taking away, deprivation’, *pri(si)ėmimas* ‘acceptance, reception, assumption’. Below are some examples of metaphors that rely on the metaphorical structuring of possession, acquisition, and deprivation:

- (1) [...] *yra valstybių Europoje, kur **laisvės atėmimo**²⁶ baudmė skiriama dažniau nei Lietuvoje* (LT50²⁷).
‘there are countries in Europe in which a sentence of **taking away** of **liberty** (=custodial sentence)²⁸ is imposed more frequently than in Lithuania’
- (2) [...] *subjektai, kurie mano, jog jų teisės pažeistos, **turėtų teisę** savo teises ginti teisme* (LT46).

²⁶ Throughout the thesis metaphorical patterns will be marked in the following way: target domain lexemes are written in bold and metaphorically used words instantiating a specific source domain are marked by underlined bold typeface.

²⁷ The detailed list of the data sources is provided in Appendices 1 and 2.

²⁸ To preserve the basic (physical) meanings of metaphorically used words in Lithuanian, their translations into English contain both the literal and the contextual sense provided in brackets, where necessary. The translation of Lithuanian examples was performed by the author of the thesis.

- ‘persons who think their rights were violated would **have** the **right** to defend their rights in court’
- (3) [...] *valstybė **igyja teisę** sulaukyti privalomus pateikti muitinei daiktus* (LT62).
‘the state **acquires** the **right** to seize and detain items which must be declared at customs’
- (4) [...] *Blacks who killed Whites were four times more likely to **receive** a death **sentence** compared to Whites who killed Blacks* (EN17).
- (5) [...] *say just the power it’s given us as the professionals, that we **have** the **law** behind us and we can say [...]* (EN1).
- (6) *The first two saw the murderers arrested within a short space of time and the maximum **sentence** was **delivered** to both* (EN1)

Notably, the Lithuanian data contained significantly more instantiations of this metaphor (see Table 7 above for measures of statistical significance across metaphor classes) since some of the most important legal terms in Lithuanian are actually formulaic expressions that contain the verb *atimti* and its nominalization *atėmimas*. Consider the Lithuanian legal term which denotes ‘life imprisonment’:

- (7) *Laisvės* *atėmimas* *iki* *gyvos* *galvos* (LT50).
liberty-GEN SG deprivation-NOM SG till live-GEN SG head-GEN SG
‘life imprisonment’

The above expression in Lithuanian is a legal term which in texts typically occurs as a stable lexical unit. However, by analysing this stretch applying under the MIP(VU) guidelines, it is easy to identify that the first part of the phrase encodes the metaphor LIBERTY IS AN OBJECT, i.e. something a person can be deprived of, whereas the second part contains a metonymy in which the noun ‘head’ stands for ‘a person’ and the whole expression refers to the period until the person dies. Another similar case of metaphorical structuring is evident in the legal term *laisvės atėmimo vieta* ‘a place of detention’, lit., ‘place of taking away liberty / freedom’, which also encodes the treatment of liberty in terms of an object.

The analysis of metaphors in research articles on criminal law has confirmed that one way of objectifying (typically abstract) law-related concepts is by rendering them in terms of objects that have dimensions such as as height, weight, size, shape, volume, width etc. Examples (8) to (13) below provide a range of metaphorical uses of lexis related to weight and lightness which are mapped onto different target-domain law-related concepts:

- (8) *Dauguma **sunkių nusikaltimų**, pasižyminčių ypatingu nemotyvuotu žiaurumu* (LT70).
 ‘The majority of **heavy** (=grave) **crimes** characterised by particular unreasonable cruelty.’
- (9) [...] *asmeniui, pirmą kartą teisiamam už **nesunkų** ar **apysunkį** tyčinį nusikaltimą* (LT28).
 ‘person who is convicted for the first time for a **light** (=minor) or **somewhat heavy** (=less serious) premeditated **crime**.’
- (10) [...] *savoniškas padarytos žalos atlyginimas ar pašalinimas laikomas **atsakomybę lengvinančia** aplinkybe* (LT65).
 ‘voluntary compensation for the caused damaged or elimination of damage is considered a circumstance **lightening** the **liability** (=a mitigating circumstance).’
- (11) [...] *BPK nuostata, leidusi teismui kvalifikuoti teisiąmojo veiką pagal **lengvesnį** BK straipsnį [...] neprieštarauja Konstitucijai* (LT31).
 ‘the provision of the Code of Criminal Proceedings which enabled the court to qualify the act of the defendant under a **lighter** (=less strict, severe) **article** of the Criminal Code, is not against the Constitution.’
- (12) [...] *views on the relative **gravity** of the different drug **offences*** (EN7).
- (13) [...] ***lighter sentences** for drug ‘mules’ would be tolerated by the public if this was introduced under the new guideline* (EN7)

As the above examples illustrate, the concepts of weight and lightness play a significant role in the conceptualisation of legal matters, especially of such categories as offence, liability, and punishment. Thus seriousness / severity of offences (examples (8), (9), (12)) and of liability (10) are conceptualised in terms of physical weight, whereas the severity of a sanction laid down in the Criminal Code (11) and the severity / strictness of penalties (13) is also rendered by relying on the notion of heaviness / weight. As can be seen from the above sentences, lightness tends to be associated with mitigation and less severe penal sanctions, whereas heaviness suggests gravity, and, sometimes, evokes negative aspects such as danger and harm caused by offenses and severity of sanctions imposed for a given misconduct. Examples (8), (9) and (12), for instance, instantiate the conceptual metaphor SEVERITY / SERIOUSNESS OF OFFENSE IS WEIGHT, which has to do with the extent of the damage done by a crime which can be seen as a burden placed onto the affected persons in particular and the society and the state in general. In a similar vein, criminal liability (10) may be “lightened” or “burdened” depending on the presence of mitigating or aggravating factors. One way of interpreting example (11) is by treating it as a complex case of a close interaction between metaphor and metonymy. In this line of interpretation, the concept of weight can be seen as used to refer to an article in the Criminal Code which provides for a

“heavier” sanction imposed for certain offensive conduct. We find a metaphorical relationship between the concepts of “heaviness” and severity / strictness of sanctions and a metonymic relationship in which the expression “a heavy article” stands for a heavy penalty / sanction indicated in an article.

In addition, the source domain of WEIGHT in Lithuanian is realised in categorising drugs / narcotics as ‘light’ and ‘heavy’, i.e. *lengvieji ir sunkieji narkotikai*, lit., ‘light and heavy drugs’. Accordingly, weight is associated with such aspects as a more dangerous effect of the substance that is likely to cause addiction, the strength of intoxication caused by the substance and severe health damage, whereas lightness implies a considerably lesser probability of developing addiction and less severe damage caused to the body. Thus in Lithuanian the titles of the two categories of drugs are based on heaviness versus lightness metaphor, whereas in English the same categories are termed *hard* and *soft* drugs. Consider the following examples in Lithuanian:

- (14) [...] *į vartotojus žiūrima atlaidžiau, nepaisant to, kokius narkotikus (lengvuosius ar sunkuosius) jie vartoja* (LT54).
‘users are looked at with more lenience irrespective of what **drugs** (light (=soft) or heavy (=hard)) they use.’

The close relationship between the literal sense of weight and metaphorical sense of significance is claimed to have its roots in the embodied experience related to weight which people associate with certain abstract concepts such as importance, seriousness, dangerousness and guilt. According to cognitive psychologists (see Kaspar & Vennekötter 2015: 64) who advocate the view that cognition is grounded in human interaction with the physical world, experiencing weight sensations is something people get familiar with early in life. As a result of such interaction with the environment, weight as a concrete experience often motivates the metaphorical meaning of more abstract concepts such as importance. According to them, the conventional metaphor IMPORTANCE IS WEIGHT derives from our basic sensimotor experience and manipulation of objects (ibid.: 64–65).

As regards the analysis of weight-related metaphors identified in the two corpora, it is important to note that the lexical variation in the expression of

weight and lightness metaphors that structure the understanding of law-related target domains has been considerably more varied in Lithuanian in comparison to English. The Lithuanian data featured metaphorical expressions which contain lexis denoting the action of loading / putting something on (one's shoulders), burdening and related nouns of a (*work*)load, *burden*, and *mass*, for instance:

- (15) [...] *kilo klausimas, kodėl gerokai labiau bylomis apkrautas EŽTT byla sprendė [...], o Federalinis Konstitucinis Teismas to nedarė* (LT46).
 'a question arose as to why **ECHR** which is much more **loaded** with cases heard the case, while the Federal Constitutional Court did not do that.'
- (16) [...] *norint suvokti, kokia bausmių „našta“ tenka nusikaltusiems asmenims, visos paskirtos bausmės buvo apibendrintos* (LT69).
 'in order to see what "**burden**" of **penalties** (=concurrent punishment) goes onto offenders, all imposed penalties were summarised.'
- (17) [...] *su smurtu šeimoje yra susiję nemažai mitų ir stereotipų, apsunkinančių jo prevenciją* (LT42).
 'there are many myths and stereotypes related to domestic violence which **make heavier** (=complicate) its prevention.'
- (18) [...] *didžioji masė bylų yra tokios, kuriose taikytina artimesnė sankcijos minimumui bausmė* (LT57).
 'the major **mass** (=majority) of cases are those in which the imposed penalty is closer to the sanction's minimum.'
- (19) [...] *bausmės kartu su kitomis privalomai taikomomis priemonėmis (konfiskavimu, mokestiniu išieškojimu) užgula teisėsaugai įkliuvusio kaltininko (ir jo šeimos) pečius milžinišku svoriu* (LT57).
 '**punishments**, together with other mandatory penal sanctions (confiscation, tax recovery) imposed **fall / lie onto the shoulders** of an offender (and his/her family) **with huge weight**'

As can be seen from (15) and (18), the overall number of cases that courts deal with is metaphorically viewed as "massive amount" whereas the court that needs to deal with all those cases is viewed as being "burdened" with that load. Carrying heavy burdens and being loaded with objects make physical activity such as walking under such circumstances to be considerably more difficult. By the same token, as seen in (17), encumbrance to efficient crime prevention is also conceptualised as being loaded or burdened. In (16), we find the notion of a burden shaping the understanding of concurrent punishment, whereas in (19) all imposed sanctions are conceptualised as a burden that falls onto the shoulders of an offender and their family members. The example does not explicitly refer to a burden; however, its image is implicated by such expressions as *užgulti pečius* 'fall / lie onto the shoulders' and the expression

milžinišką svorį ‘with a huge weight’ which highlights the gravity of the imposed penal sanction.

In criminal justice discourse it is common to speak about the seriousness of punishments employing weight-related vocabulary, which has become highly conventionalised; however, the metaphor of weight in (19) is likely to have been used deliberately. This can be supported by at least two arguments: firstly, by the fact of obvious metaphor extension, i.e. metaphorical use of several linguistic expressions coherently and systematically representing the source domain (namely, ‘fall / lie’, ‘onto the shoulders’, ‘with huge weight’) as compared to other metaphors expressed mainly by adjective–noun collocates where the adjective denotes heaviness and the noun refers to a legal concept; and secondly, by the expression of the negative authorial stance towards strict criminalisation of drug-related offences in cases of trafficking of goods. In the original research article, the author focuses on the sanctions imposed for trafficking of goods in the light of the proportionality principle and argues that sentences and other penal sanctions imposed may be contradicting the proportionality principle and the general system of offences. Therefore, the extended burden / load metaphor in (19) is likely to have been used deliberately by the author in order to emphasise the (unfair) severity of certain statutory sanctioning provisions. Another instance of deliberate use of metaphor in the above-cited excerpts is example (16), in which the author's intended implication is signalled typographically, i.e. by the occurrence of the lexeme *naštas* ‘burden’ in inverted commas as a metaphor-signalling device²⁹.

In addition to weight-related metaphorical patterns, some metaphorically used lexemes realise physical senses pertaining to such qualities of objects as size, volume, width, and length:

- (20) [...] *maksimalus laisvės atėmimo **bausmės dydis** yra taip pat 10 m.* (LT67).
‘the maximum **size of the punishment** of deprivation of liberty (=the maximum length of the imprisonment term).
- (21) [...] *policijos ir bendruomenės bendradarbiavimas ne visada **sumažina nusikalstamumą*** (LT63).

²⁹ Metaphor signalling is currently an interesting field of inquiry in itself (see Skorczyńska & Ahrens 2015). Metaphor signals are also known as metaphor flags (Steen et al 2010), tuning devices (Cameron & Deignan 2003), and metaphorical markers (Goatly 1997).

- ‘cooperation between the community and the police does not always **reduce crime (rate)**’
- (22) [...] *sutrumpinti* laisvės atėmimo *bausmę* (LT51)
‘to **shorten** the **sentence** of imprisonment (=reduce the length of imprisonment)
- (23) [...] *nuosavybės teisės apimtį nepriklauso nuo* [...] (LT26)
‘the **volume** (=scope) of property **right** does not depend on [...]’
- (24) [...] *taking into account the nature and volume of crimes* (EN19)
- (25) [...] *race is not a significant predictor of imprisonment or sentence length* (EN26).
- (26) [...] *to fund work with short sentence prisoners to reduce their risk of reoffending* (EN20).
- (27) [...] *siejama su tais metais išplėsta administracine atsakomybe* [...] (LT49).
‘related to the **extended** administrative **liability**’
- (28) *situaciją galima išspręsti susiaurinus baudžiamąją atsakomybę* (LT43).
‘the situation can be improved by **narrowing** criminal **liability**’

Most of the above metaphorical patterns are very conventional and they systematically realise metaphors LEGAL SANCTION IS AN OBJECT (examples (20), (22), (24), (26)), TIME IS SPACE / LENGTH (examples (22), (25), whereas (23), (27) and (28) are instantiations of metaphorical treatment of rights and liabilities in terms as objects which, when their scope changes, become larger or smaller in volume or width.

Apart from being seen as objects which possess dimensional qualities, some legal concepts are objectified by mapping such qualities onto them as softness and hardness mostly expressed by adjectives which collocate with nouns denoting criminal conduct and punishments:

- (29) [...] *žymiai švelnesnė bausmė nei terminuotas laisvės atėmimas* (LT28).
‘considerably **softer** (=more lenient) **punishment** than fixed-term imprisonment’
- (30) [...] *vadinamieji švelnieji narkotikai* (LT54)
‘so-called **soft drugs**’
- (31) [...] *selling marijuana or hard drugs, being loud/rowdy in a public place* (EN26).
- (32) *Kokiu pagrindu atsakomybė turėtų būti švelninama* (LT54).
‘On what grounds **liability** should be **softened** (=mitigated)’
- (33) *They found that for "soft" crimes such as drug and weapon violations, Black individuals suffer from an unexplained arrest disparity* (EN26).

What becomes clear from these examples is that the conventional labelling of categories of drugs in English relies on the opposition between softness and hardness which metaphorically stand for effect or dangerousness of the substances, whereas in Lithuanian, the conceptual properties of softness and roughness³⁰ are attributed to a wider spectrum of legal concepts such as liability,

³⁰ Although in this dissertation no metaphorical patterns were identified with lexemes designating roughness, Lithuanian legal language contains numerous such expressions, e.g. *šurkštus*

punishment, violation of rules, etc. Like the previously-discussed opposition between weight and lightness which are associated with the extent of damage done by criminal activity and the sanctions imposed for it, here the opposition is created between physical properties of texture in which softness refers to lesser dangerousness while hardness is associated with danger of substances as well as criminal conduct. In language, the pairs of antonyms are used to classify and label these legal matters accordingly.

Furthermore, a large set of metaphorical patterns make use of metaphorically used lexemes which highlight such properties of objects as their ability to be handled, manipulated, transformed as well as destroyed. Such linguistic realisation of OBJECT metaphors was considerably more numerous in Lithuanian. Some of the examples of this metaphorical patterning include: *to break the law*, *to take the law into one's own hands*, *to drop a case*, *to handle cases*, *to clear a case*, *to cut crime*, *to reverse the law*, *to split a sentence*, *to take cases to trial*, *užtraukti atsakomybę* ('to draw / pull liability onto sb' (=to prosecute, to arraign)), *panaikinti atsakomybę* ('to delete / eliminate liability'), *laikytis įstatymo* ('to hold to / keep to (=observe) the law'), *pažeisti įstatymą* ('to damage (=break) the law'), *suvaržyti teises* ('tighten / screw (=restrict) the rights'), *atidėti bausmę* ('to put aside (=postpone) the punishment), etc.

Moving on to other features which are highlighted in the metaphorical structuring of legal discourse based on reification, some metaphorical patterns realise yet another property of objects, i.e. the fact that they are subject to sensory perception, mostly sight. Thus numerous metaphors in academic legal discourse were visually-evocative, e.g.: *to disclose assault*, *to observe cases / crime*, *to look at crime / cases*, *focus on crime*, *to see / view disorder*, *to review the law*, *to look at a sentence*, *vague law*, *pažiūrėti į bausmę* ('look at punishment / sentence'), *bausmės peržiūrėjimas* ('review of punishment / sentence'), *atskleisti nusikaltimą / veiką* ('reveal a crime / criminal act'), *apžvelgti veikas* ('to review criminal acts').

pažeidimas ('rough (=gross) violation'), *šurkštus nusizengimas* ('rough (=gross, flagrant) offence, violation') *šurkščiai pažeisti* ('to violate in a rough manner (=to grossly violate') etc.

Although reification typically takes place by metaphorically treating abstractions in terms of tangible objects, in academic legal discourse in both languages people may also be objectified. Consider several examples:

- (34) [...] *their role is simply to **place offenders** into appropriate interventions and to manage them through their sentence* (EN19).
- (35) *Ewing has **labeled officers** of this type as ‘supercops’* (EN16).
- (36) [...] *a **victim** as likely to be **placed** in a potentially lethal situation* (EN20).
- (37) [...] *siekti geresnių rezultatų, norint **pataisyti nuteistąjį*** (LT30)
‘to aim for better results in order to **repair** (=correct) the **offender**’
- (38) [...] ***įtraukiant nukentėjusįjį į jam nenaudingą sandorį*** (LT24)
‘**pulling** (=involving) the **victim into** an unprofitable agreement / transaction’
- (39) [...] ***traukti kaltininką baudžiamojon atsakomybėn*** (LT3)
‘pull the perpetrator / offender into criminal liability (=to prosecute the perpetrator)’

As can be observed in (34), (36), (38) and (39), perpetrators or offenders who are prosecuted or convicted as well as victims are seen as objects and the situations they are put into or find themselves in are metaphorically treated as containers. A different kind of objectification occurs in example (35) which features a conventional metaphor realised by the verb *to label* and instantiate a metaphor DESCRIBING / CHARACTERISING A PERSON IS LABELLING and A PERSON IS AN OBJECT / PRODUCT. Finally, in (37), the linguistic realisation of objectifying a convicted person via the lexeme *pataisyti* ‘to repair’ encodes metaphorical structuring of offenders as (defective) objects, criminal actions as defective / faulty objects and correctional measures as method of repair / fixing.

To move on with the analysis of other OBJECT metaphors, a rather pervasive object-related lexical unit found in metaphorical patterns in combination with different law-related nouns was the lexeme *form*. It was typically found in collocations that contained such legal lexis in Lithuanian as *smurtas* ‘violence’, *veika* ‘(criminal) act / activity’, *bausmė* ‘punishment’, *atsakomybė* ‘liability, responsibility’ and English law-related nouns *crime*, *delinquency*, *justice*, *victimization* and *violence*. Below are a few examples which instantiate the conceptual metaphor TYPE / KIND IS FORM:

- (40) *Psichopatiniais bruožais pasižymintys nusikaltėliai [...] gerokai dažniau naudoja įvairias **smurto formas*** (LT55).
‘Criminals who have psychopathic traits [...] considerably more frequently use different **forms** of **violence**’

- (41) *This article addresses a **form** of family **violence** which has remained largely invisible in policing, youth justice and domestic violence policy* (EN3).
- (42) [...] *baudžiamoji atsakomybė nėra vienintelė poveikio priemonė teisės pažeidėjai teisinės **atsakomybės formų** sistemoje* (LT3).
 ‘criminal liability is not the only penal sanction that can be imposed on the offender in the system of (different) **forms** of legal **liability**’
- (43) [...] *and promote instead a **form** of distributive **justice** that recognizes and responds to gender differences in the pursuit of equal treatment* (EN4).
- (44) [...] *or in the **form** of hate **crime** and exploitation by members of the host community* (EN25).
- (45) [...] *these behaviors evolve into more severe **forms** of **delinquency** during adolescence* (EN49).

While the noun *form* is conventionally metaphorically used to refer to the type of something, some metaphors instantiate mappings the source domain of which is a specific geometric shape, e.g.:

- (46) [...] *apimti kuo didesnį **ratą nusikaltimų*** (LT44).
 ‘to encompass as wide **circle** (=range, scope) of **crimes** as possible’
- (47) [...] *toks teisminis įstatymo aiškinimas, [...] išplečiantis neatsargių nusikalstamų **veikų ratą*** (LT14).
 ‘such judicial interpretation of the law [...] which widens the **circle** (=class, range) of negligent criminal **acts**’
- (48) *Based on the ‘**crime triangle**’ (i.e. motivated offender, opportunity and capable guardians), the propensity to commit offences is assumed and analytical focus is placed on ‘opportunity structures’* (EN13).

In (46) and (47), the noun *ratas* (‘circle’) is used in its conventional metaphorical sense to refer to a group of items that belong together, namely, offences and criminal acts that belong to a certain category such as negligent crimes (47). The notion of a *crime triangle* found in (48) is in fact a very specific metaphor that pertains to the field of environmental criminology and is also known as problem analysis triangle (Cohen & Felson 1979). The metaphorical notion of a *crime triangle* deals with three factors commonly discussed in crime problem analysis, namely, the offender, the victim, and the location. The idea is that crime occurs under three mandatory conditions which include the presence of a motivated offender, his / her presence in the same place as the target of the crime (objects for property crimes and people for personal crimes) and in the absence (or failure to act) of controllers (also known as capable guardians).

As can be seen from the interpretation of most common object metaphors, criminal law discourse relies on several metaphorically used lexemes related to geometry, namely lexemes signifying form, circle, and triangle. These findings

are in line with some other research carried out in the field who investigated the metaphoricity of legal reasoning and legal language. Having observed a shift from visually-evocative to aurally-evocative metaphors in American legal culture, Hibbits (1994: 229) contends that “we associate legal reasoning with the manipulation of visible geometric forms”, which holds true in the present research as evidenced from numerous geometry-related metaphorical patterns in the English and Lithuanian concordances.

Furthermore, a set of metaphorical patterns which instantiate OBJECT metaphors, derives from the domain of spatial relations. Such metaphors are realised in language through lexis which denotes relations between objects in space, distance and proximity, movement and position of objects in relation to verticality and horizontality, centrality and periphery, defined physical space and other aspects of physical existence of objects in space. Spatial metaphors are equally salient in research articles written by both the Lithuanian and English discourse community. The most common linguistic realisation of spatial metaphors is through prepositional phrases, e.g.:

- (49) ***Under** South Carolina law, sex offenders must agree that they “will not purchase, possess, or use [...] (EN35).*
- (50) [...] *jeigu savo pobūdžiu šie pažeidimai **pagal** galiojančius **įstatymus** neužtraukia baudžiamosios atsakomybės (LT54).*
‘if by their nature these violations **alongside** (=under) effective **laws** do not incur criminal liability’
- (51) [...] *teisingai įvertinti kaltinamojo veiksmus **pagal** atitinkamus BK **straipsnius** (LT23)*
‘to fairly assess the defendant’s actions **along** (=in accordance with) relevant **articles** of the CC [Criminal Code]’

In both example (49) and (50) the metaphorical patterns refer to compliance with the laws, which are expressed metaphorically via prepositional phrases which contain law-related lexemes. In English, the metaphor governing the conceptualisation of observing the law is expressed through the preposition *under* which instantiates the metaphor LEGAL CONTROL / POWER IS UP. Such metaphorical conceptualisation of power and control has been attested in both legal and non-legal discourses, as shown in abundant literature (see Lakoff & Johnson 1980: 15; Imamović 2013: 302–303; Kövecses 2010: 40; Larsson 2014: 615; Šeškauskienė *et al.* 2016; Winter 2001: 172–173, Winter 2008: 369, *inter alia*). The metaphorical conceptualisation of control on the basis of verticality

is rather conventional the vertical dimension is salient in perceiving hierarchical structures whereby the higher the layer in a hierarchical structure, the more power and vice versa.

While English clearly metaphorically structures legal power as being UP, in Lithuanian the interpretation of the metaphorical patterns found in (50) and (51) proved to be slightly problematic. Based on the definition provided in the DCL, the meaning of the preposition *pagal* is ‘along, near, alongside, beside (to refer to place)’, whereas the second sense is even less clear, i.e. ‘reference to direction’ (DLKŽ_e). DLL gives the following definition: ‘reference to a place towards which one moves’ (LKŽ_e). Both, the first sense which refers to a place and the second which also implies movement or direction suggest that in Lithuanian observing the law metaphorically relies on the source domain concept of a direction towards or movement along an object in space, thus it implies that Lithuanian gives preference to the horizontal dimension when conceptualising compliance with rules and laws, as reflected in (50) and (51).

Several other metaphorical patterns realised metaphors of opposition by the use of prepositions *against* and *prieš* in combination with legal nouns, cf.:

- (52) *Warrants that included the indicator of a **crime against** a child [...]* (EN48).
- (53) *prilyginamas bet kuriam kitam **nusikaltimui prieš** asmenį* (LT20).
‘equated to any other **crime against** a person’
- (54) *[...] those experienced in the field of **violence against** women* (EN2)
- (55) *Taip pat mažai duomenų apie **smurtą prieš** vyrus* (LT59)
‘Little data is available on **violence against** men’
- (56) *[...] fizinis **smurtas** turi būti **nukreiptas prieš** kitą žmogų* (LT35).
‘physical **violence** has to be **directed against** another person’

As can be seen from the examples above, criminal wrongdoing and violence are seen as being *against* children, men or women. Yet, the reading of the prepositions based on the dictionaries of contemporary English and Lithuanian suggests an intricate correlation between several meanings, namely, the spatial object-related meaning ‘in opposition to someone/something’ (MacmD_e), ‘touching or hitting someone/something’ (MacmD_e), another sense ‘in the opposite direction to the movement or flow of something’(LDCE_e) and ‘used to say who someone is competing with or trying to defeat in a game, battle etc’(LDCE_e). According to DCL, *prieš* means: a) ‘a place in front, from the

front'³¹; b) 'opposite the direction of movement'³², and c) 'opposition, contradiction'³³. Arguably, all the senses provided in dictionaries of contemporary Lithuanian are closely related and, possibly, overlapping. Based on the principles of MIPVU, an analyst should identify a basic meaning which provides the grounds to establish a perceived relationship between the contextual sense and the basic sense. However, the procedure is not always a straightforward or an easy one. For example, at least two definitions provided by contemporary English and Lithuanian dictionaries seem to be equally plausible in being more concrete than the contextual meaning of resorting to violence or committing criminal acts. Thus the above examples may give rise to at least two interpretations, namely: 1) use of violence (which may be both physical, psychological or otherwise) may be seen as being in physical opposition to the affected person; 2) use of violence may be seen as an enemy in a conflict or battle. Although *against* and *prieš* may be interpreted as lexemes which instantiate the source domain of a conflict, thereby suggesting a metaphorical conceptualisation of crimes and violence as enemies in a conflict or a battle, the physical spatial meaning cannot be underestimated either. In example (56), for instance, the lexeme *nukreiptas* ('directed') suggests that violence is treated as an object physically directed in opposition to the affected person / victim. Notably, other combinability patterns identified in the context of the use of violence and force also suggest that we tend to speak about it using lexis related to objects and their relational properties, e.g.:

(57) [...] *smurtas turi būti nukreiptas į nusikalstamos veikos aukos kūną* (LT35).

'**violence** has to be **directed towards** the body of the victim of a criminal act'

(58) [...] *the offender did not use physical force on his victim* (EN41)

Taking into consideration the concreteness of meaning (physical spatial meaning) which gives rise to a metaphorical structuring of crime, it seems reasonable to treat the above examples as cases of reification, whereby violence is perceived as a physical object directed against the affected persons. Yet, there is one more line of reasoning in interpreting these examples. (52) – (56) may

³¹ The original definition: 'vietą priekyje, iš priekio' (DLKŽ_e).

³² The original definition: 'priešingą judėjimo kryptį' (DLKŽ_e).

³³ The original definition: 'priešingumą, prieštaravimą' (DLKŽ_e).

be also interpreted as cases of metaphors which have a metonymic basis. Namely, since violence (especially physical abuse) typically occurs when the perpetrator and the victim are literally opposing each other and inflicting force encompasses physical actions directly affecting the victim's body but at the same time such violence may be accompanied by verbal, emotional and psychological abuse, it is reasonable to treat the examples above as both metaphoric and metonymic.

As can be seen from the above passages, concreteness of meaning and identification of *one* basic meaning which structures the metaphorical source-to-target mapping may sometimes be complex and challenging. Such cases of metaphoricity point at several factors of how more concrete meanings may give rise to metaphorical conceptualisation of abstract and complex phenomena such as violence or crime. Namely, it is evident that identifying one basic, i.e. concrete, physical meaning in a dictionary in order to reconstruct a metaphorical mapping may require consideration between several meanings which vary in their concreteness. For instance, the previously discussed cases suggest that while the spatial meaning of *against* / *prieš* is more concrete, easier to imagine, the conflict-related meaning, which is less concrete in comparison to the spatial one, may also be at play in the construction of metaphorical structuring of crime and violence. It is fair to argue, then that concreteness of meaning is a matter of degree which may give rise to different interpretations in determining which sense actually is at play in a metaphorical transfer. In addition, these metaphors are also suggestive of the fact that metaphors may be “multi-layered”. For example, the procedure of litigation is commonly conceptualised in terms of a conflict e.g.:

- (59) *Naujausiame EŽTT sprendime, priimtame byloje prieš Lietuvą* (LT46)
'the latest judgement of ECHR in the case **against** (=versus) Lithuania'

In the above case, the conflict metaphor is obvious based on the correspondence between the target and the source domains, i.e. litigation involves two sides which are “competing” against each other, cases are “won” or “lost”, etc. However, the physical spatial sense of *against* also suggests that while litigation is understood via the conflict scenario, in its turn, the

conceptualisation of a conflict rests on the metaphor of objects (or people) being in physical spatial opposition to one another. Thus the transfer of meaning from concrete to abstract in metaphorical structuring may be a result of a complex and multi-layered development of metaphorisation in which there is a chain of several meanings constructing each other going from the cline of most concrete to the most abstract.

Returning to the interpretation of OBJECT metaphors, a recurrent metaphorical model in academic discourse of both Lithuanian and English discourse communities is evoked by the tendency to speak about crime and law in terms of measurability. Since crime-related matters are constantly measured and numerous institutions attempt to control crime, violence, disorder, etc., such abstract notions are often described in terms of physical measurement and treatment of legal matters in terms of sizes, volumes, lengths, etc. Thus the common use of such expressions as *to measure arrest*, *reduction in crime*, *to measure disorder*, *volume of crime*, etc. Furthermore, a set of metaphorical expressions instantiating OBJECT metaphors are motivated by the source domain notions related to measurement and mathematics (geometry, to be precise) such as proportionality and symmetry. The notion of proportionality is particularly significant in the context of penal policy since the doctrine of proportionality is the underlying principle in allocating punishments which requires that a penalty be “proportionate” to the gravity of criminal wrongdoing. Consider several examples:

- (60) *Nusikalstamą veiką padariusiam asmeniui turi būti paskirta **proporcinga** ir teisinga **bausmė*** (LT28).
‘A person who committed a criminal act must be imposed a **proportionate** and just **punishment**.’
- (61) [...] *išvengti **nusikaltimo** ir **bausmės** **disproporcijų*** (LT28).
‘to avoid **disproportions** between **offense** and **punishment**’
- (62) [...] *reminding the courts of their duty to apply a penalty that is **proportionate** to the **crime*** (EN4).

In all three excerpts above, the concept of proportion structures the understanding of the procedure of allocating and imposing penalties in terms of (physically) measuring and calculating the seriousness / gravity of offences and the respective calculation of a just and reasonable sanction which needs to “match” or “counterbalance” the damage done by a criminal act. Such

metaphorisation creates a view that the effects of offences can be measured physically, and therefore, punishments imposed need to also be “weighed” against those effects in order to meet the criteria of fairness. In addition, what the proportionality metaphor suggests by way of analogy is that it is possible to establish some kind of “proportional” equivalence between the two distinct phenomena of criminal wrongdoing and punishment.

Furthermore, a related mathematical notion of *symmetry* was found to lend its cognitive properties to the construction of domestic violence as a target domain in the Lithuanian corpus, e.g.:

- (63) [...] *smurtas moterų ir vyrų santykiuose yra simetrinis, t. y. vyrai tampa smurto aukomis lygiai taip pat dažnai, kaip ir moterys* (LT59).
‘Violence in men-to-women relationships is symmetrical, i.e. men become victims of violence as often as do women’
- (64) [...] *vieni tyrėjai [...] teigia esant smurto „asimetriją“ bei kur kas didesnę vyrų agresiją moterų atžvilgiu, kiti kalba apie „simetriją“ arba vienodas vyrų ir moterų smurto proporcijas* (LT42).
‘some researchers [...] argue for the existence of the “asymmetry” of violence and a far greater aggression of men towards women, whereas others speak about the “symmetry” or equal proportions of violence between men and women.’

In the physical sense of the word, *symmetry* refers to the quality of something such as an object that has two halves that are exactly the same (MacmD_e). Thus when comparing the extent of abusive behaviour between men and women and finding that the extent is either the same or different, the concepts of physical symmetry and asymmetry become salient by invoking the view of violence in terms of a presumed physical object. It is interesting to note that although the metaphor is conventional (most dictionary entries of this lexeme include the metaphorical sense of the word), its use in (63) is clearly conscious and perhaps even deliberate on the part of the author, since it is marked by inverted commas as a metaphor-signalling device.

Differently from cases observed in the Lithuanian data, it was found that in English articles the notion of symmetry is employed in a very specific sense to refer to the extent of law applied to people of different social backgrounds. In other words, the symmetry metaphor is employed when referring to a criminological theory developed by Black (see Black 1976: 77–79) which claims that the police tend to be more punitive towards citizens who have a

lower social status or come from a marginal socioeconomic background. Consider the following example:

(65) [...] *law is less likely to be applied to individuals who are closer to the police. Therefore, Black's theory develops a hypothesis regarding social **asymmetry** between police **officers** and citizens* (EN33).

Notably, in order to comprehend the metaphorical use of the lexeme asymmetry in (65), the reader must have some knowledge of the theory and its fundamental tenets. With regard to the main functions of metaphor in science proposed by Boyd (1979 / 1993: 359), the metaphor in the above example can be said to serve a theory-constitutive function since it is instrumental in the context of Black's theory. All in all, since the range of lexis related to such physical properties as (dis)proportionality, (a)symmetry in combination with nouns related to law and crime is very conventional, such conceptualisation can be said to be integral to the discussion of criminological and criminal law issues and it is highly systematic with other OBJECT metaphors. However, as exemplified in (65), some uses of these metaphorical expressions are highly discipline-specific.

Most prevalent language-specific features of (non-specified) OBJECT metaphors

As has been shown in this section, both English and Lithuanian discourse communities make use of a variety of metaphors based on reification of abstractions. The most salient aspects of objects actualised in metaphorically structuring academic criminal law discourse in both languages were their dimensionality, the fact that objects are subject to destruction, impact, transformation, handling, etc. Thus numerous law-related matters can be handled, manipulated, seen, possessed, transferred, broken, acquired, measured, etc. It has been shown that lexemes denoting concrete meaning of such physical properties of objects as weight and lightness or softness and roughness may be crucial in constituting legal terminology to refer to criminal acts and sanctions imposed for them. Thus OBJECT metaphors create an internal systematicity in constructing the discourse of crime, criminal acts, their gravity in terms of heaviness while lightness metaphors systematically construct discourse about less dangerous criminal acts, less severe sanctions and

mitigating circumstances. In addition, some legal concepts are reified by using lexemes which signify spatial relations. The most prominent contrastive difference has been observed in the proportion of OBJECT metaphors in Lithuanian as compared to Lithuanian, in which reification is a dominant metaphorical model structuring legal discourse representing almost 70 percent of all metaphorical patterns identified in the corpus.

In addition to quantitative differences, some cross-linguistic properties of English and Lithuanian metaphors were also evident. While both English and Lithuanian refer to law in terms of measurable, tangible objects which may have a shape, colour, or other physical properties such as bulkiness, firmness or softness, flexibility, etc., Lithuanian has shown a significant preference for weight-related metaphors, mostly realised via metaphorically used adjectives, nouns, and verbs signifying weight, lightness, weighing, burden, etc. In addition, the analysis has also demonstrated that in Lithuanian preference is given to metaphor LAW IS A POSSESSION / PROPERTY, i.e. metaphorical patterns which encode metaphorical view of law as an object to be possessed, acquired, given, taken, transferred, etc. These metaphors were mostly realised via combinability patterns with verbs which denote possession, acquisition, taking, giving, etc. Furthermore, in Lithuanian there were considerably more metaphorical patterns instantiating metaphors related to measurement of numerous abstract law-related matters. Interestingly, reification in both languages was not only related to metaphorically structuring of abstractions, but also treating people in terms of objects.

As regards lexical diversity / variation, the metaphorical type-token ratio in OBJECT metaphors was considerably higher in English which this was determined by the fact that most metaphorical expressions (types) were represented by few tokens whereas Lithuanian contained numerous metaphorical types represented by particularly high numbers of tokens due to repetitiveness.

4.4.1.2. SUBSTANCE metaphors

Closely related to the OBJECT metaphor is a group of metaphorical patterns which employ the source domain of (CHEMICAL) SUBSTANCES. Previous metaphor studies have shown that the source domain of SUBSTANCES, especially LIQUID, is prominent in structuring the conceptualisation of issues related to economy and finance in which the concept of liquidity grounds some economic and financial terms across different languages (see Charteris-Black 2004: 135-169; Takahashi 2010; Silaški & Kilyeni 2011; Luporini 2013; Arrese 2015). In a similar vein, O’Connon (1998) reports that the discourse of finance and money is rich in metaphorically used lexis instantiating metaphors based on the source domains of LIQUID, GAS and SOLID. This study has also found numerous cases of substance metaphors which show that the knowledge related to substances, chemical reactions, and manipulation of substances in their different forms (solid, gas, liquid) may be useful in drawing parallels between the elements of the source domain of SUBSTANCE and a variety of legal concepts such as the composition of a crime / offense, communication between the police and the society, the gravity of a crime, and other legal issues. Table 11 below shows all the metaphorical patterns in English and Lithuanian which were classed as SUBSTANCE metaphors.

Table 11. Metaphorical patterns of SUBSTANCE in English and Lithuanian research articles

English	Types	Tokens / overall share (%)	mTTR	Normalised frequency /10,000 words
	46	230 / 13.09	20.00%	6.02
Metaphorical patterns (number of occurrences) <i>gun level (57); crime level / level of crime (37); level of violence (20); a sample of offenders (16); sample of cases (14); case processing (9); level of disorder (8); crime exposure (7); exposure to violence / violence exposure (6); a sample of officers (4); low-level disorder (3); low-level offense (3); processing of offenders (3); to expose X to violence (3); to interact with the police (3); alcohol-fuelled crime(3); crime element / element of crime (2); level of delinquency (2);; officers interact with X (2); interaction with the victim (2); police-citizen interaction (1); combined cases (1); crime seeps in (1); X is concentrated in X (1); to expose X to crime (1); combination of disorder and X (1); element of disorder (1); disorder's corrosive effect (1); expose X to delinquency (1); disorder's corrosive impact (1); interaction between disorder and X (1); matter of justice (1); law element (1); offender's interaction with X (1); level of offense (1); toxic offenders (1); composed of offenders (1); X mix with offenders (1); interaction with officers (1); X is composed of officers (1); officers are concentrated in X (1); interaction with the police (1); police amalgamation into X (1); neutral to the police (1); level of sentences (1); to interact with the victim (1).</i>				
Lithuanian	Types	Tokens / overall share (%)	mTTR	Normalised frequency /10,000 words
	25	403 / 6.30	6.20%	10.40
Metaphorical patterns (number of occurrences) <i>veikos sudėtis (224); nusikaltimo sudėtis (108); nusikalstamumo lygis (22); bylos medžiaga (11); nusikaltimų lygis (11); atsakomybės laipsnis (3); bausmės laipsnis (2); nusikalstamumo elementas (2); nusikalstamumo koncentravimas (2); prevencijos lygmuo (2); straipsnio sudėtis (2); įstatymo elementas (1); nuostata sąveikauja su X (1); nuostata nusistovi (1); nusikalstamumo terpė (1); nusikaltimo elementas (1); X absorbuoja nusikaltimus (1); prevencijos elementas (1); reaktyvi prevencija (1); teisių elementas (1); veikos elementas (1); veika susideda iš X (1); nusikaltimų kurstymas (1); sukurstyti veiką (1); nusikalstamumo sklaida (1).</i>				

As can be seen from the overall shares of this metaphor in English and Lithuanian corpora, SUBSTANCE metaphor was more prominent in the English corpus featuring 13.09% of all metaphors identified, whereas its share in the Lithuanian dataset was almost twice smaller, i.e. 6.30%. In addition, the lexical diversity of the linguistic realisation of SUBSTANCE metaphors was also higher in the English sub-corpus. The Lithuanian data, on the other hand, contained a noticeably higher number of metaphorical tokens of this mapping due to repetitiveness of some metaphorical terms.

As the study has shown, substance-related lexemes are most commonly employed in both languages by attributing different conceptual properties of substances (for example, toxicity, chemical composition, manipulation of substances, their measurement) to numerous legal issues. In such a view, measuring crime, violence or disorder is seen in terms of chemical substances

(such as liquids, for example). Therefore, we can metaphorically refer to crime, violence, and delinquency in terms of their *level*. In addition, since the concept of an offense in criminal law is based on a definition which includes some essential constitutive parts which metaphorically are often referred to as (chemical) elements, i.e. the conceptualisation of crime adapts the conceptual structure of chemical composition via metaphorical transfer. It is also common for authors of legal research papers to refer to certain notions (such as a legal case) in terms of substances that may be manipulated, e.g. *combined* or *processed*. Finally, we may find metaphorical patterns that draw a parallel between the effects of crime and violence and chemical properties of substances such as toxicity, corrosion or their ability to seep or settle (as in falling downward through the water).

Hence, the source domain of SUBSTANCE may lend to legal discourse different conceptual properties which are salient in highlighting different aspects of crime and law. However, shedding light on the linguistic realisation of SUBSTANCE metaphors in the English and Lithuanian samples reveals certain differences in the way the two discourse communities make use of this specific source domain in discussing criminal law and criminology issues. To reveal cross-linguistic similarities and differences of mappings based on the source domain of SUBSTANCE, this section further concentrates on shared metaphorical patterns and then proceeds to language-specific patterns.

SUBSTANCE metaphors: metaphorical patterns shared by English and Lithuanian

In both corpora, it is common to refer to the extent of crime, disorder, delinquency using the notion of a *level*. The MacmD_e provides at least two substance-related meanings of the noun:

- (a) ‘the amount of liquid that there is in a container, which can be seen by how high the liquid is’;
- (b) ‘the amount of a chemical in another substance’.

In both English and Lithuanian this lexeme is most productive in collocating with law-related nouns that refer to criminal activity, such as *crime*, *disorder*,

delinquency, offense, and violence in English and *nusikalstamumas* ‘crime rate’ and *nusikaltimas* ‘crime, offence’ in Lithuanian, e.g.:

- (66) [...] *than increased **levels** of actual **violence**, higher recorded rates can be as a result of [...]* (EN21).
- (67) [...] *resulting in neighborhoods with elevated **levels** of **delinquency** and **crime**.* (EN50).
- (68) [...] *young people involved in **low-level disorder** or exhibiting ‘at risk’ symptoms of crime* (EN9).
- (69) [...] *aukštas **nusikalstamumo lygis** paprastai būdingas miestų rajonams, kurie pasižymi didele etnine ir klasine gyventojų įvairove* (LT63).
‘high **level** of **crime** (=crime rate) is characteristic of those districts which are rich in ethnic and social class diversity’
- (70) [...] *gali susidaryti paradoksaliais situacijos, kai **nusikaltimų lygis** yra žemas, o gyventojai vis tiek jaučiasi nesaugūs* (LT59).
‘paradoxical situations may arise when **level** of **crime** (=crime rate) is low, while citizens still feel unsafe’

As can be seen in the above examples, such criminal law matters as crime, violence, delinquency are referred to in terms of liquid substances that can be measured which foregrounds a common practice of keeping crime-related statistics in observation and attempts to measure it so that its extent could be reported on, compared to previous crime rates so that relevant bodies keep track of such rates. Such metaphorical conceptualisation is based on a few features that liquid substances and such inherently negative forms of misconduct share, namely, different amounts / levels, ability to rise or fall, etc. Since the extent of criminality and disorder cannot be easily seen as a whole, the LIQUID metaphor helps perceive of crime and violence as if they were physically existing bodies of substance which can drop or elevate and be measured in units.

In the context of other metaphor studies, these findings resonate with Hanks’ (2006: 20) claim that particular rich sources of metaphor are words denoting types of physical locations, the sea being among them. Since we associate the word *level* with the sea (due to the prominence of the notion of *sea level*, which is often used as a benchmark in geographical measuring), this source domain is particularly productive when we deal with abstract and complex notions, especially when their measurement is significant. Crime is an abstract phenomenon which different crime prevention and crime control institutions constantly observe and try to “measure”. Therefore, the notion of a *level*

provides some of its salient cognitive features to the target domain of the extent of crime when measuring its extent in a neighbourhood, city, country, region, etc.

In addition to nouns which denote criminal conduct, the word *level* was found to be part of metaphorical patterns with the nouns *gun* (*gun level*) and *sentence* (*level of sentences*), and *offense* (*level of offenses*) whereas in the Lithuanian data one metaphorical pattern, namely, *prevencijos lygmuo* ‘level of prevention’ was identified. In the case of *gun level*, the metaphorical pattern relies on the conceptual domain of LIQUID SUBSTANCE to refer to the extent of gun ownership in a given area, whereas the expression *level of sentences* is grounded in the understanding of effectiveness of penalties in terms of a certain level that a substance reaches. In fact, the expression *gun level* could be interpreted as a metaphor which also has a metonymic basis³⁴ or as a case of metaphonymy (see Goossens 1990), i.e. the occurrence of metaphor and metonymy at the same time. What the phrase *gun level* refers to is the level of gun ownership rather than guns. So, the lexeme *gun*, by being part of the conceptual domain of gun possession / ownership, provides cognitive access to the whole domain via part-whole relationship. Metaphorical meaning in the expression, on the other hand, is signalled by the lexeme *level*, which evokes the image of liquid, i.e. body of water that reaches a certain physical / measurable level. Similarly, in discussing the effectiveness of crime prevention in Lithuanian, we rely on the notion of a metaphorical *level* in order to see how high / low it is.

It is important to note that the above metaphor relies on a few primary metaphors offered by Grady (1997: 75, 153, 172), namely, QUANTITY IS VERTICAL ELEVATION and MORE IS UP. Therefore, the extent or number of crimes is discussed in terms of a level which measures a particular height whereas the degree of effectiveness of crime prevention and penalties such as sentences may also be perceived in terms of a physical vertical measurement

³⁴ There is wide agreement among metaphor scholars that the relationship between metaphor and metonymy is particularly intricate and intertwined (see Barcelona 2003).

such as a level. As could be seen in the brief discussion above, the prominent cognitive feature in drawing a parallel between the level of a liquid (in a container) and the extent of crime, ownership of guns or effectiveness of preventive or correctional measures is the perceived potential to measure these phenomena as if they were physical, tangible and thus measurable.

Another group of SUBSTANCE-related metaphorical patterns identified in both corpora was the metaphorical use of the noun *element* in combination with a variety of nouns signifying legal phenomena. In English, three metaphorical patterns which involve this lexeme were identified in structuring the understanding of such target-domain notions as *law*, *disorder* and *crime*, whereas Lithuanian research articles contained more cases of metaphorical use of this source concept *elementas* ('element') in combination with such target domain lexemes as *law*, *crime*, *prevention*, *rights*, and *criminal acts*. Consider several examples below:

- (71) [...] *arrests of severe offenders are based more on **elements** of the actual **crime** they are arrested for, than on other factors* [...] (EN26).
- (72) [...] *some jurisdictions may be unable to assist where there is no criminal **law element** involved* [...] (EN13).
- (73) [...] *du recidyvinio **nusikalstamumo elementai** – pakartotinis suėmimas ir pakartotinis įkalinimas per 8 m. laikotarpį po paleidimo į laisvę* (LT66).
'two **elements** of recidivist **crime**, i.e. repeated remand/arrest and repeated detention during the period of 8 years after release'
- (74) *Neformali socialinė kontrolė laikoma vienu esminių bendruomeninės nusikalstamumo **prevencijos elementu*** (LT63).
'informal social control is considered to be one of the core **elements** of the community-based crime **prevention**'
- (75) [...] *žalos atlyginimas [...] yra civilinės **teisės elementas*** [...] (LT65).
'compensation of damage is an **element** of civil **law**'
- (76) [...] *mens rea (nusikalstamas sumanymas) yra būtinas nusikalstamos **veikos elementas** ir kartu su actus reus turi būti įrodytas* [...] (LT11).
'*mens rea* is a mandatory **element** of criminal **act** and together with *actus reus* it must be proven'

As defined by dictionaries of contemporary English, an *element* is 'a substance that consists of only one type of atom' (MacmD_e), or 'a simple chemical substance such as carbon or oxygen that consists of atoms of only one kind' (LDCE_e). Although the knowledge of chemistry may be varied among language users, the key conceptual aspect of a chemical element is that it is the smallest indivisible part and that it can make up other substances. This attribute of the source domain of SUBSTANCE is salient in metaphorically projecting it onto

such notions as crime which, by analogy, also consist of several elements that are essential in qualifying as crimes and criminal acts, as suggested in (71) and (76), or in qualifying as a certain type of criminal activity, as exemplified in (73) above.

It is important to point out that in criminal law the term *element* of a crime is one of the most important notions and has a distinct legal sense. In the context of criminal law, two essential elements of criminal offense are the so called *actus reus* (Latin for “a guilty act”) and *mens rea* (Latin for “a guilty mind”), which means that criminal behaviour is characterised by the above simultaneously occurring elements. In other words, evidence that both elements were present must be provided for a defendant to be convicted of an offense. So, the metaphorical sense of an element is part of the linguistic repertoire of criminal law. The understanding of a valid composition of crime rests on the principle of presence or absence of mandatory elements. It would be reasonable to maintain that the term *element* which exists in the discipline of chemistry has been adopted by the field of criminal law to acquire a new sense. This phenomenon is known as migration of scientific terms between disciplines (Muşat 2003: 327) which is especially relevant in the context of metaphorical terminology developing based on borrowing the existing terms and giving them new meaning(s) in a new discipline. From the point of view of the functions of metaphor, it serves the discipline-constitutive function with the metaphorical lexeme being a specialist criminal law term (cf. Boyd 1993).

Turning now to another set of metaphorical patterns shared by both English and Lithuanian, in both languages law-related phenomena are described in terms of their (chemical) composition. In English, this metaphor is linguistically signalled by the expression *to be composed of officers*, whereas in Lithuanian the noun *sudėtis* ‘composition’ and verb *susidėti* ‘to be constituted’ are found in metaphor-inducing expressions with such legal nouns as *nusikaltimas* ‘crime’, *straipsnis* ‘article’, *veika* ‘criminal act’. It is important to note that the Lithuanian corpus contained 224 tokens of the metaphorical pattern *veikos sudėtis* (‘composition of (criminal) act’) and 108 instances of the

pattern *nusikaltimo sudėtis* ('composition of crime' (=elements of crime) thereby accounting for over 80 percent of all SUBSTANCE metaphors in Lithuanian. In English, on the other hand, the lexemes *compose* / *composition* have only been found to be used metaphorically twice to refer to the make-up of a study sample that contains information collected about offenders and law enforcement officers who are metaphorically constructed as elements that make up the sample. Below are some examples:

- (77) [...] *the sample is **composed** of incarcerated sexual **offenders** who had been both charged and convicted* (EN41).
- (78) [...] *with these larger teams being **composed** of a much higher proportion of probationary **officers*** (EN10).
- (79) *Atskirti nusikalstamos veikos ir jos sudėties požymius taip pat nėra paprasta* (LT40). 'Distinguishing between the elements of a criminal **act** and its **composition** is also far from easy'
- (80) [...] *ypač svarbu laikytis įprastos teisinės technikos, kaip **straipsnio** ir **nusikaltimo sudėties** konstravimo, formulavimo, išdėstymo taisyklių* (LT13). 'it is very important to follow the rules of conventional legislative procedures such as the construction, formulation, and disposition of the **article** and composition of the offence (=elements of an offence).

As can be seen from examples (79) and (80), in Lithuanian research papers criminal act and crime are understood through CHEMICAL SUBSTANCE by borrowing its ability to make up another substance when combined. The metaphor emphasises the fact that the presence of all elements is mandatory must be proven in order for the accused to be convicted of a given offense. The conceptual elements of the source domain of CHEMICAL SUBSTANCE have been so pertinent in the understanding of the composition of crime that in Lithuanian the metaphor-based expressions *nusikaltimo sudėtis*, *veikos sudėtis* have become legal terms, hence their high density in the Lithuanian data. This confirms one of the claims of contemporary metaphor theory that metaphors are a rich source of meaning extension and development of scientific terminology (see Boyd 1993; Finatto 2010; Gledhill 2000) and numerous metaphorical patterns constitute a significant part of the lexical repertoire of field-specific terminology.

Another SUBSTANCE-related lexical unit used metaphorically to structure the understanding of criminal law matters in both corpora were the verb *to concentrate* / *to be concentrated* in English and noun *koncentravimas*

‘concentration’ in Lithuanian. In both languages this specific lexeme occurs in combination with target domain lexemes denoting crime, whereas in English it may also be projected onto a more specific domain of the distribution of officers in a given geographical area (82). Consider the following examples:

- (81) [...] *crime is **concentrated** both geographically in certain areas [...]* (EN17).
- (82) *Police **officers** are often **concentrated** in high crime areas, particularly when violent crime is rampant* (EN37).
- (83) [...] *seniai pastebėtas **nusikalstamumo koncentravimas** mieste teritorijose* (LT59).
‘**crime concentration** it has long been observed to occur in urban territories’

In examples (81) and (83), the extent of crimes in certain geographical areas is metaphorically referred to via the noun *koncentravimas* (‘concentration’) in Lithuanian and the verb *to concentrate* in English which bears a basic meaning of ‘the amount of a substance contained in a liquid’ (LDCE_e). Similarly, example (82) contains a conventional metaphorical expression that draws a parallel between gathering officers together to an area and making a substance less dilute. In the case of the officers’ concentration in a particular geographical region, the metaphorical mapping is enabled by the fact that a greater number of officers in a concrete geographical area is analogical to the greater abundance of a chemical constituent that makes up the total volume of a given chemical substance. A similar analogy works in the understanding of the extent of crime that exists in a given area which is implicitly construed as mass concentration of a chemical mixture, i.e. a density of a certain chemical component.

To proceed with the shared metaphorical patterns that instantiate the source domain of SUBSTANCE, both languages contained metaphorical expressions that contained law-related nouns and the verb *to interact* in English and its equivalent *sąveikauti* in Lithuanian. The English data also included metaphorical patterns with a related noun *interaction*. From a cross-linguistic point of view, English was more prone to rely on this notion in the conceptualisation of such target-domain notions as the officers’ communication with the public or the victims, whereas Lithuanian only contained one metaphorical pattern with the verb *sąveikauti* which was used to refer to the way legal provisions interact with the definitions of criminal acts provided in the Criminal Code, e.g.:

- (84) *How a police **officer interacts** with a witness is important* (EN16).
- (85) [...] *higher levels of force will be used by **police** when **interacting** with suspects* (EN33).
- (86) [...] *galime savęs paklausti, kaip ši **nuostata sąveikauja** su įvairių nusikalstamų veikų definicijomis* (LT1).
 ‘we can ask ourselves how this **provision interacts** with the definitions of different criminals acts’

MacmD_e provides two definitions of the verb *to interact*. One refers to people’s communication with one another and reacting to one another, often while performing something together, whereas the second has to do with the way two things (such as gases, as suggested by the example provided in the definition entry³⁵) interact and affect one another. Examples (84) and (85) above, clearly, are related to communication which may involve many rather abstract elements such as using language, exchanging and sharing information, news, ideas, using non-verbal communication, etc. Interaction between two things or substances, on the other hand, is much more tangible, easier to imagine and therefore, easier to draw on in conceptualising communication. As defined by the MacmD_e, interaction refers to ‘the process by which different things affect each other or change each other’. Therefore, a key aspect of interaction in terms of chemistry is a reciprocal effect that often is physical and concrete. Similarly, communication between the police and a witness has effect on both parties and leads to some outcome such as exchanging information, asking for and providing for significant details related to a case, building trust, etc.

As regards example (86), it deals with the way a certain legal provision is related to the definitions of certain offences provided in the Criminal Code and the way law researchers and practitioners should interpret the composition of particular crimes. The understanding of the interrelation between legal definitions of crimes therefore also relies on the way things/substances affect one another, based on the definition provided by the *Dictionary of Contemporary Lithuanian* (hereafter, DCL_e). Although the definition does not indicate if the entities affecting each other are animate (related to people) or inanimate (related to objects and substances), the physics-, chemistry-, and,

³⁵ The sentence provided as an example is as follows: *Researchers want to know how these gases interact* (MacmD_e).

sometimes, nature-related meaning is in this thesis interpreted as being more concrete, easier to imagine and therefore providing the conceptual basis for the understanding of a less delineated and more abstract notion of interrelatedness between/among legal provisions and definitions of crimes.

Such conceptualisation may be explained by the fact that a body of laws and principles laid down in them are very complex and the notions discussed in written laws are interrelated in multiple ways. The interpretation of written laws, especially, when applying them in a specific case is far from arbitrary and straightforward, and it is important to understand complex links between legal provisions and to interpret them adequately. On the one hand, the understanding of such links is facilitated by the metaphor that draws on the notion of physical or chemical interaction between objects and substances. On the other hand, such metaphorisation may also suggest an (over)simplified view of legal provisions and their internal coherence by treating them as interacting substances/objects and thereby shifting the attention away from the fact that the laws are written and interpreted by people.

To proceed with shared metaphorical expressions related to the source domain of SUBSTANCES, legal phenomena may be viewed as *matter* in English and *medžiaga* ‘matter, substance’ in Lithuanian, e.g.:

- (87) [...] *teismas remdamasis bylos medžiagos duomenimis* [...] (LT3).
‘the court, relying on the evidence of the **matter** of the **case** (=case file)’
- (88) [...] *sufficient evidence to argue that it is wrong, as a **matter** of justice and of policy* [...] (EN15).

The basic physical sense of the noun *matter* is ‘a particular type of substance’ (MacmD_e). A legal case, on the other hand, is a more abstract notion that refers to both trial and ‘an aggregate of facts which furnishes occasion for the exercise of the jurisdiction of a court of justice’ (*Black’s Law Dictionary*, hereafter, BLD). Since the hearing of a case, especially in a codified legal system, relies to a great extent on written laws and a number of facts are presented in reports that the court must analyse, all the documents may collectively be considered as *matter* that makes up a physical body. Similarly, the notion of justice is even more abstract, i.e. it refers to ‘the legal process of judging and punishing

people' (MacmD_e). Its understanding therefore becomes slightly more accessible and easier-to-comprehend when we deal with issues related to justice by metaphorically seeing them as substances, tangible and perceivable by senses.

In sum, both discourse communities share some of the elements in borrowing the elements from the source domain of SUBSTANCE to construct the discourse of criminal law and criminology. Namely, both English and Lithuanian linguistically realise the source domain of substance by lexemes which allow the reconstruction of the source domain of LIQUID SUBSTANCE (in a container) which provides a view of crime, violence, disorder as measureable and manipulatable. In addition, the understanding of criminal act / offence in both languages is construed metaphorically in terms of chemical composition thereby emphasising the complex composition of the offences that are constituted by certain essential elements of crime. A few other properties of chemical substances have been pervasive in the conceptualisation of crime and law, namely concentration and chemical interaction. Other metaphorical patterns motivated by the source domain of SUBSTANCE were instantiated by different lexical means in the two datasets, therefore this work proceeds by discussing English- and Lithuanian-specific metaphors separately.

English-specific metaphorical patterns

The most notable tendency observed only in English was metaphorical conceptualisation of legal cases, officers and offenders in terms of a *sample*, the basic meaning of which is “a small amount of a substance that is used for scientific or medical tests” (MacmD_e). Consider the following examples:

- (89) *In recent research that examined samples of **cases** involving only adult victims, findings indicated that [...]* (EN30).
- (90) *[...] used in this study with other samples of **offenders** to validate, and increase the reliability of, these findings* (EN41)
- (91) *[...] related to organizational commitment in a sample of police **officers*** (EN37).

In all three excerpts above, an analogy is drawn between an amount of substance used for testing and the amount of data collected, processed, analysed in a scientific legal study. The metaphorical meaning of the noun *sample* to refer to a group of people who are used for getting information for research is

conventional and draws on the resemblance between them and an amount of a substance tested and a collection of data about the target group in question. Such a pattern of metaphorisation may be suggestive of the fact that in reporting on studies that deal with less tangible data we tend to implicitly present research material as if it were a piece or a unit of tangible substance / matter.

Furthermore, several cases in the English research articles refer to crime and violence as dangerous substances that may affect the society as an organism. This metaphorical conceptualisation was signalled by the verb *to expose* and the related noun *exposure*, e.g.:

(92) [...] *calculate the likelihood that they may be exposed to **crime*** [...] (EN21).

(93) [...] *police officers are profoundly affected by their exposure to **violence** and the traumatic events* [...] (EN37).

In both examples the metaphorical meaning is generated by the tension between the physical sense of the underlined words with abstract law-related nouns. Based on the metaphorical mapping CRIME / VIOLENCE IS DANGEROUS SUBSTANCE, the metaphor brings to light the detrimental character of these forms of misconduct since both exposure to some substances and criminal behaviour inevitably result in bringing about negative outcome on the part of the affected entity. It is important to acknowledge, on the other hand, that the interpretation of this lexical unit as signalling the occurrence of the source domain of SUBSTANCE is closely connected (and, possibly, overlapping) with the source domain of an OBJECT. According to OED_e, *exposure* is “the state of having no protection from something harmful” which is exemplified by the following sentence: ‘the dangers posed by exposure to asbestos’. One of the basic physical senses of the verb *to expose* is “to allow something that is usually covered or hidden to be seen” (MacmD_e). The two meanings indicate that another reading of the metaphor could be that it is based on the source domain of an OBJECT. However, it may be argued that due to the negative effects that both chemical substances and crime, violence and related wrongdoings share plays a crucial role and provides sufficient basis to treat such cases as signalling SUBSTANCE metaphor which is coherent with the system of other aspects

related to substances and chemistry which are mapped onto legal issues. However, the overlap between the domains of OBJECT and SUBSTANCE is obvious and by all means acknowledged in this dissertation, which is why both are subsumed by the generic metaphor LAW IS AN OBJECT / SUBSTANCE.

To proceed, the English data demonstrated that disorder might be metaphorically referred to as having a *corrosive* effect. According to MacmD_e, “a corrosive substance contains chemicals that can cause damage”. Based on this definition, disorder may be perceived as having damaging effects on the society and its well-being thereby emphasising its harmful character and the need to take measures against such consequences. Like physical substances and materials affected by corrosion, i.e., a society exposed to high levels of disorder is likely to suffer from deterioration, or lack of security and safety, as illustrated in the examples below:

(94) [...] *attributable to **disorder’s corrosive impact** on social mechanisms of social cohesion* [...] (EN40).

(95) [...] *through **disorder’s corrosive effect** on shared expectations for control* (EN40).

Another property related to chemical substances which has been transposed onto legal notions in English is *toxicity*. More precisely, one research paper contained the metaphorical conceptualisation of offenders attributing to them the property of being poisonous, which typically is a quality of chemical substances. Consider the following example:

(96) [...] *particular types of ‘rehabilitative offenders’ will be courted while **‘toxic offenders’** will be cast aside* (EN45).

Clearly, the most salient perceived similarity of the target and the source domain in the above example is the negative and dangerous effect that both toxicity and criminal activity exert. Essentially, toxicity has to do with the extent to which a given substance may damage an organism (MacmD_e). Since the society is commonly conceptualised as a living being or an organism, by means of extension, the adjective *toxic* may be used to refer to the damaging effects on more abstract and complex entities such as society. However, what such metaphorical rendering also leads to is dehumanisation of offenders and metaphorically treating them in terms of toxic waste. It is important to note, on the other hand, that it is not the offenders themselves that are described as

having properties of toxic substances but rather their conduct, effect of their (criminal) actions and more general consequences of offensive behaviour. With regard to metaphor use, the toxicity metaphor is likely to have been used deliberately by the author of excerpt (96) since the inverted commas are definitely meaningful and, to the least, show the awareness of metaphorical language use. Besides, the metaphorical pattern is only represented by a single token which also allows judging the possibility of the metaphorical pattern to be an example of deliberate metaphor use.

To carry on with English-specific metaphorical patterns, another tendency observed was the use of substance-related lexis that denotes some kind of manipulating substances, signalled by such lexemes as *processing*, *to combine*, *to mix* and *amalgamation*, e.g.:

(97) [...] *victim credibility influences **case processing**, attrition, and outcomes* [...] (EN30).

(98) *Photographs increase case filing by an additional 60 percent for **combined misdemeanor and felony cases*** (EN16).

(99) [...] *how non-offenders might be affected by **mixing** with **offenders*** [...] (EN4).

(100) [...] ***police amalgamation** into a Police Service for Scotland in 2013 is a point of interest* (EN10).

In (97) the process of cases going through the courts and trials is seen in terms of processing a substance, whereas handling all cases that qualify as misdemeanour and felony in one unit (98) and coexistence/presence of non-offenders with offenders (99) are conceptualised as uniting substances to make a chemical compound. Finally, reorganising an institution such as the police into a new body may also be seen as amalgamation (100), i.e. mixing substances such as metals to form a new substance. Since mixing tangible substances, processing them is easy to imagine and people tend to have some hands-on experience of doing that, it works as a useful source of knowledge to draw on in conceptually dealing with such abstract notions as reorganisation of institutions, or discussing / considering several cases as a whole.

The remaining English-only metaphorical pattern is related to the chemical condition of neutrality, e.g.:

(101) [...] *respondents who are **neutral** to **police** and those who* [...] (EN27).

The underlined noun has a primary meaning that has to do with the chemical condition of neutrality which gives rise to the metaphorical understanding of being indifferent or having no opinion about something as chemically qualifying as a neutral substance (neither acid, nor alkali). The metaphorical sense of neutrality to refer to the lack of feelings or opinions about something is highly conventional and its degree of metaphoricity is minimal.

Finally, crime in English research articles was found to be conceptualised as a liquid that can *seep in*, similarly to liquid substances that can flow or ooze slowly through holes or some other gaps into an area. Consider the following example:

(102) [...] *fear is what paralyzes a disorder-entrenched community and allows **crime** to seep in* (EN40).

The excerpt deals with the link between disorder and crime which are inherently negative phenomena. Similarly, the meaning of the verb *to seep* evokes a negative connotation since it means leaking into or out of something when this should not happen (MacmD_e). The metaphorical conceptualisation is based on such salient aspects of liquid as a source domain as its ability to leak and thereby cause damage to the area it reaches. The overall negative overtone of the sentence is also strengthened by the metaphorical use of the verb *to paralyse* in reference to an entrenched fear of crime. The metaphorical expression is rather unexpected and represented by a single instance. In addition, the excerpt is characteristic of the overall negative evaluation of fear as a cause of letting crime spread in the community. Therefore, it may be argued that this metaphor has been used deliberately by the author to highlight the seriousness and danger of the potential scenario of how fear, disorder, and crime might affect the community.

This section has focused on English-specific metaphorical patterns that instantiate the source domain of SUBSTANCES and has revealed that English data displayed a greater lexical variation of this metaphor in comparison to Lithuanian. The majority of metaphorical patterns instantiating the source domain of SUBSTANCE are highly conventional metaphorical expressions;

nevertheless, some metaphors, mostly represented by single instances, were rather novel and, potentially, were used deliberately for emphasis or expression of evaluative stance.

Lithuanian-specific metaphorical patterns

This subsection focuses on those metaphorical expressions that were only identified in the Lithuanian dataset in constructing legal discourse through the source domain of SUBSTANCE. Only four such metaphorical tokens were found. One of the properties that substances have is their temperature, typically expressed in terms of *degrees*. This property can be mapped onto criminal law notions of penalties and liability, as in the following examples:

- (103)[...] *tam tikras kaltės įrodymo laipsnis lėmė* [...] *tam tikro laipsnio baudmę* (LT39).
'a certain degree (=level) of the proof of guilt determined a certain **degree** of **punishment**'
- (104)[...] *kildavo probleminių klausimų dėl kaltininko atsakomybės laipsnio tais atvejais, kai* [...] (LT34).
'issues regarding the **degree** (=extent) of a defendant's **liability** would arise in cases when [...]'

As noticed in some other previously discussed metaphorical expressions, the metaphorical use of the noun *laipsnis* ('degree') implicitly constructs the understanding of criminal liability and penalty in terms of substance that has measurable temperature. Over time, the noun *degree* has obtained conventionalised metaphorical meanings to refer to intensity, amount, level or extent of something (OED_e) that is less concrete than temperatures. When categorising or qualifying such phenomena as penalties in terms of their harshness and strictness (103) and liability in terms of its extent (80), there must be a way of measuring these things. Since the notions of punishment and, even more so, of liability are abstract and complex, measuring their strictness, effectiveness or extent is not easily comprehensible. Measuring temperature, on the other hand, is much easier to imagine since in our environment we have special equipment to perform such a function. Therefore, temperature and its measurement in terms of degree(s) is conceptually much more accessible and comprehensible; therefore, as a source domain, it can lend some properties to much more abstract and complex notions in criminal law. Since qualifying such legal matters as guilt, negligence and classifying crimes into different categories

according to the degree of guilt³⁶ is of crucial importance in (criminal) law and has direct consequences to the type of liability incurred and the type of penalty imposed, the metaphorical use of the term *degree* provides a view of these matters as concrete and having measurable properties such as temperature.

The discussion above shows that the understanding of criminal law concepts may be facilitated by borrowing some aspects of the source domain of temperature as a feature of chemical substances which is linguistically realised via contemporary senses of lexemes the meanings of which are related to substances and their chemical properties. Metaphor identification and attribution of metaphorical patterns to instantiate a specific source domain in this study was performed based on the principles of MIPVU which requires consulting usage-based contemporary dictionaries of English, such as MacmD_e. However, a closer look at the etymology of the meaning of the word *degree* shows that the word acquired the sense related to temperature later than the phrase “degrees of crime” was noticed to be used. According to the *Online Etymology Dictionary* (OED_{etym}³⁷), the noun derives from the Old French *degré*, which refers to “a step (of a stair)”, which had come from Latin *degradus* (‘a step’). Whereas the meaning of “a grade of crime” occurred in the 1670s, the chemistry-related meaning “a unit of temperature” occurred in 1727. Based on this knowledge, it is not difficult to reason that the verticality of the steps of a stair and the common design of thermometers that have a vertically designed scale to show degrees are closely linked through a metonymic relationship where the scale represents the degrees or temperature. In addition, the vertical representation of an increasing temperature is directly related to the primary metaphor MORE IS UP, since a rising red liquid in a thermometer

³⁶ These legal notions are also often referred to in terms of *degrees*, e.g. the system of *degrees of crimes* is used in many jurisdictions as a division or classification of one specific crime into a few grades of guilt, in accordance with the circumstances attending its commission. For examples, there are many jurisdictions that have *first degree* and *second degree* murder and other crimes qualified in terms of degrees. Similarly, *degrees of negligence* are different grades that govern the liability of persons and separate distinct categories of negligence such as ordinary and gross negligence (BLD: 221).

³⁷ To avoid confusion between reference to the Oxford English Dictionary of and Online Dictionary of Etymology, the former is abbreviated OED_e and the latter OED_{etym}.

column shows higher temperature or indicates that there is more heat. Hence, this source domain scenario is used systematically in representing a larger extent of liability or more harshness / strictness of a punishment.

Two other properties of liquid SUBSTANCES that are metaphorically attributed to criminal law are their ability to settle, signalled by the verb *nusistovėti* ('to settle') and the ability to absorb (liquid) substances, signalled by the verb *absorbuoti* ('to absorb'), e.g.:

(105) *Lietuvos Aukščiausiojo Teismo jurisprudencijoje nusistovėjo nuostata, kad "jei BK straipsnio sankcija numato tik laisvės atėmimo bausmę, pavyzdžiui, už kolaboravimą (BK 120 str.), skirti bausmę, nesusijusią su laisvės atėmimu, galima tik nustačius švelnesnės, negu įstatymo numatyta, bausmės skyrimo sąlygas (BK 62 str.) arba kai BK straipsnio sankcijoje numatytos bausmės paskyrimas aiškiai prieštarautų teisingumo principui (BK 54 str. 3 dalis)"*(LT28).

'A **provision** has **settled** in the jurisprudence of the Supreme Court of Lithuania that "if the sanction of an article of the Criminal Code only stipulates punishment by imprisonment, as in the case of collaboration (Art. 120 of CC), for example, imposition of a penalty other than imprisonment is only possible in the presence of the conditions which allow for the imposition of a more lenient penalty than provided for by the law (Art. 62 of CC) or where imposition of the penalty provided for in the sanction of an article is evidently in contravention to the principle of justice (Section 3 of Art. 54 of CC)"

(106) *Sociologija [...] nesunkiai absorbuoja nusikaltimus kaip vieną, nors ir specifinį, „žmonių socialinio gyvenimo“ arba socialinės sąveikos elementą* (LT55).

'Sociology [...] easily **absorbs crimes** as one (though a very specific one) of the elements of "human social life" or an element of social interaction'

The basic physical sense of *nusistovėti* ('to settle') has to do with such substances as dust, sand or any sediment and denotes their falling down through the air or water until it reaches the ground or bottom of something. The verb has an extended conventional meaning of gaining stability, becoming a norm, or establishment. Example (106) contains a metaphorical conceptualisation of a specific discipline, i.e. sociology as a liquid-absorbing material whereby specific issues of subjects the discipline deals with (such as crimes) are seen as liquid, moisture or a similar substance. In both examples the source domain of LIQUID SUBSTANCE offers different conceptual aspects that are helpful in drawing parallel between the target domains of a legal provision (example (105)) and crimes as being the object taken up by sociology (example (106)).

As regards major cross-linguistic tendencies observed in the way SUBSTANCE metaphors occur in conceptualising the law, the clearest trend observed is the

lexical variation of this metaphor which has been richer in English as compared to Lithuanian. In quantitative terms, both English and Lithuanian make extensive use of LIQUID metaphors which allow treating crime, delinquency, disorder and other issues in terms of liquid substances such as mass of water whose levels can be measured and observed. Language-specific realisation of LIQUID metaphors, on the other hand, reveals more interesting interlingual variation in English and Lithuanian. Thus while English makes use of a specific notion of *seeping in* to describe crime which spreads in a neighbourhood; Lithuanian makes use of the liquid-related notion of *settling* to conceptualise legal provisions and rules and the notion of *absorption* in a specific context of sociology which is said to absorb crimes into its scope of research. In addition, while both languages make considerable use of chemistry-related notions, English has shown greater lexical variation in encoding such metaphors by making use of such metaphorically used substance- and chemistry-related lexemes as *corrosion*, *toxicity*, *amalgamation*, *processing*, *mixing*.

4.4.1.3. CONTAINER metaphors

As briefly discussed in Chapter 2, among the most common image schemas on the basis of which we conceptualise different abstract phenomena is the image schema of physical containment or a CONTAINER schema which has three integral elements, namely a *boundary* which distinguishes an *interior* from an *exterior* (Lakoff 1987: 271). The pre-conceptual knowledge structure of containment and boundedness develops from such experience as being aware of our bodies as containers into which we put things such as food, air and things that our bodies contain such as internal organs, blood, etc. As Lakoff puts it, “we are physical beings, bounded and set off from the rest of the world by the surface of our skins, and we experience the rest of the world as outside us. Each of us is a container, with a bounding surface and an in-out orientation. (Lakoff & Johnson 1980: 29). In addition, we also experience containment by being in and out of different bounded spaces such as rooms, buildings, vehicles, and even clothes. Manipulation of objects and substances by putting them into and out of containers such as boxes, cups, bags also contributes to the formation

on the basic pre-conceptual knowledge structure of containment (Johnson 1987: 21–22; Johnson 2007: 852).

The results of this dissertation have shown that numerous law-related concepts are conceptualised by relying on the source domain of a CONTAINER. Table 12 below presents the range of metaphorical expressions that are a linguistic realisation of CONTAINER metaphors.

Table 12. Metaphorical patterns of CONTAINER in English and Lithuanian research articles

English	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	29	166 / 9.57%	17.46%	4.34
Metaphorical patterns (number of occurrences) <i>in case(s) (108); in justice (7); in delinquency (6); in the police (5); in officers (4); in probation (4); in offense (3); to remove cases from X (2); to get / keep X out of crime (2); pathway into crime (2); within justice (2); in law (2); outside law (2); in sentence (2); to get back into drugs (1); in assault (1); cases contain X (1); to open a case (1); to close a case (1); to propel X into crime (1); in drug (1); to get into drugs (1); to be into drugs (1); outside justice (1); X contains offenses (1); outside probation (1); removal of a sentence (1); X in violence (1); X contains violence (1).</i>				
Lithuanian	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	42	332 / 5.18%	12.65%	8.65
Metaphorical patterns (number of occurrences) <i>(pa)traukti baudžiamojon atsakomybėn (101); iš nuteistojo (33); kodekso papildymas (20); papildyti kodeksą (18); straipsnio turinys (16); gauti / turėti naudos iš veikos (16); (pa)traukimas baudžiamojon atsakomybėn (15); iš kaltininko (11); iš nusikaltimo (11); straipsnio papildymas (9); veikos turinys (7); įstatymo turinys (7); iš įstatymo (7); nuostatos turinys (6); iš bylos / bylų (4); bylos turinys (4); perkelti X į kodeksą (4); papildyti straipsnį (4); perkelti X į teisę (4); įstatymo papildymas (3); papildyti įstatymą (3); nusikaltimo turinys (3); įtraukti X į kodeksą (3); dėti X / patekti į įstatymą (2); įstatymo turinys (2); patekti į straipsnį (2); teisės turinys (2); atsakomybės turinys (1); grąžinti X į kodeksą (1); X perkėlimas į kodeksą (1); įtraukti nukentėjusį į X (1); įsitraukti į nusikaltimą (1); įsitraukimas į nusikaltimą (1); įtraukti X į prevenciją (1); įtraukti X į straipsnį (1); perpildytas straipsnis (1); pereiti į teisę (1); patekti į teisę (1); įsileisti X į teisę (1); teisių turinys (1); įsiskverbimas į teisę (1); atviras smurtas (1).</i>				

As can be inferred from the table, CONTAINER metaphors were slightly more prevalent in English in comparison to Lithuanian. Namely, this class constitutes almost ten percent of all metaphorical expressions in English and slightly over five percent in the Lithuanian data. As far as linguistic realisation is concerned, while in the Lithuanian sub-corpus CONTAINER metaphor was expressed by a higher (raw) number of metaphorical types (42 as compared to 29 in English), the type-token ratio indicates that the lexical expression was slightly more varied in English research articles. The higher overall frequency of CONTAINER metaphors in Lithuanian was determined by the fact that almost one third of

the class in Lithuanian consisted of 101 tokens of the expression *patraukti X baudžiamojon atsakomybén* ('to incur criminal liability onto sb; lit., 'to pull someone into criminal liability') which is a strictly formulaic expression that makes up a conventionalised legal term. In English, on the other hand, two thirds of the whole CONTAINER metaphor class are constituted of the 108 tokens of the collocation *in case(s)*, which realise the conceptual metaphor (LEGAL) CASE IS A CONTAINER. Other metaphorical patterns were not as numerous, especially in English research articles.

The most salient aspect of containment that has been realised in metaphorical mappings is that of the interior. As seen from the above table, the linguistic expression of CONTAINER metaphors in English is restricted to metaphorical mappings realised through propositional phrases with *in, into, within, out, outside* and other lexis denoting openness, closeness, containment, movement into and out of a container, e.g. *to remove sth from sth, removal of sth from sth, to open, to close, to contain*. In Lithuanian, containment is expressed mainly through prepositional phrases with *į* 'into' and *iš* 'from, out of', the legal expression *(pa)traukti atsakomybén* (lit. 'to pull into liability'), verbs *(pa)(per)pildyti* 'to (over)fill, supplement' *į(si)traukti* lit. 'pull oneself into', *patekti* ('get into, find oneself in') *perkelti, pereiti, patekti, įsileisti, įsiskverbti* and nouns *turinys, papildymas, įsitraukimas*.

It is important to observe that the analysis of prepositions in determining metaphorical meaning posed significant challenges in the present analysis which is a serious issue for numerous metaphor analysts. The core of the issue is the fact that in comparison to other lexemes, prepositions carry less semantic content (see Deignan 2005: 50). Nacey (2013: 207) observes a similar difficulty in approaching this word class in metaphor analysis. She states that "prepositions constitute one of the most notorious word classes to deal with when it comes to metaphorical analysis." A related challenging issue that occurs in metaphor analysis is identifying the basic sense of a preposition which helps understand the target domain item, which is particularly relevant when relying on the principles of MIP(VU) (Pragglejaz 2007; Steen et al 2010a). The

protocol requires identify *one* basic meaning of the word, whereas sometimes more than one can be interpreted as equally fitting in providing a conceptual link in understanding the target domain concept by way of comparison (for more on this issue see Badryzlova et al 2013a, 2013b; Urbonaitė 2015b). To a certain extent, then, some cases of analysing metaphors through prepositional patterns are a matter of individual analysts' interpretation and require collaboration of a number of analysts to reach analyst agreement. Unfortunately, this study was unable to involve more analysts due to the wide scope of data analysed and limited time space allocated for completing the study.

The container image schema in Lithuanian data was most frequently mapped onto such legal concepts as criminal liability, legal documents, their parts or a collection of written laws, whereas in English containment is attributed to such legal concepts as case, justice, delinquency, and probation. As has been indicated above, in such metaphorical mappings the salient feature of containment realised is that of the interior. Here are some linguistic examples of metaphors LEGAL DOCUMENT IS A CONTAINER, CASE IS A CONTAINER, CRIMINAL ACTIVITY IS A CONTAINER, and JUSTICE IS A CONTAINER:

- (107) [...] *members of the public are often hesitant to impose a life sentence **in** all cases, suggesting that there may be less support for such policies than often assumed* (EN15).
- (108) [...] *the availability of forensic evidence **in** cases involving juveniles* (EN30).
- (109) [...] *the impact of maternal participation **in** delinquency and offending should not be underestimated* (EN44).
- (110) [...] *challenge to these conclusions came from psychologists working **in** criminal justice* (EN12).
- (111) [...] *turtas [...] yra gautas **iš** nenustatytos ar neįrodytos nusikalstamos veikos* (LT26).
 'property is received **from** an unestablished or unproven criminal act'
- (112) *EŽTT savo sprendimuose ne kartą pabrėžė, kad „teisė“ apima tiek **iš** įstatymų, tiek iš jurisprudencijos kylančią teisę* (LT37).
 'In its judgements ECHR emphasised on numerous occasions that the concept of "law" encompasses both law deriving **from** legislation and from case law'
- (113) *Tai, kad teismai skirtingai vertina neapibrėžta ir apibrėžta tiesiogine tyčia padarytus nusikaltimus, rodo ir atskiri pavyzdžiai **iš** bylų* (LT52).
 'The fact that courts evaluate offences committed with an indefinite (dolus indeterminatus) and definite intent (dolus determinatus) differently is evident from individual examples **from** cases'
- (114) [...] *Patraukti baudžiamojon atsakomybėn kišenvagi buvo beveik neįmanoma* (LT32).

‘it was virtually impossible to to **draw / pull** the pickpocket **into** criminal **liability**
(=to incur criminal liability; to arraign)

As can be seen from all the above examples, these cases of containment are all linguistically realised through prepositional phrases that legal nouns are part of. The logic of the conventionality of CONTAINER metaphors lies in the fact that all containers have perceived boundaries and we tend to impose conceptual boundaries onto abstract categories of different kinds. Under this logic anything that belongs to a given category is thought of as something that is *in* a container whereas unrelated issues and items that do not belong to a field being discussed are *outside* that container. This is the most basic and most conventional functioning of the container metaphor.

However, example (114) above is a case of more complex way of how the container schema functions and it calls for a more elaborate discussion for several reasons. Firstly, in Lithuanian the understanding of criminal liability which is based on the container schema through the metaphorical pattern *(pa)traukti baudžiamojon atsakomybén* is extremely conventional because this whole expression is a legal term. As a result, this is the most pervasive linguistic expression of the container metaphor in the Lithuanian dataset. Secondly, this particular expression raises significant methodological questions since the metaphorical meaning in it is generated not only as a result of the clash of meanings of the verb *patraukti* in combination with the legal noun *atsakomybė* but also from the grammatical inflection of the noun phrase *baudžiamoji atsakomybė*. It therefore becomes apparent that apart from lexical means of expressing metaphoricity, the metaphorical meaning of containment is also generated by the illative locative case, i.e. by grammatical means of expression. As far as MPA and MIPVU are concerned, neither of the procedures provide procedural steps in encountering metaphor on the level of grammatical inflections of nouns, which needs to be addressed, especially in dealing with highly inflected languages such as Lithuanian. Since this thesis has relied on the combination of MPA and MIPVU to identify metaphor in language, metaphors realised by grammatical cases could not be identified. However, as the case with illative locative case above shows, grammatical flections can also

be playing a significant role in encoding grammatical meaning which is worth special attention from scholars in further studies of linguistic expression of metaphor in Lithuanian. In addition to the question of the interaction between lexical and grammatical means of expression in generating metaphorical sense, another significant methodological issue to be addressed is the ability of such methodological frameworks as MPA and MIPVU to tackle metaphor that is expressed by different linguistic resources which include both lexis and grammar. Due to the limited scope of the present thesis, these questions cannot be discussed here, however, they are by all means significant in order to make metaphor research in general and metaphor identification in particular more systematic and accurate.

Returning to the analysis of metaphors motivated by the container imager schema, the systematicity of CONTAINER metaphor in the data analysed is maintained by the presence of other elements related to containers and the general knowledge that containers may be full and empty, they can contain objects and substances, it may be open and closed, we can open and close / cover it. In Lithuanian, these aspects of containment are mostly realised through patterns that contain nouns *turinys* ('content'), *papildymas* ('addition'; lit., 'filling'), *įsitraukimas* ('involvement'; lit. 'pulling oneself into'), verbs *įtraukti (į)* ('to involve'; lit., 'to pull / draw into'), *(pa)(per)pildyti* ('to supplement, add', 'to (over)fill'), *patekti (į)* ('to get in(to)', 'find oneself in'):

- (115) [...] *o eilinis kodekso papildymas tėra tik laikinas problemos išsprendimas* (LT37).
 'a routine supplement / addition³⁸ to the **Code** is a merely temporary solution to the problem'
- (116) [...] *straipsnio pavadinimas yra siauresnis nei straipsnio turinys* (LT33).
 'the title of the Article is narrower than the content of the **article**'
- (117) [...] *būtų iškreiptas arba paneigtas kurios nors kitos Konstitucijos nuostatos turinys* (LT31).
 'the content of some other **provision** of the Constitution would be distorted or contradicted'
- (118) [...] *Tačiau iš kur atsirado įstatyme vartojama formuluo­­tė ir kodėl būtent tokia ji pateko į baudžiamąjį įstatymą?* (LT13).
 'But where did the formulation used in the law come from and why did it get into the criminal **law** in this exact wording?'

³⁸ The literal rendering of the deverbal noun *(pa)pildymas* in Lithuanian encodes the basic concrete meaning of 'putting, placing or pouring something to make making full(er)'.

As can be evidenced from the above examples, CONTAINER metaphors in Lithuanian make use of the container-related element of content, i.e. objects or substance that are in some container. Such conceptualisation allows seeing legal documents (115), articles (116) and provisions (117) as containers that hold all the relevant information in them. In addition, another prominent element realised linguistically is based on such knowledge about containers that they can be filled (115), i.e. that substances and objects can “get into” them (118).

Focusing on other aspects of the way container metaphor functions in research papers on criminal law and criminology, it is interesting to note that people (in the law) can be conceptualised both as containers and as objects or substances that are in a container. Consider the following examples:

- (119) [...] *kai buvo sprendžiamas kaltininko patraukimas baudžiamojon atsakomybén* [...] (LT34).
 ‘when the **pulling / drawing** of the offender **into** criminal **liability** (= the arraignment of the offender) was considered, [...]’
- (120) [...] *kokie gali būti jų įsitraukimo į tokius nusikaltimus motyvai* (LT69).
 ‘what the motives of their **pulling / drawing into** (=involvement into) such **crimes** may be’
- (121) [...] *research on the common risk factors that propel males and females into crime* (EN20).
- (122) [...] *a demonstrable effect on women’s pathways into crime* (EN4).
- (123) *Both of the females did not get into drugs until around age 30* (EN24).
- (124) *It is common for individuals to [...] become involved again in drugs and crime* (EN24).
- (125) [...] *iš kaltininkų paimama nusikaltimu gauta nauda* (LT57).
 ‘benefit obtained from crimes is taken **from** offenders’
- (126) [...] *may yield details about how suicidal thoughts occur in officers* [...] (EN37).

While in (119) – (125) people are seen as substance or objects that are being pulled, propelled into or otherwise get into criminal liability (in (119)), criminal activity (in (120), (121), and (122)), and drugs (in (123)), in examples (125) and (126) individuals are seen as containers out of which something can be taken (as in (125)) or which can contain something such as thoughts (as in (126)).

As could be seen from the initial presentation of the metaphors shared by both discourse communities, the most substantial part of CONTAINER metaphors in English constituted of metaphorical patterns of the law-related noun *case*

combined with the space-related preposition *in*. This very conventional use of metaphor provides a picture of legal cases as containers into which fall such items as the information, documents, evidence etc which are seen as the content of the container. However, legal cases can also be metaphorically treated as an object or substance that may be put into or removed from a container. A specific use of container metaphor was observed in the English research articles in which legal cases were conceptualised as objects that researchers put into or remove from their studies. Consider this use of CONTAINER metaphors in which cases are given the properties of objects / substances which can be placed into and out of somebody's study as a container:

- (127) *Although 568 cohort members were arrested between the ages of 17 and 52, we **removed** three of those **cases** due to the extent of conflicting data in the multiple sources of information* (EN36).
- (128) *This **case** was accordingly **removed from** the study* (EN47).

Thus criminal law researchers who conduct studies based on samples of criminal cases that are relevant to their study, conventionally refer to those cases as something that their studies contain and, on the contrary, something that can be physically removed from their studies as if it was tangible material.

All in all, CONTAINER metaphors were realised in English and Lithuanian research articles with reference to a broad range of target domain items. Among the most common ways of linguistically realising metaphors motivated by the source domain of CONTAINER was via metaphorical patterns with prepositional phrases. Cross-linguistically, however, prepositions were a dominant linguistic manifestation of this metaphor in English, whereas Lithuanian research articles employed a slightly broader range of lexemes highlighting different aspects of containment. The most prominent Lithuanian-specific feature of realising CONTAINER metaphors linguistically through lexemes referring to the *content* of a container, *filling* a container and, in particular *pulling / drawing something* into a container. As far as lexical variation is concerned, English showed a slightly richer lexical diversity of encoding containment metaphors in

comparison to Lithuanian research articles on criminal law, criminal justice and criminology.

4.4.1.4. MACHINERY metaphors

A common source domain in structuring scientific legal discourse in both languages is that of MACHINES and MECHANISMS. The OED_e defines a machine as “an apparatus using mechanical power and having several parts, each with a definite function and together performing a particular task.” The key aspects of machinery are its complex structure consisting of interconnected parts that perform a specific function, ability to function mechanically, its efficiency and ability to function on its own. In drawing analogies between complex organised systems and mechanisms, these tend to be the salient aspects that provide the conceptual structure to more abstract notions via metaphorical mappings.

Previous research (Lakoff & Johnson 1980/2003: 27; Boyd 1993: 486) has shown that it is common to conceptualise the mind in terms of a device that operates and which, like mechanisms, may have faulty parts or need fixing. Similarly, certain social phenomena such as a political or legal system, may also be seen as a mechanism or a machine that operates and serves specific purposes and functions. More specifically, the data of this study have demonstrated a tendency to employ MACHINERY metaphors in the discussion of legal measures as constituent parts of the legal system. In both English and Lithuanian research articles on criminal law, this metaphorical pattern has been found to be present in describing a number of legal notions such as justice, prisons, the law, penalties, the Code, legal provisions, and courts, etc. Table 13 shows the distribution of all MACHINERY metaphors identified in the two corpora:

Table 13. Metaphorical patterns of MACHINERY in English and Lithuanian research articles

English	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	32	262 / 15.11%	12.21%	6.86
Metaphorical patterns (number of occurrences) <i>justice system / system of justice (185); crime control (21); to indicate arrest (8); justice techno-fix (5); prison system (5); law regulates X (3); an indicator of crime / crime indicator (3); justice mechanism (3); gun control (3); an indicator of arrest (2); to control crime (2); crime signal / signal of crime (2); disorder operates (2); signal of disorder / disorder signal (2); indicator of disorder (2); disorder signals X (2); operation of law (2); to regulate arrest (1); to regulate crime (1); indicator of delinquency (1); operation of justice (1); justice operates (1); justice technology (1); law operates (1); system of law (1); police operate (1); to generate sentences (1); disengaged from the police (1).</i>				
Lithuanian	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	31	205 / 3.20%	15.12%	5.34
Metaphorical patterns (number of occurrences) <i>narkotikų kontrolė (64); teisės technika (29); teisės sistema (27); nusikalstamumo rodiklis (15); teismų sistema (9); teisės reguliavimas (7); teisė reguliuoja X (6); nusikalstamumo kontrolė (5); prevencijos sistema (5); įstatymo(-ų) sistema (4); veikos mechanizmas (4); įstatymas reguliuoja X (3); nuostatų sistema (3); nuostata reguliuoja X (3); pataisyti nuteistąjį / nuteistasis taisosi (2); reguliuoti įstatymus (2); BK sistema (2); veikos detalė (2); reguliuoti atsakomybę (1); bausmių sistema (1); įstatymas kontroliuoja X (1); įstatymas veikia (1); kodekso reguliavimas (1); kontroliuoti narkotikus (1); kontroliuoti nusikalstamumą (1); nusikaltimo detalės (1); nusikaltimų technologija (1); prevencijos reguliavimas (1); smurto reguliavimas (1); straipsnis reguliuoja (1); teismas siunčia signalą (1).</i>				

The tendency to metaphorically construct legal discourse relying on this specific source domain has been slightly more pervasive in the English research articles under investigation in comparison to the Lithuanian data. While in Lithuanian MACHINERY metaphors constitute 3.20% of all metaphorical expressions found in the dataset, in English the share is considerably higher, i.e. 15.11%. Such a difference could be accounted for by taking into account the overall tendency of Lithuanian research articles to contain very high numbers of (non-specified) object metaphor whereas other source domains were represented by significantly lower numbers. In English, on the other hand, the distribution of the specific source domains has been more even. To consider the linguistic variation of MACHINERY metaphors cross-linguistically, in both languages the diversity is rather similar with Lithuanian showing slightly richer lexical diversity (over 12 percent in English and over 15 percent in Lithuanian). To disclose more similarities and differences of MACHINERY metaphors identified in research articles written by the two discourse

communities, this section proceeds with the analysis of specific metaphors shared by the two corpora and then goes on to discuss some language-specific metaphorical patterns.

As has been mentioned, MACHINERY metaphors are useful in describing abstract systems such as a political, academic or legal system. One way of perceiving an abstract system in more concrete metaphorical terms is describing it in terms of a mechanical operation. Thus the law and a variety of legal (also crime-related) processes were found to be described as *operating*, for example:

- (129) [...] where **disorder operates** by eroding local residents' sense of security [...] (EN40).
- (130) [...] led us to believe [...] that 'procedural **justice' operated** on a surface level [...] (EN2).
- (131) [...] of how the **police operate** in partnership with other agencies (EN9).
- (132) As she points out, the **law operates** through a number of forums (EN1)
- (133) [...] *įstatymų leidėjas bejėgis numatyti, kaip įstatymas veiks, kokią naudą jis duos* (LT13).
'the legislator is incapable of predicting how the **law** will **operate**, what benefit it will bring'.

In the above examples *disorder*, *justice* and *law* are described through the source domain of a MACHINE by mapping common features of machines and mechanisms onto crime and criminal law issues. Disorder in communities is seen as operation (example (129)), while the law (examples (132) and (133)) and justice (example (130)) operate, or work, as a piece of equipment. Both legal and justice systems and machines are complex in their structure and are used for specific purposes. In addition, machines consist of parts that are adjusted to each other and perform their functions compatible with the function of the equipment as a whole; similarly, the enforcement of law and administration of justice are also based on the work of many employees as part of the system as well as proper functioning of related bodies such as the police, courts, prosecutors, etc.

In addition to the machinery-related verb *to operate* that collocates with some items of the legal vocabulary signalling the use of machine metaphor in this type of discourse, it is also common to describe legal notions in terms of a *system*, which, as defined by MacmD_e dictionary, is “a set of pieces of

equipment or computer programmes that work together”. Consider the following examples that contain this metaphorically used lexeme:

- (134) [...] *to ensure a more humane and effective **system** of justice for women* (EN4).
(135) [...] *those offenders purged from the **prison system** to alleviate crowding* [...] (EN34).
(136) [...] *baudos, kaip kriminalinės baudmės, vieta **bausmių sistemoje** tvirtėja* (LT62).
‘the position of a fine as a criminal penalty is stronger in the **system** of **punishments**’
(137) [...] *paviėnių straipsnių pakeitimai ardo **BK sistemą*** [...] (LT40).
‘amendments of individual articles **disassemble / break** the **system** of CC [the Criminal Code]’
(138) *Vertinant Lietuvos BK [...] **nuostatų sistemą** bei tam tikras jų rūšis,* [...] (LT28).
‘in assessing the **system** of the **provisions** of Lithuanian CC and its certain types’
(139) [...] *nėlaiko normų ir jų hierarchijos esminė **teisės sistemos** dalimi* (LT47).
‘do not consider legal norms and their hierarchy the essential part of the **system** of **law** (=legal system)’
(140) [...] *mišriosios kolegijos buvo įkomponuotos į esamą nacionalinę **teismų sistemą*** (LT44).
‘mixed juries were incorporated into the existing state **system** of courts’

The salient aspect transferred from machines and mechanisms as a source domain onto legal concepts in the examples above is the set of things working together as parts of a complex whole. Criminal justice system (example (134)), for instance, is constituted of a number of different practices as well as numerous institutions and other agencies that work individually and in cooperation in order to prevent, deter, and control crime, sanctioning those that have violated the law, as well as correctional and offender rehabilitation practices. By the same token, systems of courts have their own internal complexity, territorial division, hierarchy (example (140)), they are divided into courts of general and special jurisdictions, they hear different cases and deal with different offenses such as criminal, civil, administrative and other matters. Thus, systems of courts may also be seen as a mechanism that consists of separate yet related parts that operate in order to serve specific functions.

It is interesting to note that the internal structure of a Criminal Code may also be seen as a system, as evident from example (137), which highlights its internal coherence and harmony in the legal provisions laid down in the Code. What is more interesting is that the example is based on metaphor mixing (see Gibbs 2016), namely a simultaneous conceptualisation of the internal system of provisions of the Criminal Code as machinery and as a physical structure

such as a building, which is suggested by the metaphorically used lexeme *ardyti* ('to disassemble, demolish, take apart'). Although the words *sistema* ('system') and *ardyti* seem to relate to different concepts, they are not incongruent since both the conceptual domain of MACHINERY and that of a PHYSICAL STRUCTURE / BUILDING share the conceptual element of a set of parts assembled / built in the way that it functions as a whole which is key in the metaphorical mapping in example (137). Finally, as some of the above examples show, the conceptualisation of a legal system (example (139)), legal acts (example 137)), punishments (example (136)) and legal provisions (example (138)) is also based on a complex structure of separate parts that are adjusted to each other to serve specific functions and which must have internal harmony in order for the system to work as a whole. In sum, what allows drawing the analogy between complex mechanical structures and legal processes are the shared aspects between the two domains such as complex patterns of organisation structure, subdivision into smaller parts performing specific functions and simultaneously ensuring efficient performance of the whole system.

The findings of this study have shown that (scientific) legal discourse tends to employ concepts of machines and mechanisms when describing court and prison systems and has disclosed the tendency to conceptualise legal institutions and their network as machinery. This tendency has also been noted by previous metaphor studies. Namely, in their analysis of metaphors used to discuss prison organisation in correctional literature, Arrigo and Williams (2000: 210) noted that machine metaphor is among the seven most common metaphorical representations of prison organisations encountered in literature on correctional institutions. According to the researchers, conceptualising the complex network-like system of prisons in terms of machines highlights the mechanistic aspects of the bureaucratic foundation of prisons and the routine character of the administrative processes involved in correctional systems (ibid.). The scholars argue that the MACHINE metaphor provides an insight into the ways that correctional institutions are able to maintain order and a perspective which allows assessing relative efficiency of correctional facilities (ibid.: 213). In addition to Arrigo and Williams, the pervasiveness of

MACHINERY metaphors in legal discourse has also been attested in the study by Gražytė and Maskaliūnienė (2009) who identified this metaphor in the translation patterns of metaphors in the EU White Papers.

Apart from the rather general lexis related to machinery such as *to operate* and *a system* collocating with legal nouns and signalling the use of machine metaphors, another salient aspect highlighted in metaphorically describing law in terms of mechanisms was the aspect of regulation and control, as in the following examples:

- (141) *Unlike **arrest**, which is more closely **regulated** by mandatory policy [...]* (EN16).
- (142) *[...] hence the salience of instrumental concerns about police performance in local **crime control*** (EN17).
- (143) *[...] the obligation people feel to **regulate crime** in their community may be complicated [...]* (EN45).
- (144) *The central premise behind **gun control** as a policy to reduce crime [...]* (EN31).
- (145) *[...] ekonominio pobūdžio **įstatymuose, reguliuojančiuose** verslo tvarką* (LT12).
'in economy-related **laws regulating** business procedures'
- (146) *[...] tokia politika **narkotikų kontrolės** atžvilgiu gali būti sėkminga* (LT54).
'such policy regarding **drug control** may be successful'
- (147) *[...] įtvirtintomis **nuostatomis, reguliuojančiomis** [...]* (LT9).
'established provisions regulating [...]
- (148) *[...] nepadės užtikrinti socialinės **nusikalstamumo kontrolės** [...]* (LT63).
'will not help ensure social **crime control**'

As can be inferred from the above examples, a number of criminal issues such as the level of crime (examples (142) and (148)), regulation of firearms (example (144)) and drugs (example (146)) and legal sanctions such as penalties (example (141)) are conceptualised in terms of a machine or mechanism that are controlled by someone, whereas laws (example (148)) and their provisions (example (147)) are seen as people that control different legal areas. The metaphorical view of a number of legal phenomena such as crime in terms of mechanisms that depend on someone who controls them adds to the authoritative and powerful character of the crime control measures that are implemented in order to prevent criminal behaviour and reduce crime. Thus in addition to the machinery-related lexis which highlights organisational complexity, regulation and control, another contributing factor in metaphorically conceptualising the law as a powerful figure is achieved through personification which is most commonly expressed via expressions when inanimate legal nouns (e.g. *teisė* ('law', 'statute'), *nuostata* ('provision')) appear

in the subject position followed by active verb which attributes agentivity to legal notions thereby resulting in personification. This is a significant contributing aspect of shaping the understanding of the law in terms of an authoritative, powerful and competent human being in charge of maintaining order, imposing rules, punishing offenders, and performing other functions.

Interestingly, the above-discussed examples of metaphors based on the source domain of machinery reveal two different, yet, related aspects of the way the machine and mechanism metaphors behave in (scientific) legal discourse. On the one hand, conceptualising the law as a machine or a piece of equipment which may operate on its own with a high level of efficiency, which has no values, feelings or senses, leads to dehumanisation of law and presenting it as an autonomous, indifferent, and even mechanical system. It could be inferred that such representation of the law emphasises its rationality, impartiality and effectiveness. On the other hand, there is another aspect that is inherent in machinery and mechanisms, i.e. machinery is effective in as much as it is controlled and operated by a competent engineer. In this regard, the best “engineer” to operate the machinery is the law itself or the state that governs it, as the following examples suggest:

- (149) [...] *įrodymų priimtinumą pirmiausia **reguliuoja**³⁹ nacionalinė teisė* (LT46).
‘admissibility of evidence is primarily **regulated by** the national law’
- (150) [...], *nes pati teisė **reguliuoja** savo kūrimą ir taikymą* (LT5).
‘since the law itself **regulates** its legislation and application’
- (151) [...] *suėmimo vykdymo tvarką **reguliuoja** atskiras Suėmimo vykdymo įstatymas* (LT38).
‘rules regarding arrest are regulated by a separate Law on the Execution of Pre-trial Detention’
- (152) [...] *žmogaus teisės, kurios iš esmės **reguliuoja** individo ir valdžios santykius [...]* (LT42).
‘human **rights** which essentially **regulate** the relationships between an individual and government’

While previously presented examples realised the metaphor of the legal system as a mechanism that operates on its own, in the above cases the law is personified, i.e. humanised. Yet, as opposed to the law-as-machine metaphor,

³⁹ These metaphorical expressions are instantiations of the general PERSON metaphors, i.e. attributing human properties to legal entities. They are discussed in this section to discuss the close connection between personifying the law as an “engineer” running / regulates something and mechanistic metaphors.

the personified vision of the law does not distort the consistency of the law being treated as a rational, impartial, and powerful structure. Since the personified law is an authoritative, competent and powerful figure, metaphorical attribution of the role of operating the legal “machinery” to the law and its provisions also adds to its representation as a supreme authority that is in control of establishing standards, regulating conduct, maintaining adequate order, protecting liberties, resolving disputes, etc. Thus, somewhat paradoxically, the initial discrepancy between the two representations actually turns out to be compatible since they both contribute to conceptualising the law as a powerful, rational, and effectively performing system.

To elaborate on other aspects of machinery that are highlighted in metaphorical conceptualisation of crime and criminal law in research articles, both English and Lithuanian data display the use of metaphors in which the salient aspect projected onto legal issues is that of sending signals or indicating something. The English data under investigation turned out to be more reliant on such metaphorical structuring in comparison to Lithuanian which only contained two metaphorical patterns based on the source domain of a signal. Consider a few examples where this metaphorical conceptualisation is most prominent:

- (153) *Warrants that included the **indicator** of a **crime** against a child were less likely [...]* (EN48).
- (154) *[...] **signals** of crime and **disorder** should be targeted by the police [...]* (EN48).
- (155) *[...] archival **indicators** of crime, **delinquency**, and gangs are all used [...]* (EN29).
- (156) *[...] **disorder signals** a lack of neighborhood control, sparks fear of crime [...]* (EN40).
- (157) *Aukšti registruoto **nusikalstamumo rodikliai** šioje amžiaus grupėje rodo, kad [...]* (LT60).
'High official **crime indicators** (=rates) in this age group show that [...]
- (158) *[...] kasacinės instancijos teismas vis **siunčia** tą patį **signalą teismams** [...]* (LT1).
'a Cassation **Court sends** the same **signal** to courts'

A signal is typically given or transmitted to draw attention or show that there is some danger. Similarly, indicators in equipment show the condition of something that they are measuring. Lexis related to indicators and signals was also found in some metaphorical patterns provided above. Signalling or indicators may be indicative of crime or delinquency in a community (examples (153), (154), (155), (158)). Typically, the function of a signal sent by a device is to indicate something that might be dangerous or at least should

be taken into consideration (for example, an indicator in a vehicle typically informs the driver of the condition of the different parts of the machine). Similarly, if there are indicators and signals of crime, disorder, delinquency and other social and criminal issues, the responsible parties should also take the message indicated by those signals and pay specific attention to the areas that have been identified as potentially affected by criminal conduct or other dangerous or prohibited activities.

To sum up, the systematicity of MACHINERY metaphors in both English and Lithuanian research articles is reflected by the variety of aspects that are metaphorically attributed to the law. It was common in both English and Lithuanian research articles on criminal, criminal justice and criminology to encounter source-domain lexemes related to regulation, operation, control, signals, and technology. Cross-linguistic variation was not very prominent in the linguistic realisation of this metaphor with several language-specific metaphorical patterns. In terms of lexical variation, which was indicated by the type-token ratio measure, research articles in both languages lexically expressed this metaphor with a similar lexical diversity.

4.4.1.5. STRUCTURE metaphors

Lakoff and Johnson argued that one of the most common ways to speak about theories and arguments in English is in terms of BUILDINGS which can have *foundation*, can be *supported* by scientific arguments and facts that may be seen as *bricks* of a theory (Lakoff & Johnson 1980/2003: 53). Other studies have shown that scientific discourse in general tends to rely on the source domain of BUILDINGS and other structures which may be found to be realised in different languages and cultures. For instance, Šeškauskienė (2011), who researched the conceptualisation of argumentation in linguistic research papers, demonstrated that the source domain of BUILDING and STRUCTURE is one of the most productive in conceptualising scientific argumentation in English and Lithuanian (Šeškauskienė 2011: 53–54). The key aspects of the source domain in such discourse are the structure / construction, foundation / base and support. Thus dealing with theoretical and argumentative claims, we tend to

draw analogies between the most salient aspects that structures and theories / arguments share.

In this work, among other classes of metaphorical patterns systematically divided into coherent groups, the source domain of PHYSICAL STRUCTURE also proved to be rather productive in shaping the understanding of legal documents, their parts, criminal conduct, liability, etc. Although some other researchers, following Lakoff and Johnson (1980/2003) may refer to such metaphors as BUILDING metaphors, this thesis relies on the principles laid down in the primary metaphor theory proposed by Joseph Grady (1997) and therefore a less specific label of PHYSICAL STRUCTURE is preferred, since the salient aspects of this source domain may be related to a wider variety of objects that have physical structure and not buildings alone. For example, bridges, models, schemas, patterns are also structures of some kind, but not necessarily buildings. As suggested by the ODE_e, a structure is a “building or other object constructed from several parts”, so the key aspect of any structure is the composition of several connected parts to make up a whole. Therefore, it may include buildings, bridges, chains, models and other objects that consists of different parts. Table 14 below illustrates the range of metaphorical patterns in English and Lithuanian that were motivated by the source domain of STRUCTURE.

Table 14. Metaphorical patterns of STRUCTURE in English and Lithuanian research articles

English	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	24	42 / 2.42 %	57.14%	1.09
Metaphorical patterns (number of occurrences) <i>X -> delinquency chain (9); model of crime (2); to link crime to X (2); to link X to crime (2); pattern of crime (2); X linked to delinquency (2); disorder model / model of disorder (2); model of justice (2); to build bridges between the police and X (2); to support violence (2); to support sentences (2); a link between X and crime (1); a bridge from X to crime (1); to design crime (1); a causal bridge from disorder to X (1); a link to offense (1); to support offenders (1); constructor of offenders (1); to support officers (1); to support the police (1); link between X and probation (1); victim support (1); to construct victims (1); model of victimization (1).</i>				

Lithuanian	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	42	185 / 2.89%	22.70%	4.82
Metaphorical patterns (number of occurrences)				
<i>įtvirtinti nuostatą (33); remtis nuostata (27); nusikalstamumo struktūra (16); įtvirtinti teisę (15); remtis straipsniu (12); įtvirtinti atsakomybę (10); atsakomybės pagrindas (7); įstatymo struktūra (6); (žemesnės) grandies teismas (5); įtvirtinti bausmę (5); remtis kodeksu (3); (pa)grįsti prevenciją X[Ins.] (3); straipsnio struktūra (3); remtis teise (3); įtvirtinti veiką / įtvirtinta veika (3); pagrįsta atsakomybė (2); kodekso struktūrinė dalis (2); remtis prevencija (2); prevencijos pagrindas (2); teisės modelis (2); teisės ir X jungtis / jungtis tarp teisės ir X (2); teisės pagrindai (2); atsakomybės modelis (1); konstruoti atsakomybę (1); atsakomybės slenkstis (1); bausmės pagrindas (1); bausmės struktūra (1); įstatymo konstravimas (1); nuostatos pagrindas (1); paremti nuostatą (1); nuostatų konstravimas (1); straipsnio konstrukcija (1); straipsnio sudedamosios dalys (1); teisė, pagrįsta X[Ins.] (1); pamatinė teisė (1); sujungti teismą (1); teismo modelis (1); teismo struktūra (1); veikos pagrindas (1); veikos modelis (1); paremti veiką (1); veikos schema (1).</i>				

In comparison to other source domains on which legal conceptualisation tends to rely, PHYSICAL STRUCTURE metaphors were not as numerous in both English and Lithuanian. The overall share is rather small represented by 2.42% and 2.89%, respectively. To consider the linguistic realisation and some general cross-linguistic differences, while Lithuanian contained an overall higher number of different metaphorical patterns (42 as compared to 24 in English), the lexical diversity was more than twice higher in English because in the English corpus different metaphorical expressions representing this source domain were less productive in comparison to Lithuanian.

Drawing on the most numerously represented metaphorical patterns identified in the two datasets, the source domain of PHYSICAL STRUCTURE has been observed to lend its conceptual structure to such abstract notions as criminal conduct, (criminal) liability, penalties, court system, written legal acts, their parts, and the law itself. The most prevalent metaphorical patterns representing this category in English were collocations that include target domain lexis (law-related nouns) consisting of such lexical units as *chain* (9 instances), *model* (7 instances), *bridge* (4 instances), *to support* (7 cases), *to link* (6 instances), and *a link* (3 instances). Whereas the most prevalent Lithuanian patterns involved law-related lexis and the following structure-related lexical units: *įtvirtinti* ('to consolidate, fortify') (66 instances), *remtis* and *(pa)remti* ('to rest on, to support') (49 instances).

To reveal the tendencies of shared and language-specific features of metaphorical conceptualisation of the law and crime in terms of structures, this section of the thesis first focuses on patterns that were common to both English and Lithuanian and then proceeds to the analysis of language-specific metaphorical patterns.

Metaphorical patterns shared by English and Lithuanian

The linguistic realisation of STRUCTURE metaphors has been rather diverse in both languages and has included some patterns that are shared by both discourse communities. First and foremost, one of the salient aspects of physical structure that has been realised in both languages is its constitution of parts that can provide support to each other and can be linked to each other in making up the whole. In English such metaphorical conceptualisation is most pervasively instantiated by the use of the verb *to support* and noun *support* through their combinability patterns with legal lexis, whereas in Lithuanian the most prominent linguistic unit signalling this metaphorical understanding is the verbs *(pa)remti*, *remtis*, ('to support', 'to rest on') collocating with law-related nouns. Consider the following examples:

- (159) *Tokią sąsają galima įžvelgti **remiantis** nacionalinių teisės aktų **nuostatomis** [...]* (LT49).
 'such connection may be revealed based **resting on** the **provisions** of national legal acts'
- (160) ***Remiantis** 53 **straipsniu**, vykdomo tyrimo procese leidžiama [...]* (LT41).
 '**Resting / based on Article** 53, during the trial it is allowed'
- (161) *[...] **nusikalstama veika, paremta** vien turto verte [...]* (LT13).
 'criminal **act supported** / based solely on the value of assets'
- (162) ***Remiantis** Švedijos šeimos **kodeksu**, vaikams draudžiama taikyti kūno bausmes* (LT42).
 '**Based on** the Swedish Family **Code**, corporal punishment is prohibited'
- (163) *[...] other agencies involved in **supporting offenders** on their caseload [...]* (EN8).
- (164) *[...] to the more recent powerful influence of **victim support** organizations [...]* (EN20).
- (165) *In **supporting** the mandatory life **sentence** for murder respondents also highlighted [...]* (EN15).
- (166) *[...] evidence of a separate class neighborhood culture that openly **supports violence*** (EN27).

The above metaphorical expressions in Lithuanian suggest a view of law as a physical structure in which legal provisions, legal documents and parts of written law are metaphorically structured in terms of objects that support other

objects, as examples (159), (160), (162) illustrate. Drawing a parallel between physical objects that are arranged in a way that parts are connected to each other, provide support to each other and are part of a larger whole emphasise the complex internal structure of law, namely the fact that different rules and the underlying principles of law must have internal coherence. In other words, the reliance on the source domain of a PHYSICAL STRUCTURE brings to the fore the internal coherence and presupposed harmony of legal rules and provisions as parts and the wider whole of criminal law framework. The image of physical support in the English data, on the other hand, displayed a slightly different tendency to be a useful conceptual tool in conceptualising approval of certain correctional measures such as mandatory life sentence (example (165)) or violence (example (166)), or providing assistance, financial backing and encouragement to people (examples (163) and (164)).

It is interesting to note that the metaphorical patterns that instantiate the mapping of physical support in relation to law-related concepts display some cross-linguistic differentiation, namely English giving preference of the lexeme *support* to collocate with the target domain lexis that denotes people whereas Lithuanian preferring the target domain notions that relate to (written) laws. On the one hand, such a tendency may be accounted for based on the fact that nouns related to written laws were among the most frequent in the Lithuanian corpus whereas the English sample contained more target-domain nouns that refer to people or groups of people. On the other hand, it is also common that the same source domain can structure the understanding of a wide variety of target-domain concepts, as has been shown in some previous sections of the analysis.

Another group of PHYSICAL STRUCTURE metaphors shared by English and Lithuanian discourse communities have been signalled by lexis that denotes a model, which is used in conceptualising such legal notions as crime, disorder, justice, victimization, liability, law, and court. Consider a few examples that contain linguistic expressions motivated by the MODEL metaphor:

(167) [...] *but also for the basic systemic model of crime* (EN29).

- (168) [...] *calls for more conceptual clarity in models of **disorder** and incivilities* (EN29).
- (169) *The Government's strategy [...] has rested upon a specific model of distributive **justice*** (EN4).
- (170) [...] *baudžiamosios **atsakomybės** modelį [...] papildė [...]* (LT12).
 'supplemented the model of criminal **liability**'
- (171) [...] *parodantis [...] autoritarinį baudžiamosios **teisės** modelį* (LT43).
 'which shows an authoritarian model of criminal **law**'
- (172) [...] *tokį **teismo**, kaip teisingumą vykdančios institucijos, modelį [...]* (LT31).
 'such a model of **court** as an institution administering justice'

As may be inferred from the above examples, all the target domain concepts onto which the conceptual elements of the source domain have been projected have their inherent internal complexity. In examples (167) and (168), we deal with certain theoretical frameworks of crime and disorder that are based on complex networks of ideas, definitions and theoretical accounts. The systemic model of crime, for example, is a theory that intends to explain crime rates, victimization, and fear of crime and that takes into account a combination of interrelated aspects and factors of crime and disorder such as the social structure of neighbourhoods, relationships among their members, etc. (Messner & Zimmerman 2012: 160–161). Thus the theoretical framework is particularly elaborate and draws on a variety of interrelated notions and propositions. Similarly, the concepts of justice, law, criminal liability and institutions such as courts also feature inherent complexity and organisation. Therefore, dealing with such multifaceted and less delineated phenomena in terms of tangible structures such as models that the human mind is able to perceive more readily and in a more coherent manner serves as a useful conceptual tool in bringing more conceptual organisation into the complex field of crime and criminal law.

Another linguistic realisation of PHYSICAL STRUCTURE metaphors encountered in both data samples was the mapping of the more-specific source domain of CONSTRUCTION and the act of CONSTRUCTING. The most prevalent cases of such metaphorical rendering appear in the Lithuanian research articles in describing the process of drafting legal documents, legal provisions and referring to the formation of legal concepts in terms of constructions, whereas only one such case detected in English made use of the source domain of CONSTRUCTION to refer to the factors that may contribute to the formation of the psychological profile of a chronic offender, e.g.:

- (173) [...] *abstraktus kitų Konvencijos nuostatų konstravimas suteikia tam tikrą laisvę* (LT54).
 ‘abstract **construction** (=formulation) of other **provisions** of the Convention allow certain freedom’
- (174) [...] *kuo abstraktesnis įstatymo konstravimas nuo seno yra teisėkūros technikos siekiamybė* (LT32).
 ‘legislative bodies for long have aimed at an as abstract **construction** (= linguistic formulation) of the **law** as possible’
- (175) *Bet taip ir turėtų būti konstruojama kaltininkų atsakomybė, kiekvienas asmuo turi atsakyti tik už savo kaltę* (LT52).
 ‘But this exactly how the **liability** of offenders should be **constructed**; every person is only liable for their own guilty acts’
- (176) [...] *there is substantial overlap among the constructors of chronic offenders (e.g., life-course-persistents), career criminals, and psychopaths* (EN43).

As examples (173) and (174) demonstrate, the process of drafting provisions and other legal documents is analogous to producing a physical construction which encompasses connecting parts so that they could have internal coherence. In a similar vein, example (175) provides a systematic mapping between developing the legal definition of criminal liability and designing and producing a physical construction which, in addition to other salient aspects of the act of constructing, may also imply that developing legal notions and defining them is a demanding and time-consuming process. Example (176), on the other hand, relies on the notion of constructors in establishing a correspondence between parts of a construction and factors that contribute to the formation of certain personality traits. Arguably, such realisation is motivated by the correspondence between the complex physical structure of a construction and the sum of different factors that (may) contribute to the formation of the personality of an offender.

Finally, the last sub-group of shared metaphorical expressions related to the PHYSICAL STRUCTURE source domain is the metaphorical use of lexemes instantiating the imagery of links and chains. At the level of linguistic expression, in English this metaphorical structuring was realised in patterns that contained the verb *to link*, noun *a link* and the noun *chain*, whereas Lithuanian patterns contained such source domain nouns as *jungtis* (‘a link’), and *grandis* (‘chain’) and a related verb *sujungti* (‘to connect’). Below are a few illustrations based on the source domain image of LINK/CHAIN:

- (177) [...] *The Temperament-2 → Externalizing → Delinquency chain achieved a significant indirect effect [...]* (EN47).

- (178) [...] *a new crime– migration–security nexus has been formed which not only links crime to migration* (EN25).
- (179) *Ar neturėtų tuomet teisėjas iš tiesų tapti „jungtimi tarp teisės ir gyvenimo“ ir šiek tiek susiaurinti tokio įstatymo turinį?* (LT1).
 ‘Shouldn’t then a judge truly become a “link between **law** and life” and thereby to narrow down the scope of such a law?’
- (180) *Visų grandžių teismai šioje byloje vienodai nepritarė bandymui* [...] (LT12).
 ‘In this case, **courts** of all chains (=at all levels) were unanimous in rejecting the attempt to [...]’

As examples (177) and (178) above illustrate, accounting for different factors that may correlate with criminal activity in legal research articles involves speculation about possible connections the understanding of which makes use of the cognitive structure of chains. In addition, people in the legal system may also be seen in terms of physical links that bridge the gaps between “real life” and the law, as seen in (179). Finally, the image of a chain structures the target domain notion of a group of courts that belong to the same level in their hierarchical system.

From the above discussion it follows that many aspects of the conceptual domain of a PHYSICAL STRUCTURE are shared by both English and Lithuanian communities of legal researchers in structuring the complex and conceptually less delineated field of criminal law. Both languages display the tendency to rely on similar aspects of the source domain of the overarching metaphor of STRUCTURE such as models, chains, and constructions. However, the analysis has also shown that the same source domain concepts may be mapped onto different target domain concepts in the two languages thereby disclosing some metaphorisation differences which reflect cross-linguistic and cross-legal features.

Lithuanian-specific metaphorical patterns

This subsection of the thesis focuses on those PHYSICAL STRUCTURE metaphors which were encountered in the Lithuanian data only. In fact, Lithuanian has at least one structure-related word used metaphorically (*(pa)grįsti* (‘to pave’, ‘to ground’)). This Lithuanian verb is used in a restricted meaning to refer to the construction of roads, typically cobbled streets. This verb was used metaphorically in combination with such target-domain words as criminal liability, prevention, and law. For example:

- (181) [...] *todėl visiškai pagrįsta* baudžiamoji *atsakomybė* už tokias [...] veikas kaip *genocidas, agresija ir pan.* [...] (LT43).
 ‘therefore such **liability** for such [...] acts as genocide, aggression, etc is absolutely **grounded**.
- (182) [...] *į „šventai tikinčios“ vietą atėjo nauja, skeptiška – įrodymais grindžiama* nusikaltimų *prevencija*, kai lėšos ir pastangos skiriamos tik toms prevencijos programoms ir priemonėms, kurių veiksmingumas [...] įrodytas dabartinio prevencijos mokslo metodais (LT64).
 ‘the **prevention** which “had holy faith” was replaced by a new, **sceptical**, i.e. evidence-**based** (crime) **prevention** which only allocates funding and human resources to those programmes and tools the efficiency of which has been proven by the methods of contemporary science of prevention’
- (183) *Dėl tos priežasties teisė, pagrįsta* vertinamaisiais požymiais, *sensta lėčiau* [...] (LT37).
 ‘Therefore, **law paved by** (=which rests on) evaluative features ages considerably more slowly [...].

As discussed by some other researchers who analysed metaphors in Lithuanian (see Šeškauskienė 2011), BUILDING and STRUCTURE metaphors are particularly productive in the conceptualisation of arguments and (scientific) reasoning. In a similar manner, scientific debates regarding the basis on which criminal liability may be incurred for certain offenses (example (181) may be grounded on certain principles and legal argumentation. In addition, the notion of (criminal) liability is quite complex, based on certain fundamental principles; therefore, thinking about such principles drawing on the conceptual structure of the domain of grounding / paving streets makes the otherwise complex notion slightly more easily accessible conceptually.

In fact, example (182) is worth a more elaborate discussion, since apart from the source domain of paving, the co-text of the excerpt signals that the conceptualisation of crime prevention is simultaneously based on two other source domains, namely PERSON and JOURNEY. This phenomenon is known in contemporary metaphor research as metaphor mixing, i.e. the use of multiple source domains to refer to the same target domain in close textual adjacency (see Gibbs 2016). The whole excerpt (182) contains at least three easily identifiable source domains, i.e. PERSON, JOURNEY, and STRUCTURE. In addition, the source domain of a PERSON is introduced into the sentence with a clear metaphor-signalling device – inverted commas which mark conscious (and, possibly, deliberate) use of metaphor. The source domain of a JOURNEY / MOVEMENT (signalled by the verb *to come*) in this example is used in

reference to the appearance of a new conception of prevention, i.e. its reform. Finally, there is a clear opposition between the metaphorical representation of the “old” conception of crime prevention which is seen as a person who possesses holy faith in something, whereas the new conception is seen as a person who is particularly sceptical and who requires evidence in order to prove that measures against crime work and who only allocates financial resources to advanced programmes that demonstrate their effectiveness. Although it employs a variety of source domains, the extended metaphor with mixed source domains offers a more creative metaphorical conceptualisation. Not only does it project an image of prevention as a structure but it also creates personified views of the two different types of crime prevention attributing certain features to them such as old age, scepticism or faith. Admittedly, such use of metaphor is likely to draw the reader’s attention and it may also be a reflection of the author’s point of view towards the target domain at issue. Thus extended metaphors that are likely to have been used deliberately may also be a means of creating certain evaluative overtones with respect to target domains described.

Another sample of Lithuanian-only metaphorical patterns that are based on a particular aspect of the source domain of PHYSICAL STRUCTURE that is transferred onto numerous legal concepts in understanding law and crime is that of consolidation, fortification, and support. The examples provided below illustrate the pervasiveness of this source domain realised in language through metaphorical patterns that contain legal nouns that collocate with the verb *įtvirtinti* (‘to fortify’, ‘to consolidate’):

- (184) [...] *aiškinamos [...] kartu su kituose įstatymuose **įtvirtintomis nuostatomis*** (LT9).
‘are explained [...] together with **provisions consolidated** (=contained, established) in other statutes’
- (185) [...] *Konstitucijos 21 straipsnyje **įtvirtinta teisė** į asmens neliečiamumą* (LT25).
‘Article 21 of the Constitution **consolidates** (=provides for) the **right** to personal inviolability’
- (186) [...] *140 straipsnyje **įtvirtinta atsakomybė** už mušimą ar kitokį smurtavimą* (LT3).
‘Article 140 **consolidates / fortifies** (=provides for) **liability** for beating or other violent actions’

As can be inferred from examples above, drawing on the knowledge of physical structures, we shape our conceptualisation of legal provisions (example (184)),

rights (example (185)), and liability (example (186)) in terms of embedded objects that are part of a larger structure.

In addition to the notion of embedding and consolidation, the conceptualisation of the law and crime in the Lithuanian data was found to rely on the image of a base / foundation. In Lithuanian, this kind of metaphor comes handy in delineating such legal concepts as criminal liability, punishment, provisions, prevention, the law, and criminal behaviour. Somewhat surprisingly, no cases of metaphorical patterns that contain the imagery of a base or a foundation were detected in the English concordances analysed. Below are several examples that contain metaphorical expressions with the noun *pagrindas* ('base') and a related adjective *pamatinis* ('foundational'):

- (187) [...] *baudžiamosios atsakomybės pagrindas yra nusikalstamos veikos sudėtis* (LT35).
'the **base** (=basis) of criminal **liability** is the composition of criminal offense'
- (188) *Kaltė turėtų būti suvokiama [...] kaip baudmės pagrindas* (LT52).
'Guilt should be understood [...] as the **foundation / base** (=basis) of **punishment**'
- (189) *Nusikalstamumo prevencijos pagrindą turi sudaryti [...]* (LT6).
'The **base / foundation** (=basis) of crime **prevention** should consist of [...]'
- (190) *Žmogaus teisė į kūno neliečiamybę [...] yra viena pamatinių teisių* (LT3).
'The human right to bodily integrity [...] is one of the **fundamental rights**'

The salient aspect that is at play in metaphorically structuring the law in terms of a physical structure here is the lower part of a structure such as a building. The foundation or base of is the most important part of a building that supports other parts and holds their structure. Based on this analogy, we can speak about the core of criminal liability, punishment or prevention by referring to it as a base or foundation.

With respect to the BUILDING metaphor, which in this thesis is subsumed in the more general class of the PHYSICAL STRUCTURE metaphors, this specific source domain was not very productive in either of the two languages, yet, one Lithuanian-specific metaphorical pattern involving building-related lexis was identified. Namely, the understanding of (criminal) liability was found to be based on the notion of a *threshold*, e.g.:

- (191) [...] *baudžiamosios atsakomybės slenksčio* nustatymas BK per dalyko vertę gali siųsti žinią, kad atitinkamas neteisėto praturtėjimo lygmuo valstybėje yra toleruotinas [...] (Article_2_T).
 ‘[...] the establishment of the **threshold** (=limit) of criminal **liability** in the Criminal Code through the value of an item may be sending a message that certain level of acquisition of property obtained by criminal means is tolerable in the state [...].’

The above example is based on a metaphor in which the key element of the source domain of a building is that of a threshold, i.e. a wooden or stone strip at forming the bottom of a doorway and crossed in entering a room, house or some other building (ODE_e). Since criminal liability is constituted of certain elements, their absence or presence determines if it may be incurred for a given wrongdoing. In other words, criminal liability is a category that has presupposed boundaries the crossing of which is a determining factor of facing its imposition. Therefore, the complex notion bears conceptual resemblance of a threshold which is a boundary that marks leaving one space and entering another one.

To proceed with another set of metaphorical patterns found only in the Lithuanian data, some law-related nouns were used in combination with the word *struktūra* (‘structure’) and expressions *struktūrinė dalis* (‘structural part’), and *sudedamoji dalis* (‘component’, lit., ‘one of the pieces to be assembled and connected in making up a whole’). Based on such metaphorical conceptualisation, we can speak about the structure of punishments, laws / statutes, Criminal Code, articles, and courts. Consider a few examples that contain the instantiation of this specific source domain:

- (192) *Baudžiamojo įstatymo struktūra* suformuota taip, kad jame daugelis sudėčių konkuruoja viena su kita (LT40).
 ‘The **structure** of the criminal **law** is formulated in such a way that the majority of elements of crimes compete with each other’
- (193) [...] *kad baudžiamojo įstatymo straipsnio sudedamųjų dalių* suvokimas turi didelę reikšmę (LT33).
 ‘the understanding of the **components / pieces of assembly** (=elements / structural parts) of the article of criminal law has considerable significance.’
- (194) *Visos BK struktūrinės dalys* yra susijusios ir sudaro visumą – sistemą (LT33).
 ‘All **structural parts** of the **CC** are related and make up the whole, i.e. a system’
- (195) [...] *tačiau tai ir nėra būtina įvertinant kolegijų vietą Kambodžos teismų struktūroje* (LT44).
 ‘but this is not mandatory in considering the role of tribunals in Cambodian **structure** (=system) of **courts**’

Examples (192) and (193) rely on the cognitive elements of objects which constitute some kind of physical structure in order to give a more easily accessible understanding of the way written laws, separate articles and their parts are arranged and related in making up a body of law, whereas example (194) is based on the conceptualisation of the hierarchy of law as if it was a physical structure.

Finally, one more Lithuanian-specific metaphorical pattern that was identified in the data was the pattern that contained the lexical unit schema ('schema', 'scheme'). In particular, this source domain notion was used in combination with the law related word *veika* ('(criminal) act'), e.g.:

(196) [...] *nusikalstamų veikų schemos tampa sudėtingesnės* (LT58).
'schemes of criminal acts (=crime schemes) become more complex'

The research article that (196) is an excerpt of deals with new methods of fraud (such as identity theft) in the electronic medium which are enabled by technological advancement such as online banking systems. Since offenders develop creative, smart and often complex ways of commit such acts, they resemble a scheme, which is a model or a drawing that represents a plan, a theory, a mechanism or some other complex system. Based on the concept of a SCHEMA, the notion of criminal act such as fraud becomes conceptually more accessible since this metaphorical mapping provides the basis to view such a complex act in terms of a visual representation which features the key elements of a represented item, connections between them, which has some shapes and lines that make it easier to see the whole as well as observe its constituent parts.

This section has focussed on the metaphorical patterns that were encountered only in the Lithuanian data and has demonstrated that Lithuanian research articles contained a set of Lithuanian-specific metaphorical expressions thereby revealing a tendency for Lithuanian to feature a richer lexical variety of the PHYSICAL STRUCTURE metaphors in comparison to English. The following section proceeds with the analysis of a few of metaphorical patterns which were identified in the English data only.

English-specific metaphorical patterns

With regard to English-specific metaphorical patterns that instantiate the conceptual domain of PHYSICAL STRUCTURE, only a few cases were detected. English research articles made use of the more-specific structure-related image of a BRIDGE to conceptualise causal links between social and criminal issues as well as closer relationship between the police and other institutional or societal groups. For instance:

- (197) [...] *the social processes that supposedly form the causal **bridge** from **disorder** to **crime*** (EN40).
- (198) [...] *talked about the importance of '**building bridges**' between the **police**, a range of other agencies and migrant groups* (EN25).

Just like a structure carrying a road, railway or path across a river or another obstacle and connecting two physical areas, different social factors and processes may have direct impact and thus lead to offensive conduct, as example (197) above suggests. Furthermore, describing establishment and maintenance of relationships between people, their groups, and institutions is also seen more comprehensively drawing on the conceptual structure of a BRIDGE. Example (198) is also noticeable for the use of inverted commas which signals the author's awareness of the use of figurative language. From the point of view of different uses of metaphor, orthographic text features such as the use of inverted commas may be a marker indicating potentially deliberate metaphor or, at least, the author's awareness of the use of metaphor (see Goatly 2011, Nacey 2013, Steen 2008, 2015). The 'building bridges' metaphor is rather conventional and does not strike the reader with its novelty or creativity and the question as to the use of a deliberate metaphor is debatable since, as noted by some other scholars (Nacey 2013: 169), metaphor may be interpreted as deliberate although this may not be true on the part of the producer of the text. Nevertheless, what example (198) points at is the different uses of metaphor in terms of conscious / unconscious and deliberate / non-deliberate use.

Another English-specific case of metaphorical description of crime was the metaphorical pattern *to design crime*, which was represented in the English sample only by one metaphorical token. Although the basic meaning of the verb may be associated with a variety of other objects and not only structures,

this example was considered to be a peripheral case that fits into the category of PHYSICAL STRUCTURE, since, as suggested by the definition provided by ODE, the verb means “to decide upon the look and functioning of (a building, garment, or other object), by making a detailed drawing of it”. As the metaphorical mapping implies, crimes are often thought out, prepared in advance, carefully considering the plan of actions, means used in the commission of the crime, etc. Metaphorically conceptualising premeditated and carefully planned crimes in terms of designing them, arguably, emphasises the guilt of offenders and may also indicate the writer’s evaluative approach to such behaviour.

All in all, metaphorical conceptualisation of criminal law issues drawing on the source domain of a PHYSICAL STRUCTURE has proved to be productive and used in a variety of ways in English and Lithuanian research articles on criminal law. In Lithuanian legal discourse, the source domain of a PHYSICAL STRUCTURE is deeply entrenched in the conceptualisation of numerous law-related notions, which is reflected even in the semantics of the word *įstatymas* (‘law’, ‘statute’) the primary meaning of the base of the word referring to ‘consolidation’, ‘embedding’. In both languages, however, one of the key functions that this metaphor serves, is to provide a conceptually more delineated view of criminal law which features complex internal structure and complex interrelationship between its parts. Among the most pervasive metaphors in legal discourse evoking this source domain were LEGAL DOCUMENT IS A STRUCTURE, SYSTEM OF PRISONS / COURTS IS A STRUCTURE, LEGAL PROVISION IS A STRUCTURE, CRIME IS A STRUCTURE AND LIABILITY IS A STRUCTURE. However, cross-linguistic properties are best disclosed by carefully examining the lexical expression. What is disclosed in this grouping of metaphors is that while both discourse communities make use of such structure-related imagery as model, construction, chain, support, Lithuanian predominantly relies on the source domain element of consolidation. Furthermore, in Lithuanian a prominent metaphor relies on the source domain of PAVEMENT / PAVING as signalled by the conventional metaphorically used lexeme *grįsti* ‘to pave’. The most prevalent metaphor resting on this source domain has been LEGAL

DOCUMENT IS PAVEMENT and ARGUMENTATION IS PAVEMENT. In addition, Lithuanian features another very specific metaphor expressed by the noun slenkstis ('threshold', 'doorstep'). This concept is used specifically to construct the target domain concept of a criminal liability thereby signalling a metaphor LIABILITY IS A BUILDING and LIMIT IS A THRESHOLD. Although English-specific metaphors were not very prominent, conceptualising connections in terms of bridges shows an English-specific lexical realisation of STRUCTURE metaphor via a very specific image metaphor. Thus it is possible to draw a conclusion that the most prominent cross-linguistic differences metaphoricity occur not only (or not so much) by observing different conceptual patterns but especially by observing the different lexis which evokes the same source domain.

4.4.1.6. INSTRUMENT metaphors

The last group of metaphors making up the class of metaphors instantiated by an objectified view of the law consisted of metaphorical patterns which realised the source domain of INSTRUMENT / TOOL. All the examples of INSTRUMENT metaphors alongside their statistical data are provided in Table 15.

Table 15. Metaphorical patterns of INSTRUMENT in English and Lithuanian research articles

English	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	14	21 / 1.21%	66,66%	0.54
Metaphorical patterns (number of occurrences) <i>use of violence (4); to use violence (3); use of law (2); use of prisons (2); to use arrest (1); to use cases (1); to clear a case with arrest (1); use of justice (1); to use offense (1); to use prisons (1); user of probation (1); to use sentences (1); use of sentences (1); to use the police (1).</i>				
Lithuanian	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	11	154 / 2.40%	7.14%	4.01
Metaphorical patterns (number of occurrences) <i>prevencijos priemonė (45); (pa)naudoti smurtą (43); teisės priemonė (21); smurto naudojimas (16); pasinaudoti / naudotis teise (12); (pa)vartoti smurtą (8); naudoti teisę / naudotis teise (3); (pa)naudoti įstatymą / naudotis įstatymu (3); naudotis laisve (1); naudoti nuostatą (1); teisės instrumentas (1).</i>				

As the table shows, in total, there were 21 tokens (14 types) of INSTRUMENT metaphors identified in English and 154 tokens (11 types) in Lithuanian. As far as the linguistic expression of the grouping of metaphors is concerned, they were linguistically realised by a very limited range of lexemes. As can be seen

from the examples provided in Table 15, the lexemes which realised this source domain in combination with law-related nouns in English were *to use NP* and *a user of NP*, and *to clear a case with arrest*. In Lithuanian the language signalling INSTRUMENT metaphor consisted of the noun *priemonė* ('tool, instrument') verbs *vartoti* ('to use'), *(pa)naudoti(s)* ('to use, make use of'), nouns *naudojimas* ('use'), and *instrumentas* ('instrument') As for quantitative properties, since Lithuanian dataset featured frequent repetition of some of the tokens realising this metaphor, the lexical variety of expressing this metaphor in Lithuanian was considerably lower as compared to English metaphorical patterns which were not as frequent.

In texts of both discourse communities, violence is conventionally treated as something which is used as a physical tool / instrument:

- (199) [...] *offender's capacity to **use violence** throughout the crime commission process* (EN41).
- (200) [...] *encourage the **use of violence** and threats to others in order to gain social respect* (EN50).
- (201) [...] *galimybė **panaudoti smurtą** prieš nukentėjusįjį* (LT32).
'opportunity to **use violence** against the victim'
- (202) [...] *fizinio **smurto naudojimas*** (LT36).
'**use** of physical **violence**'

In all of the above examples resorting to violence is conventionally treated as a physical tool handled and used for a specific purpose. Notably, such metaphorical language does not evoke a very vivid metaphorical picture but rather is a sign of extremely conventionalized way of linguistically referring to violence in physical terms. Perpetrators engage in abusive behaviours which may involve physical actions, verbal abuse, sexual assault, psychological abuse and different other actions. However, the conventionalised metaphor provides a more delineated picture of violence by referring to it as if it was a physical tool / instrument used for a particular purpose.

As regards the most frequent metaphorical patterns, in Lithuanian, the most numerous represented metaphorical patterns employed the lexeme *priemonė* 'tool, means' in combination with the noun *prevencija* 'prevention' and *teisė* 'law', e.g.:

- (203) [...] *įstatymų leidėjas turėtų **naudoti** baudžiamosios **teisės priemones*** (LT49).

- ‘the legislator should **use** the **instruments** / **means** of criminal **law**’
- (204) [...] *civilinės teisės priemonių sąrašas buvo papildytas* (LT11)
‘the list of civil **law instruments** / **tools** was supplemented’
- (205) [...] *bausmės yra veiksminga nusikalstamumo prevencijos priemonė* (LT51)
‘punishments are an effective **tool** / **instrument** of crime **prevention**’

These are conventionalised metaphorical expressions recurrent in legal discourse as part of legal lexis.

Furthermore, INSTRUMENT metaphors are prominent in legal discourse when referring to citizen’s possibility to be protected by the laws, to use rights, liberties, police force, justice, etc.:

- (206) [...] *jo nesugebėjimą pasinaudoti savo teisėmis bei apginti savo interesų* (LT3).
‘his inability to **use** his **rights** and protect his interests’
- (207) *Naudojimasis šiomis laisvėmis* (LT1)
‘**use of** these **liberties**’
- (208) [...] *who consider the use of restorative justice in cases of youth violence towards parents in Australia* (EN)
- (209) [...] *residents in socially disorganized contexts are less likely to use police to resolve disputes because the law is potentially viewed as unjust and unfair* (EN27).

Other target domain concepts commonly instrumentalised are legal documents, specific provisions laid down in them and punishments as tools to correct criminals or apply the law in practice, e.g.:

- (210) *But the question is how the law may be used effectively* (EN2).
- (211) [...] *šios nuostatos pradėtos naudoti dėl* [...] (LT1).
‘these **provisions** we started to be **used** for [...]’
- (212) [...] *about the use of custodial sentences* (EN4).

As has been shown in this section, various criminal law measures such as legal documents, legal provisions, sentences are metaphorically treated as tools used by legislators, institutions, legal practitioners, and legal scholars, whereas rights and liberties are available for the use of all citizens. INSTRUMENT metaphors are conventionalised in both English and Lithuanian in referring to law via this metaphorical model. The results have been in line with the findings of other studies which have also revealed that instrument metaphors are particularly prominent in legal discourse, especially in the conceptualisation of legal documents as instruments.

Among the highly conventional metaphorical expressions expressed through very limited lexis, English featured one rather specific example of a metaphor which implies a metaphorical structuring of arrest as a tool / instrument of

clearing a criminal case (*to clear a case with arrest*), whereas the most prominent contrastive difference was the tendency of certain lexicalised metaphorical expressions to recur frequently in Lithuanian which resulted in a slightly bigger proportion of INSTRUMENT metaphors and a significantly lower lexical variation of instrumentality metaphors in Lithuanian as opposed to English.

4.4.2. Personification of the law

The generic metaphor LAW IS A PERSON is a very general metaphorical model which subsumes all cases of linguistic patterns based on metaphorical mappings in which law-related phenomena are conceptualised in terms of human beings, human activities or other human-like properties. The generic metaphor subsumes such cases as general personification, i.e. attributing human properties to non-human law-related target domains and more specific metaphors in which human activities such as fighting, competition, sports, health, illness, etc. are source domains mapped onto different legal phenomena. This section is divided into three parts, i.e., it first discusses general personification, and then goes on to analysing metaphors motivated by the source domains of FIGHTING AND COMPETITION and HEALTH AND ILLNESS as human activities.

4.4.2.1. PERSON metaphors

The tendency to attribute human qualities to non-human entities has been attested in scholarly literature across a variety of discourses including advertising, business, politics, the language and conceptualisation of emotions, academic discourse, etc. The results of the present study have also been in line with contemporary metaphor research which has emphasised the pervasiveness of personification since this was the second most prevalent metaphorical model in both languages by constructing legal discourse on the basis of the source domain of a PERSON.

With regard to quantitative tendencies, PERSON metaphors were both the second most represented class of all metaphorical patterns in English and Lithuanian. In total, 275 tokens (96 types, mTTR – 34,90%) of PERSON

metaphors were identified in English, which constituted 15.63% of all metaphorical patterns identified in English; whereas 466 metaphorical tokens (168 types, mTTR – 36.05%) were identified in Lithuanian which only constituted 7.28% of all metaphorical patterns in Lithuanian.

Among the most numerous metaphors based on personification is a group of metaphorical patterns which describe the law in terms of certain human-like categories. A prominent picture of law as a human being is that of a strict and authoritative figure to be obeyed. As a result, law as a person is attributed such qualities as seriousness, strictness, authoritativeness which requires people to obey him/her. One way of expressing this linguistically is via adjective-noun collocations, in which adjectives denote character traits which collocate with legal nouns. Two most salient human-like qualities that law possesses are seriousness and strictness, e.g.:

- (213) [...] *aiškiai per **griežta** bausmė, kuri visuomenės akyse tampa ne teisingumo, o žiaurumo aktu* (LT32).
 ‘clearly too **strict punishment** which in the eye of the public becomes the act of violence rather than the act of justice’
- (214) [...] *pagal **griežtesnį** baudžiamąjį įstatymą* (LT31).
 ‘under a **stricter** criminal law’
- (215) [...] ‘*laws of a free people can be **strict** but never cruel*’ (EN14).
- (216) [...] *disorder causes **serious crime** via a series of intermediating impacts* (EN15).
- (217) [...] *norėjo nužudyti bobutę ir būti įkalintas už **rimtą nusikaltimą**, nes laisvėje neturi ką veikti* (LT50).
 ‘wanted to kill the old lady and be incarcerated for a **serious crime** since he has nothing to do when released’
- (218) *Tai buvo gan **rimta** bausmė, pagal savo sunkumą nusileidžianti tik laisvės atėmimui* (LT22).
 ‘That was rather a **strict punishment** which, according to gravity, was only below imprisonment’

The adjective *strict* as a contextual clue signifying personification suggests an image of the law as an authoritative figure which is to be obeyed and listened to, whereas the quality of seriousness may be interpreted slightly differently. On the one hand, the expressions *serious punishment* and *serious crime* can be seen as living beings that possess the quality of being thoughtful, considerate and even worried. On the other hand, another, perhaps even more logical interpretation of the adjective *serious* in such expressions is that it used to refer

to the effect of a crime or penalty as being so bad, dangerous or strict that it makes you worried or look at it seriously.

Although most qualities that the law as a person is attributed have to do with strictness and authority, there are some other human-like properties that laws acquire through personifying legal phenomena. In Lithuanian research articles, for example, there were some contextual indicators of viewing law as an intelligent person:

- (219) [...], *kad įstatymai yra **protingi** ir iš jų aiškiai galima numanyti [...]* (LT37).
'laws are **intelligent / bright** (=reasonable) and they can clearly indicate the [...]

Turning to other aspects of personification identified in research articles on criminal law and criminology, a salient aspect of personifying law in both datasets was describing legal matters as if they were involved in interpersonal relations. In this metaphorical scenario, legal phenomena are described as someone you can get familiar with, someone that you describe as being a stranger, while legal notions acquire the capability of having relationships between each other, for example:

- (220) *Susipažinus su naujuoju BK 292-1 **straipsniu** pastebima, kad [...]* (LT15).
'Having **made acquaintance** (=familiarised) with the new **article** (292-1) of the CC, it may be noted that [...]
- (221) [...] *Lietuvos baudžiamajam procesui nėra **svetima** ir rašytinio proceso **nuostata*** (LT18).
'The **provision** of written proceedings is not **alien / strange** (=unfamiliar) to the Lithuanian criminal procedure'
- (222) *Fikcija [...] yra ne tik **nesvetima teisei**, bet kartais tampa neatskiriama jos dalimi* (LT5).
'Fiction [...] is not only not **alien / strange** (=unfamiliar) to **law** but it also sometimes becomes its inseparable part'
- (223) [...] *the extent to which the **relationship** between **disorder** and fear might be conditioned by social cohesion* (EN40).
- (224) [...] *partially mediates the **relationship** between low self-control and bullying **victimization*** (EN50).

In addition to describing law in general terms of relationships, legal phenomena are metaphorically treated as having certain feelings or attitudes towards something. Constructing legal discourse resting on personification it is thus possible to describe law as someone to (dis)trust, confide in, be loyal to, (dis)obey, respect, someone that can help or even serve someone else's needs. Consider:

- (225) [...] *to impact adversely on public **confidence** in criminal **justice*** (EN22).

- (226) [...] *is the factor that most readily builds **trust** in **justice*** (EN7).
- (227) [...] *niekuo nesiskirdavo nuo **teisei lojalus** asmens asmenybės turinio* (LT6).
‘was no different from the features of a person **loyal** to the **law**’
- (228) [...] *o ne skatinti **įstatymui lojalių** piliečių virsmą nusikaltėliais* (LT39).
‘and not encouraging the transformation of citizens **loyal** to the **law** into criminals’
- (229) *Čia baudžiamajai **teisei padėjo** civilinė **teisė*** [...] (LT34).
‘Here civil **law helped** criminal **law**’
- (230) *Tarybų valstybėje **bausmė tarnauja** pažangiausios visuomeninės santvarkos pagrindams* (LT30).
‘In a Soviet state **punishment serves** the essence of the most advanced social order’
- (231) [...] *we contemplate on the obvious realization that **prisons serve** as institutions aimed at imposing misery* (EN14).

Among other properties which are imported from the realm of human beings and mapped onto legal matters is the tendency to refer to law as if it was capable of having mental states, mental processes, emotions, intentions and attitudes. A particularly prominent way of realising this metaphor in Lithuanian is through metaphorical patterns of legal lexemes collocating with the verb *numatyti* (‘to provide for’ ‘to stipulate’; lit., ‘to foresee’, ‘to anticipate’). Typically, the legal nouns that occur in these metaphorical patterns denote a legal document or its part, for instance:

- (232) [...] *naujasis **BK numato**, kad būtinosios ginties ribos gali būti peržengtos tik tiesiogine tyčia* (LT55).
‘the new **CC foresees / anticipates** (=provides for / stipulates) that the limits of self-defence may only be exceeded with a specific intent’
- (233) *BK 41 str. **numato** vieną bausmės tikslų – paveikti bausmę atlikusius asmenis* (LT50).
‘Art. 41 of the CC **foresees / anticipates** (=stipulates) one of the purposes of penalty, i.e. to exert an influence on the persons who have served their sentence’
- (234) [...] *skirti švelnesnę nei **įstatymo numatyta** bausmę* (LT56).
‘to impose a more lenient penalty than **foreseen / anticipated** (=provided for) by the **law**’

Thus in Lithuanian, the Criminal Code, its articles and legal provisions are typically viewed as persons, whereas legal provision or stipulation of punishments or rules or due procedures is metaphorically seen as anticipation or foreseeing which is a very conventional metaphor. However, imbuing non-human legal entities with such human-like properties as possession of mental processes, mental states and intentions is more varied. Consider the following cases where law-related target domain items are treated as having cognitive abilities, mental states, processes, attitudes, etc.:

- (235) [...] *jei tokia nauda būtų visiškai **„pamiršta“** baudžiamųjų **įstatymų*** (LT17).

- ‘if such a benefit is totally **“forgotten”** by criminal laws’
- (236) [...] *neteisėtaiis būdais įgytas turtas iki šiol mūsų įstatymų buvo **toleruojamas*** (LT22).
‘illegally acquired property has since this day been **tolerated** by the laws’
- (237) *Tokio dalyko kaip išplėstinis turto konfiskavimas nė vienos valstybės įstatymai tuo metu **nežinojo*** (LT22).
‘The laws of no country **knew of / were familiar with** the notion of extended confiscation of property then’
- (238) [...] *mandatory life sentence for murder is still in the best **interests** of justice* (EN15).
- (239) [...] *with the **police** particularly **keen** to use female officers in such activities as it suited* (EN9).

One of the most pervasive uses of personification in academic legal discourse is attributing such human properties onto law-related target domains as the ability to require, allow, prohibit, protect someone from something or someone. These properties are typically attributed to such law-related target domains as law, statute, article, code, provision and they are linguistically realised through combinability patterns with legal nouns in the subject position followed by active verbs denoting prohibition, requirement, punishment, protection, permission, e.g.:

- (240) *Įstatymas **leido** skirti vieną ar kelias papildomas bausmes* (LT30).
‘The law **allowed** imposing one or several additional penalties’
- (241) *Baudžiamasis įstatymas **saugo** teisinės vertybės nuo esminės žalos* (LT3).
‘Criminal law **protects** legal values from significant damage’
- (242) *Yet, to date, the law has **protected** them* (EN1).
- (243) [...] *the law **requires** that they are given the same legal and employment rights* (EN1).
- (244) [...] *nuostata **draudžia** be sargybos ar be palydos už įkalinimo įstaigos ribų išvykti* [...] (LT29).
‘the **provision prohibits** leaving the premises of the prison without the guard or escort’
- (245) [...] *teisė negali **bausti** tokio sugundyto (įvilioto) asmens* (LT10).
‘the law cannot **punish** such an enticed person’
- (246) [...] *straipsnis **įpareigoja** prokurorą proceso metu imtis priemonių* (LT13).
‘the **article obligates** the prosecutor to take measures during the proceedings’
- (247) *Minėto Buhalterinės apskaitos įstatymo 4 **straipsnis įsakmiai reikalauja**, kad [...]* (LT14).
‘Article 4 of the Law on Accounting **insistently demands / requires** that [...]’

Mapping onto them human properties, legal documents, articles that constitute them, as well as (criminal) law as a whole are perceived as strict and authoritative persons who impose rules, requirements, demand certain behaviour, may punish or, on the contrary, ensure safety by protecting the society from harmful and dangerous behaviours and other causes. The above examples illustrate that law is primarily metaphorically seen as an authoritative

figure thus suggesting its supreme superiority over people and its power to protect as well as punish. In some cases, as evident from example (247) above, the metaphorical image of the law as a superior and authoritative individual is enhanced by the use of the modifying adverb *įsakmiai* ('insistently', 'imperiously') reinforcing the qualities strictness and domination of the law as a person.

Another finding worth noting is a prominent human-like trait that many legal matters are attributed by way of personification is the ability to be engaged in a verbal / discourse activity. Linguistically this is expressed via metaphorical patterns with law-related noun and such lexemes as *a response, to respond, unresponsive, to address, to say* in English and *akcentuoti* ('to stress'), *prieštarauti* ('to contradict'), *(pa)neigti* ('to negate', 'to deny'), *(ne)sutikti su* ('to(dis)agree with'), *pritarti* ('to agree', 'to approve'), *skelbti* ('to announce'), *diktuoti* ('to dictate'), *prieštaravimas* ('contradiction', 'objection'), *adresatas* ('addressee'), cf.:

- (248) [...] *coming in from the local community which would help them **address crime*** (EN9).
- (249) [...] *an arrest is but one of several possible **responses** to a criminal **offense*** (EN26).
- (250) [...] *and how **cases are responded** to within the criminal justice system* (EN3).
- (251) [...] *specialiosios dalies teisės norma [...] tapo niekine, nes **prieštaravo** bendrosios dalies **nuostatoms*** (LT34).
 'the legal provision [...] laid down in the specific provisions section became void because it **opposed / contradicted** (=was in contravention of) the provisions laid down in the general provisions section'
- (252) [...] *o laisvės atėmimo **bausmė** be paleidimo galimybės [...] **neigia** pačią asmens reabilitaciją kaip bausmės tikslą* (LT50).
 'life imprisonment **sentence** [...] **negates** (=contradicts the idea of) a person's rehabilitation as the ultimate purpose of punishment'
- (253) [...] *ar neribotas kalinimas žeminančiomis kalinimo sąlygomis **neprieštarauja** žmogaus **teisėms*** (LT50).
 'whether termless imprisonment under degrading conditions of detention **does not contradict** (=is not in contravention of) human **rights**'

Thus based on the source domain of VERBAL ACTIVITY, academic legal discourse is constructed by metaphorically describing different legal notions as if they were participants in conversations, discussions and verbal arguments able to address, oppose, contradict or, on the contrary, agree with someone, deny something, reply to somebody, especially in the Lithuanian dataset. In the English data, on the other hand, the source domain notion of a *response* is

used in a restricted conventional metaphorical sense of reacting to something such as criminal activity, violence and other negative crime-related events.

There is some conceptual coherence in the use of different lexis denoting verbal activity with certain legal lexemes; for example, the verbs *to address*, *to respond* and the noun *response* are typically parts of metaphorical patterns with nouns that indicate crime and violence, especially in English. In addition, the Lithuanian verb *prieštarauti* ('to contradict') is used to refer to lack of internal logic among different legal norms, provisions, and principles. For example, as seen in (251), (252), and (253) above, the concept of verbally expressed contradiction shapes the understanding of one element of the law being incongruent or inconsistent with other legal principles or are against them. Thus the choice of lexemes signalling verbal activity that collocate with legal nouns is also dependent on the different aspects of the law and justice.

As mentioned above, in comparison to English, the Lithuanian research articles contained a greater variety of metaphorically used lexis denoting verbal activity. While English data was practically limited to a few lexemes denoting verbal exchange such as *to address* and *to respond / a response*, Lithuanian contained more variation in the use of rather specific metaphorically used lexemes that denote announcement, accentuation, dictation, and proofreading which typically follow law-related nouns as subjects of sentences and clauses, e.g.:

- (254) *Visuotinė žmogaus teisių deklaracija [...] nustatė sąrašą nuostatų, skelbiančių apie žmogaus svarbą ir jo teisę [...] (LT42).*
'The Universal Declaration of Human Rights [...] has provided a list of provisions **declaring / announcing** the significance of a human being and his/her right (=that everyone is entitled to have their rights)'
- (255) [...] *kad administracinė atsakomybė [...] kaip tik akcentuoja, kad administraciniu požiūriu savavaldžiavimas yra [...] (LT25).*
'on the contrary, administrative **liability accentuates / stresses** that from the administrative point of view self-willed conduct is [...]'
- (256) [...] *yra atvejų, kuriais teisė nediktuoja jokio sprendimo arba jo krypties (LT1).*
'there are cases in which **law** does not **dictate** (=stipulate, provide for, regulate) any decision / judgement or its direction.'
- (257) [...] *vykdant bausmę visada svarbu matyti, kiek ir kaip keičiasi esama socialinė asmens situacija – ar bausmė ją koreguoja teigiama linkme, ar tik dar labiau apsunkina (LT51).*
'in the enforcement of a sentence it is always important to observe to what extent and how the social situation of a person changes, i.e. whether the punishment **proofreads / corrects** it towards a positive direction or rather aggravates it'

Notably, in all of the above examples law-related nouns are used as agents of the different actions signified by the verbs thereby personifying legal provisions, liability, law and punishment. So, personification in language is realised by both semantic and syntactic means. In addition, all the verbs underlined in (254) – (257) that refer to verbal (both oral and written) activity are also used metaphorically. Therefore, each of these metaphorical patterns instantiate at least two metaphorical mappings in which abstract legal notions are seen as human beings and the actions that these personified notions collocate with also denote different metaphorical target domains conceptualised in terms of verbal activity. Thus, for example, in (254) we can reconstruct conceptual metaphors *LEGAL PROVISION IS A PERSON* and *WRITTEN PROMULGATION IS AN (ORAL) ANNOUNCEMENT*, the metaphorical expressions in (255) allow identification of the metaphors *LIABILITY IS A PERSON* and *EMPHASISING IS ACCENTUATION / (PHONETIC) STRESS*, (256) is motivated by the metaphors *LAW IS A PERSON* and *LEGAL REGULATION IS DICTATION*, whereas (257) is governed by the metaphors of *PUNISHMENT IS A PERSON* and *THE EFFECT OF PUNISHMENT IS CORRECTION / PROOFREADING OF A WRITTEN TEXT*, thus emphasising the key function of any legal punishment, i.e. correction of a person who has committed a wrongful act.

In addition, personifying legal target domains is also closely linked to another conceptual tool, i.e. metonymy. Since the development of legal documents, introducing new articles into criminal codes and applying the laws requires human interference and a lot of legal processes take place with human beings involved in interpreting written laws, discussing the suitability of a punishment in a concrete legal case, presenting arguments in the court of law, it is rather natural that human actions such as verbal exchange, discussion, contradiction provide the basis for conceptually structuring more abstract and formal law-related domains such as inconsistency in legal principles as verbal disagreement and exchange of opinions, reaction to / measures against crime and violence as a verbal response, correcting a wrongdoer by means of penalty as a correction of a written text, etc.

From the point of view of Critical Metaphor Analysis (Charteris-Black 2004, 2006), it can also be added that the source domain of a VERBAL EXCHANGE or some other VERBAL ACTIVITY provides basis for a positive metaphorisation. To be more precise, for example, the metaphorical view of solving the problem of crime and violence in terms of a dialogue (e.g. *to respond to crime, to address violence*) is a more positive metaphor in comparison to another metaphorical view of solving crime as a battle (e.g. *crime fighting, to tackle crime and violence*). Since the battle metaphor implies an underlying analogy between solving a problem and physical struggle, it may be argued that such metaphorisation legitimises violence. The verbal activity metaphor, on the other hand, suggests a more civilised and less radical way of solving a problem by engaging into a verbal activity with other interlocutors and arriving at a consensus.

Interestingly, in Lithuanian some examples of a personified view of the law present it as a person who is capable of forgiving crimes, e.g. *teisė neatleidžia nusikaltimų tik dėl to, kad žala yra nedidelė* ('law does not forgive crimes only because the damage is inextensive'), and rights and sentences are able to walk, e.g. *Bausmė peržengia ribas* ('punishment steps over (transgresses) the limits), *teisė pereina kitam asmeniui* ('the right passes to another person), punishments / sentences are capable of respecting somebody, as in *bausmė turi gerbti fundamentalią žmogaus orumo vertybę* ('punishment/sentence must respect the fundamental value of human dignity'). In addition, some cases of personification, mostly realised by single metaphorical tokens were less conventional and highlighted other aspects of human life. For instance, in Lithuanian a prominent aspect of human beings is referring to law in terms of age, for instance:

- (258) *Lietuvos vyriausysis administracinis teismas* (LT29)
 'Lithuanian Oldest (=Supreme) Administrative Court'
 (=the Supreme Administrative Court of Lithuania)
- (259) [...] *teisė, pagrįsta vertinamaisiais požymiais, sensta lėčiau, nei apibrėžta pastoviaisiais požymiais* (LT37).
 'law based on evaluative features ages more slowly than law based on strict, descriptive criteria'

In addition, one Lithuanian example which was a case of mixed metaphor, presented the law as a human being living in an area encircled by a fence. The sentence goes as follows:

- (260) *Gilų kitų socialinių mokslų domėjimasi teise dažnai teisė sutinka atsitvėrus skepticizmo tvora* (LT70).
'the law meets other social sciences' profound interest in the law **encircled by a fence of scepticism'**
(= Law remains perched on the fence of skepticism regarding other social sciences' profound interest in the law)

Notably, the metaphorical view of the law in example (260) is unusual and novel. The excerpt contains several metaphorically used lexemes which imply the use of multiple source domains each highlighting a different aspect foregrounded in the metaphorical transfer. In the metaphorical scenario signaled by different metaphorically used lexemes, law is seen as a person, skeptical outlook as life in encircled area, skepticism as a fence, etc. Possibly, the author used the vivid metaphor in order to express his/her evaluative stance towards the issue discussed in the article. Possibly, it may also be a case of translating the idiomatic expression from English (or any other language which possesses a similar expression used conventionally).

Another interesting instance of a mixed metaphor (with a simultaneously used metonymy) was used in Lithuanian with reference to organized crime:

- (261) *Išskirtinę grėsmę visuomenės saugumui kelia organizuotas nusikalstamumas, kuris, papirkdamas korumpuotus pareigūnus ir per juos įsiskverbdamas į valstybės ir savivaldos aparata, investuoja į savo galios, įtakos išlaikymą ir plėtrą* (LT39).
'Exceptional threat to the society's safety is posed by organized **crime** which, by **bribing** corrupt officers and **penetrating** the self-government **apparatus**, **invests** into the **retention** and **expansion** of his/her (=its) of its power'

First of all, the excerpt above contains a metonymic reference to criminals by using the phrase *nusikalstamumas* 'crime' which stands for 'criminals' involved in organised crime. However, other metaphorically used lexemes in the sentence provide a set of different source domains used simultaneously in the excerpt by evoking the following metaphors: CRIMINAL ACT IS INVESTMENT (*to invest*), (SELF-)GOVERNMENT IS A MACHINE (*apparatus*) and a simultaneous metaphor SELF-GOVERNMENT IS AN OBJECT (*to penetrate*). This example does not only exemplify a more creative use of metaphor but also shows how multiple source domains may operate simultaneously in discourse as shown by

the density of metaphorical expressions in a rather short excerpt. Although such examples of metaphor mixing were not numerous, they indicate that metaphor mixing is a pervasive phenomenon which allows language users to resort to multiple metaphorical structures simultaneously without distorting the internal logic and structure of discourse (see also Gibbs 2016).

Finally, several peripheral personification-based metaphorical patterns were identified in both datasets which made use of a specific source domain notion of resurrection:

(262) [...] *the **resurrection** of former prisons as museums* (EN14)

(263) [...] *dalis nuostatų buvo prikeltos antram gyvenimui grąžinant jas į galiojantį BPK(LT18).*

‘some **provisions** were **resurrected for a second life** by bringing them back (=incorporating them again) into the effective Code of Criminal Proceedings’

The author of the article that example (262) is an extract of discusses the topic of the so-called penal tourism, i.e. a recent trend to establish museums in former prisons for the purposes of tourism, thus the metaphor is used in a specific context to refer to museums as human beings who resurrect for a second life because they had been closed (“died”) and then were renovated and transformed into museums (“resurrected”). The same conceptual logic applies in (263), in which provisions of a legal document which had initially been removed from it are seen as “dead” while their reincorporation into the legal document means their “resurrection” for a “second life”.

To conclude, the superiority of the law over all citizens is among the most highlighted aspects of the law and metaphorically referring to it as a person who rules over all citizens contributes to portraying the law as a powerful, impartial, and rational human being. However, cognitive legal scholars have shown that “what actually stands behind the majestic curtain of Law’s rationality and impartiality is nothing than ourselves and our own, often unruly social practices” (Winter 2001/2003: xiv). Thus it may be argued that metaphorically portraying the law as a rational, impartial and superior figure contributes to justifying and legitimisation of judicial processes, legal systems and legal structures (cf. Ebbesson 2008: 260).

As regards the most prominent contrastive features of PERSON metaphors, in attributing human features to legal concepts, both discourse communities make extensive use of patterns which foreground such aspects of the law-as-person as strictness, authority, and superiority. The laws may also possess such human qualities as have feelings, attitudes, experience mental processes, have relationships between each other, engage in interpersonal communication, i.e. perform verbal activities. As regards contrastive differences, although PERSON metaphors made up a larger proportion of all metaphorical patterns in English, Lithuanian displayed a greater inclination towards more vivid and creative use of potentially deliberate metaphor.

4.4.2.2. FIGHTING AND COMPETITION metaphors

Numerous studies into metaphoricity across and within different disciplines, types of discourse and languages have shown that the source domains of WAR, FIGHTING, and BATTLE often shape the conceptualisation of political (Cibulskienė 2006; Lakoff 1991a, 1991b; Musolff 2004), business (Koller 2004, 2008, Koller & Semino 2009), illness (Sontag 1978; Semino et al 2015) and other discourses. Legal discourse is not immune to WAR metaphors either. The legal concepts of litigation are based on the metaphor of a battle / competition in which the prosecution and the defence “fight” in order to “win” a case. The battle-based conceptualisation has been attested to be present in legal documents as shown by some researchers (Chiu & Chiang 2011).

In this study, lexemes related to fighting and competition have also been identified in combination with law-related nouns in both corpora thereby forming a coherent group of metaphorical patterns that are motivated by this specific source domain. Since the language of war, physical battles and other types of competition such as sports tend to overlap, this class is labelled as FIGHTING AND COMPETITION metaphors and are discussed together. In addition, since fighting and competition is a human activity, this class is subsumed by the more generic category of personification-based metaphors. Table 16 below illustrates all metaphorical patterns found in English and

Lithuanian research articles which are based on the source domain of FIGHTING AND COMPETITION:

Table 16. Metaphorical patterns of FIGHTING AND COMPETITION in English and Lithuanian research articles

English	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	11	16 / 0.92%	68.75%	0.39
Metaphorical patterns (number of occurrences) <i>to tackle crime(s) (3); crime fighting (3); to target offenders (2); to lose a case (1); loss of cases (1); crime buffer zone (1); to fight crime (1); war on crime (1); to target disorder (1); criminal justice arena (1); to come into conflict with the law (1).</i>				
Lithuanian	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	32	88 / 1.37%	36.36%	2.29
Metaphorical patterns (number of occurrences) <i>(ap)ginti teises (18); kova su narkotikais (12); ginti laisves (6); kova su nusikalstamumu (5); teisių gynimas (5); įstatymas gina X (4); ginti X[Acc.] nuo veikų (3); straipsnių konkurencija (3); „pirmavimas“ prieš bylas (2); karas su narkotikais (2); nukentėjusiųjų priešinimasis (2); kova su nusikaltimais (2); pasipriešinimas smurtui (2); kova su smurtu (2); teisė gina X[Acc.] (2); ginti teisingumą (2); atsakomybių konkurencija (1); konkuruoti su įstatymu (1); apginti įstatymą (1); laisvių gynimas (1); pasipriešinti nusikalstamumui (1); ginti nuo nusikaltimų (1); pasipriešinti smurtui (1); ginti X[Acc.] nuo smurto (1); kovoti su smurtu (1); straipsnis gina X[Acc.] (1); įsivelti į konfliktą su teise (1); teisių gynība (1); teisių gintis (1); teisių grūmimasis (1); konkuruoti su teisėmis (1); suduoti smūgį veikoms (1).</i>				

It has been found that written academic legal discourse tends to rely on the source domain of FIGHTING AND COMPETITION in the conceptualisation of crime, law and other legal matters. As indicated by the relative frequency count and the overall shares, this metaphor is not productive in comparison to other specific source domains. It only constitutes 0.92 percent of all metaphorical patterns (tokens) identified in the English research articles and 1.37% in the Lithuanian dataset. Interestingly, the linguistic variation is significantly higher in English in comparison to Lithuanian since most metaphorical expressions encountered in the English corpus were represented by single instances or a very low number of instances. By contrast, the Lithuanian corpus contained more numerous cases (tokens) of different metaphorical expressions (tokens), therefore its type-token ratio was lower (36.36%). On the other hand, the normalised frequencies of metaphorical tokens in Lithuanian clearly indicates that the Lithuanian corpus was richer in the different metaphorical patterns that instantiate FIGHT AND COMPETITION metaphor. As has already been noted, the

lower metaphorical type-token ratio in Lithuanian occurs due to the repetition of metaphorical tokens which was not the case in the whole corpus of English research articles as compared to Lithuanian.

Based on the partial transfer of the elements of FIGHT / WAR onto legal phenomena, such issues as crime, disorder, offending, violence can be seen as an enemy to be brought down by law enforcement bodies. The instantiation of this conceptual element of WAR AND FIGHTING has been identified in both English and Lithuanian research articles on criminal law and criminal justice, e.g.:

- (264) [...] *instrumental concerns about police effectiveness in **tackling crime*** (EN17).
- (265) [...] *we explore the extent that **targeting offenders** who might be identified as* (EN19).
- (266) [...] *an orientation around reactive '**crime fighting**' and [...]* (EN9).
- (267) *Ši įstatymų pataisa taip pat skirta **kovai su** organizuotu nusikalstamumu* (LT22).
'This amendment to the law is also aimed at **fighting** organised **crime**'
- (268) *Vienu svarbiausių Europos Sąjungos **kovos su narkotikais** teisės aktų yra [...]* (LT7).
'One of the most important legal acts of EU in **fighting** with (=against) **drugs** is [...]'

As the above examples suggest, such social and legal issues as criminal behaviour, illegal substances, their possession or distribution, and violence are seen as an enemy to be combated in a fight and dealing with such issues is therefore described in military terms. These aspects imply that criminal issues and illegal activities are to be taken seriously and they require radical action, employing strategies and tactics and often involve force and use of weapons and other military equipment. The examples above contain rather general lexemes that refer to fight and, as a result, rely on the projection of the whole image of fighting and battle as a general term without further specification of the source domain.

Both English and Lithuanian data make use of the notion of a more general and, perhaps less violent and aggressive kind of opposition, namely a conflict. Although the analysis of the concordances of twenty most common law-related nouns displayed only single occurrence of the expression *to come into conflict with the law* in English and its rough equivalent in Lithuanian *įsivelti į konfliktą su teise*, this metaphor may also be considered systematic in the context of

conceptualising law and crime in terms of having a conflicting relationship with a person. Its implications, on the other hand, may be slightly different due to a somewhat gentler nature of a conflict as compared to war or fight. Since conflicts are typically resolved and they do not necessarily entail physical fighting, aggression, the use of weapons or force, this metaphorical structuring of someone possibly breaking the law as being in a conflicting relationship with the law suggests that a potential violation of the law is less serious and may also be resolved without danger, hostility and damage suggested by a stronger image of a physical struggle or war.

It is interesting to note that the two expressions (*to come into conflict* in English and *įsivelti į konfliktą* in Lithuanian) are based on what could be called a double metaphor since they both encode another level of metaphorisation. The English expression contains an additional level of metaphorisation signified by the verb *to come* and thereby implying that getting into conflict is metaphorically conceptualised as a journey, whereas the spatial preposition *into* suggests that conflict is seen as a CONTAINER. In Lithuanian, on the other hand, the literal sense of the verb *įsivelti* is ‘to entangle oneself’ which suggests that involvement in some kind of discord or disagreement is metaphorically seen as entangling oneself into a net or wire which is difficult to disentangle from and set free. Thus what the complex metaphorical conceptualisation highlights is the fact that in its own right, conflict is seen as a situation that is difficult to escape, similarly to being stuck in wire or a net. What the two metaphorical expressions suggest is that sometimes conceptualisation consists of “layers” of metaphorisation in which tackling the issue of crime is seen as a conflict which, in its own right is understood as a container in English or a wire / web in Lithuanian.

As regards the diversity of the FIGHTING AND COMPETITION metaphor and the most pervasive cross-linguistic differences that this metaphor reveals in the data under investigation, the analysis has demonstrated that Lithuanian research articles employed the source domain of FIGHTING and COMPETITION in using more numerous lexemes signifying this source domain. In contrast to English,

which has mainly relied on the source domain of FIGHTING to structure the conceptualisation of crime and criminal activity and ways of dealing with it, in Lithuanian numerous other legal notions such as law, freedom, and even liability may be seen as human beings involved in a fight or some kind of competition. The most salient aspect that is foregrounded in Lithuanian but not in English is the aspect of legal measures acting in defending values, people and the society at large from illegal activities and other damage. This metaphor is most productively represented by metaphorical patterns where law-related nouns collocate with the active verb *ginti* ('to defend'), and related lemmas such as *gynimas* ('defence') and *gintis* ('defence'). For instance:

- (269) [...] *asmuo yra neliečiamas, žmogaus orumą **gina įstatymas*** (LT35).
'person is inviolable, human dignity is **protected by** the law'
- (270) [...] *visos mūsų teisėkūros, principu turi tapti žmogaus **teisių gynimas*** (LT30).
'the principle of the whole law-making must be **defence** (=protection) of human **rights**'
- (271) [...] *siekama [...] **ginti** visuomenę **nuo nusikalstamų veikų*** (LT31).
'aimed at **defending** (=protecting) the society from **criminals acts**'
- (272) [...] *didesnes prielaidas efektyviai asmens **teisių ir interesų ginčijai*** (LT18).
'greater preconditions for effective **defence** (=protection) of human **rights** and interests'

All the above examples may be considered to be an extension of personification which suggest the image of the law as a protective figure that is always there to protect and defend fundamental human values such as dignity (example (269)), people's liberties and rights (examples (270) and (272)) from violations or other unreasonable intrusions and the public at large (example (249)) from being injured by the detrimental effects of crime and wrongful activity. Typically, the metaphorical projection of the most salient elements of the scenario of a fight or battlefield includes two sides, i.e. someone in need of protection and defence and someone who is authoritative and powerful enough to protect and defend the potential victim. The personified vision of law as someone who protects people from wrongful actions contributes to creating the image of law as an authoritative, strict, and powerful figure whose main function is to ensure safety, maintain order, and protect human liberties and rights.

It is interesting to note that in the realisation of FIGHTING AND COMPETITION metaphor via lexis related to protection and defence in the Lithuanian data, law

may be portrayed both as a person that is protecting someone else or, alternatively, as a person that is being protected. Consider two examples below that illustrate this dual “role” of laws / legislative statutes:

(273) *Todėl baudžiamasis įstatymas gina įvairius teisinius gėrius [...] (LT35).*

‘Therefore criminal law **defends** (=protects) various legal assets’

(274) *[...] nukrypimas nuo įstatymo raidės kartais yra vienintelis būdas **apginti** patį įstatymą, kuris, nors ir stokoja konkretumo ar nuoseklumo, bet vis dėlto buvo kuriamas gerais tikslais [...] (1_JUR).*

‘digression from the letter of the law sometimes is the only way to **defend** the law itself which, despite lacking in specificity or consistency, was produced with good intentions’

Although the above examples are based on the same mapping, they present a case of the same metaphor employed to suggest slightly different aspects. Namely, example (273) is a statement that refers to the general function of the law as protection of values of a given society, whereas example (274) is an excerpt from a research article that raises a common problem of the letter of the law versus the spirit of the law. The author of the research article in example (274) argues for the superiority of the spirit of the law and therefore implies that possible inconsistencies and lack of concreteness in criminal law statutes should be disregarded in defence of the intent of legal drafters. In other words, the Lithuanian criminal law, which is often criticised for its inconsistencies and lack of specificity, may sometimes be in need of protection arguing for its force and efficiency.

Interestingly, another metaphorical scenario based on the source domain of FIGHTING and COMPETITION views the law itself as a battlefield in which the role of the two “adversaries” is imbued to such legal notions as liability, an article in a written law or even different rights. In such a scenario we may see a battle between two types of liabilities (criminal and civil), two articles of a Criminal Code, and a competition between different rights or between certain legal principles and rights. Cf.:

(275) *Taigi nustatęs skirtingų teisinių atsakomybių konkurencijos atvejį [...], teismas gali konstatuoti, kad nėra pagrindo taikyti paskutinę priemonę (baudžiamąją atsakomybę), kad ši atsakomybės rūšis nagrinėjamu atveju nėra proporcinga, ir tuo pagrindu išteisinti asmenį (LT1).*

‘Having established the case of **competition** between different legal liabilities, the court may hold that it is unreasonable to impose the ratio ultima (criminal liability),

- that this type of liability in the case under investigation is not proportional and, on these grounds, to acquit the person’
- (276) [...] *išliks BK 74 ir 75 **straipsnių konkurencija**, laikantis pozicijos, kad [...]* (LT38). ‘**competition** between **Articles** 74 and 75 of the Criminal Code will remain, holding that [...]’
- (277) [...] *viešumo principas gali **konkuruoti su** kitomis Konvencijoje numatytomis **teisėmis*** [...] (LT18). ‘the principle of publicity may **compete** with other **rights** established by the Convention’
- (278) [...] *kuris neretai panašesnis į šių **teisių grūdimąsi** nei darną* (LT18). ‘which is often more similar to a **struggle / tussle** of these **rights** rather than their harmony’

As inferred from the above examples, laws consist of different types of liability (example (275)), rights (examples (277) and (278)), and provisions set forth in different articles (example (276)). Sometimes, however, due to the interpretable character of written laws and their provisions, it may be difficult to maintain harmony and consistency of applying legal norms and choosing the right article to be applied in a concrete case. Similarly, sometimes ensuring the compliance of certain principles may be incompatible with other significant regulations or principles. Such inconsistencies and discordances may also be metaphorically treated in terms of a conflicting situation or even aggressive combat (example (278)).

Finally, in addition to conceptualisation differences of mapping FIGHTING AND COMPETITION to criminal law matters, the linguistic expression of this metaphor has disclosed a few cross-linguistic differences. In contrast to Lithuanian, the English data included metaphorical patterns in which the aspect of losing is foregrounded (*to lose a case; loss of cases*), whereas Lithuanian metaphorical patterns did not reveal any linguistic realisation of this salient aspect of fighting and competition. On the other hand, the aspects of this source domain that were limited to the Lithuanian data were competition itself (found in such metaphorical patterns as *atsakomybių konkurencija* (‘competition between liabilities’), *konkuruoti su teisėmis* (‘to compete with rights’), *konkuruoti su įstatymu* (‘to compete with the law/statute’), *straipsnių konkurencija* (‘competition of / between articles’)) resistance (e.g. *pasipriešinti nusikalstamumui* (‘to resist crime’), *pasipriešinimas smurtui* (‘resistance to violence’)), taking the lead (*pirmavimas prieš bylas* (‘lead against cases’)). Two other cases of Lithuanian-only metaphorical patterns that project a more specific image of a fight were *teisių grūdimasis* (‘tussle

/ grapple of rights’) and *suduoti smūgi (nusikalstamos) veikoms* (‘to strike / punch (criminal) offenses’). Notably, the first expression is rather unique and, perhaps, could be considered novel; whereas the second is well-established and is likely to have been affected by the language used in public discourse.

There was only one case of an English-specific metaphorical pattern projecting the image of a *buffer zone*, which, as defined by the MacmD_e, is “an area of land between two armed forces that they are not allowed to enter, making it less likely that they will attack each other”. In criminology, the expression is used in the context of geographic profiling to refer to the area around an offender’s residence in which they are less likely to commit crimes due to the fear of being recognised. As a result, they tend to travel greater distances from their homes to commit crimes. Similarly to Lithuanian-specific metaphors, the foregrounding of this specific image of a buffer zone that derives from military terminology provides a detailed visual representation of one aspect of a battle in order to maintain systematicity between the target and the source and, at the same time, is a representation of a lower level granularity of projecting certain aspects of a military image of war and fighting that are useful in drawing a parallel between them and the relevant aspects of the target domain. Thus, certain aspects of a military buffer zone which is an area of separation between two forces formed to reduce the risk of renewed conflict are particularly useful to speak about a geographical area intentionally avoided by offenders in committing crimes. Thus, the *buffer zone* metaphor is a case of metaphor migration from the military discipline into the discipline of criminology in which it acquired a different meaning.

4.4.2.3. HEALTH metaphors

Metaphor research has revealed that HEALTH and ILLNESS is a rather productive source domain that lends its properties to different notions across a variety of spheres such as economy, business and finance (Boers 1999; Goschler 2005; Urbonaitė & Šeškauskienė 2007), public discourse (Mussolf 2003) and other spheres. As maintained by Boers (1999) and Kövesces (2010), HEALTH is a frequently detected source domain in different types of discourse primarily due to

the fact that corporeal, illness and health aspects play an essential role in human life. Mapping this aspect onto non-human entities is grounded in the embodiment hypothesis (Lakoff & Johnson 1980/2003, 1999; Lakoff 1987; Johnson 2007), based on which human reasoning and cognitive processes to a large extent depend on their bodily and social experiences. Some valuable insights on the use of HEALTH metaphor have been made by Boers, who investigated metaphors that build on more specific or elaborate source domains. His corpus-based studies indicate that HEALTH metaphors are especially productive in socio-economic discourse (Boers 1999: 48). What the findings of Boers' study did was provide evidence for the claim that certain metaphorical sets are more characteristic of certain domains, in this case HEALTH metaphor was seen as particularly pervasive in socio-economic domain. A similar conclusion was made by Holmgren (2003: 106) who claimed that the economy's conceptualisation as a living organism is rather common in delineating economic phenomena since it is very often referred to as healthy, robust and strong or else ailing, weak or sickly.

The results of the present study have shown that the source domain of HEALTH AND ILLNESS is also rather pervasive in legal discourse; however, it was significantly more prominent in English as compared to Lithuanian. As the comparison of the frequency of health metaphor in English and Lithuanian reveals, it was one of the few categories of metaphors which were more recurrent in English than in Lithuanian research papers. Table 17 below shows all the cases of HEALTH metaphor alongside their statistical data.

Table 17. Metaphorical patterns of HEALTH AND ILLNESS in English and Lithuanian research articles

English	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	15	43 / 2.48%	34.88%	1.12
Metaphorical patterns (number of occurrences) <i>strong case (12); offender rehabilitation / rehabilitation of offenders (6); restorative justice (5); treatment of offenders / offender treatment (5); chronic offender (5); weak case (1); to strengthen cases (1); panacea to crime (1); symptom of crime (1); panacea to disorder (1); justice epidemiology (1); treatment of offenses (1); to rehabilitate offenders (1); rehabilitative offenders (1); weakness of a sentence (1).</i>				

Lithuanian	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	8	9 / 0.14%	88.88%	0.23
Metaphorical patterns (number of occurrences)				
<i>nuteistojo reabilitacija (2); „vaistas“ nuo atsakomybės (1); bausmės šalutinis poveikis (1); bausmė yra svetimkūnis (1); įstatymas merdėja (1); nusikalstamumo panacėja (1); nusikalstamumas – piktžaidė (1); jautrumas nusikaltimams (1); miręs straipsnis (1).</i>				

A prominent feature in mapping conceptual properties of health, illness and medicine onto legal matters through health- and illness-related lexis was via a general metaphorical model of treating crime as a disease, offenders as patients and correctional measures as medical treatment. In fact, this aspect, though linguistically realised through slightly different lexemes, has been characteristic of both English and Lithuanian research articles on criminal law, criminal justice, and criminology:

- (279) [...] *people involved in low-level disorder or exhibiting ‘at risk’ **symptoms of crime*** (EN9).
- (280) [...] *in the management and/or **rehabilitation** of convicted **offenders*** [...] (EN20).
- (281) [...] *criminal justice actors tend to seek harsher (but more expensive) **treatment of offenders** if a case has been in the press* (EN48).
- (282) [...] ***chronic offenders** exhibited more psychopathic personality traits* (EN49).
- (283) [...] *gali sukelti „moralinę paniką“ ir padidinti visuomenės **jautrumą** (netoleranciją) **nusikaltimams*** (LT69)
‘may cause “moral panic” and increase the society’s **sensitivity** (intolerance) to **crimes**’
- (284) [...] ***nuteistojo reabilitacija** – būtinas laisvės atėmimo iki gyvos galvos tikslas [...]* (LT50).
‘**rehabilitation** of an **offender** is the mandatory aim of a life imprisonment sentence’
- (285) [...] *tokios griežtos sankcijos (laivės atėmimo **bausmės**) **šalutinis poveikis** būna itin neigiamas* (LT3).
‘the **side effect** of such a severe sanction (**sentence** of imprisonment) is particularly negative’

As can be seen from the above examples, similarly to illnesses and malfunction, crime may show symptoms (example (279)), which may be indicative of a more or less serious condition. Similarly, criminals who have already been convicted, are subject to correctional measures (examples (280), (281), (284) and (285)) which is an analogical measure to rehabilitation once a disease, malfunction, injury or other medical conditions have been diagnosed. Maintaining the systematicity of HEALTH AND ILLNESS metaphor, such sanctions as penalties are likely to have side effects (example (285)). Logically, malfunction is a negative phenomenon that needs taking action and, maintaining such systematicity, the

typical target domains which are structured by the source domain of illness, malfunction, medical treatment, and other illness-related concepts, are also inherently negative. Typical target domains that are discussed in terms of malfunction are crime, disorder, criminal activity and criminal behaviour. Maintaining conceptual coherence, correctional measures are seen in terms of medical treatment such as rehabilitation, or substance to treat illnesses or reduce pain. The linguistic metaphors presented above are motivated by conceptual metaphors CRIME IS ILLNESS / MALFUNCTION, CRIMINAL BEHAVIOUR IS ILLNESS, CORRECTIONAL ACTIVITY IS MEDICAL TREATMENT which is based on a superordinate metaphor of PROBLEM / PROBLEMATIC SITUATION IS AN ILLNESS / MALFUNCTION. Such metaphorical patterns foreground the seriousness of a problem that is being dealt with, inappropriate state of affairs and the urgency of taking measures in order to improve the situation.

As has been prominent in the metaphorical structuring of legal discourse, numerous metaphorical patterns identified are well-established conventional metaphorical expressions. Numerous patterns motivated by the source domain of HEALTH have also proven to be criminal law terms, e.g. (offender) *rehabilitation*, which in criminal law refers to ‘the process of seeking to improve a criminal’s character and outlook so that he or she can function in society without committing other crimes’ (BLD: 1311). Another legal term resting on the conceptual structure of HEALTH as a source domain is *restorative justice*, which is defined as ‘an alternative delinquency sanction that focuses on repairing the harm done, meeting the victim’s needs, and holding the offender responsible for his or her actions’ (BLD: 1340). MacmD_e defines *restorative* as ‘making you feel strong, healthy, full of energy, or happy again’⁴⁰, which signals a link between medicinal and correctional repair and between damage done to an organism and damage done to the affected persons, property or any other affected entity. By way of comparing the legal contextual sense of the word and its basic meaning provided by contemporary English dictionaries, we can

⁴⁰ The examples provided are as follow: *This herb has restorative properties* and *restorative surgery* (MacmDe).

establish a metaphorical view whereby the society is conceptualised as a person whose physical and mental wellness has been damaged by the effects of crime. Therefore, the societal “health” needs treatment by way of compensating for at least some damage to be repaired and the general well-being to be restored. These metaphorical patterns are part of the specialist (criminal law) lexis used by the discourse community to name the reality of their work. However, other metaphorical patterns identified were less conventional and might have been used for communicative properties. This was relevant in the research papers written by the Lithuanian criminology and criminal law experts, as the following section shows.

In addition to HEALTH metaphors which were encountered in both corpora, the Lithuanian data displayed more variation in the projection of malfunction-related concepts onto criminal law matters. First of all, there has been an interesting use of the image of medication in the context of evading criminal responsibility for unjust enrichment. The author of a research article that concentrates on this issue makes a prediction that people will find numerous ways of concealing this type of crime which he metaphorically refers to as medicine against criminal liability. Consider the original:

(286)[...] *per keletą metų nepagrįstų turtų savininkai suras „vaistą“ nuo baudžiamosios atsakomybės: pridengs savo turtinę padėtį paskolomis, įkeitimais, perkels pinigus į užsienio bankus [...]* (LT17).
‘in a few years owners of illegally obtained property will find a “medicine” against criminal **liability**: they will cover their financial situation with loans, mortgages, transfer their money to foreign banks.’

Interestingly, the source domain of MEDICATION in this example obtains a slightly different aspect than its typical use in structuring such negative issues as crime and medical treatment aspect being projected onto the concept of correctional activity or a more general measure to improve a malfunctioning aspect. In this case, smart ways of covering one’s illegal activity are metaphorically seen as medication or, more precisely, preventive drug that will lead to further successful hiding of one’s offending behaviour and, ultimately, escaping criminal liability for such actions. Paradoxically, medical treatment which typically is a measure that prevents from such negative events as illnesses

in this metaphorical conceptualisation becomes a way of maintaining negative events and actions (criminal activity) possible by way of hiding them. However, this metaphorical pattern does not distort the systematicity of HEALTH metaphor since in this particular case the salient aspect of the source domain of drugs is that of prevention. Taking preventive medicine is supposed to prevent medical conditions and diseases. Similarly, offenders are likely to take actions in order to prevent their criminal activity from being discovered. What this metaphor also shows is that source domains may be productive by lending some aspects that are most relevant in a specific context to describe a particular situation as long as metaphorical mappings are systematic. In the example discussed above, systematicity is maintained due to the aspect of prevention which is the basis for transferring the source domain of medication onto the target of preventive measures taken to hide criminal activity.

Other cases of health-related imagery encountered only in the Lithuanian data analysed were those of a foreign body, wound, and agony or death. Consider these examples:

- (287) *Pažymėtina, kad dalis mokslininkų teigia, kad turto **bausmė** yra svetimkūnis Vokietijos teisės sistemoje, ir turi būti panaikinta.* (LT22)
 ‘It should be noted that, according to some scholars, pecuniary **penalty** is a **foreign body** in the German legal system and it should be abolished.’
- (288) *Tarybų valstybei tenka ryžtingai kovoti su paveldėta iš kapitalistinės santvarkos **piktžaiзде** – **nusikalstamumu** [...] (LT30).*
 ‘The Soviet state has to take a firm stand in fighting against **crime**, i.e. an **ulcer** inherited from the capitalist system.’
- (289) *Manau, šis **įstatymas** iš anksto pasmerktas merdėti, nepaisant [...] (LT22)*
 ‘I think this law is predestined to be moribund, irrespective of [...].’
- (290) *[...] **įstatymų** leidėjas nesiryžta atsisakyti „mirusių“ baudžiamojo **įstatymo straipsnių**.* (LT43)
 ‘the legislator is hesitant in eliminating “**dead**” **articles** of the Criminal Code’

Thus if a certain type of penalty does not have a long-standing tradition in a legal system and is unlikely to be adopted successfully, it should be abolished, similarly to removing a foreign object from tissues or cavities of an organism and which are likely to irritate the tissues or cause inflammation. This metaphor highlights the aspect of a foreign body of intruding the place it does not belong to, unlikeliness of it being successfully adapted in such an environment and therefore the urgent need of abolishing it. Likewise, if a law is in a state of

being moribund (example (289)), it is conceptualised as being at the point of death, i.e. it is in an indeed severe state and should either not be passed or reconsidered before adopting it. In addition, an article in a legal act which is obsolete and, perhaps, needs to be eliminated because it is no longer effective, may metaphorically be termed as “dead” (example (290)). Evidently, when part of a legal document has served its function, yet has become obsolete and lost its effect or relevance, a time comes for it to “pass away” and be removed from the act.

In the context of crime and its societal effects (example (288)), describing it as a wound, namely evokes a picture of a society as a person and crime as a wound which needs to be healed. The metaphorical mapping is systematic, yet its linguistic expression is rather unusual and novel. Like ulcers, i.e. are sore areas located on an external or internal surface of an organ or tissue that may bleed and produce poisonous substance, spread of crime is a painful societal issue that affects the society in a negative way. Clearly, the aspect of a damaging effect to the tissue / organ and painful effects of ulcers is crucial in such metaphorical structuring and these features of the malfunction are projected onto the substantial negative impact of crime on society and its values, a painful and sensitive social and legal issue. However, the ulcer metaphor is likely to have been used by the author of the article for communicative purposes. The use of the lexeme *piktžaizdė* (‘ulcer’) evokes a negative or perhaps even a repulsive image which the author might have used consciously to express a negative evaluation of crime

All in all, this section has presented metaphors that structure the understanding of crime and law through the source domain of HEALTH and ILLNESS obtained from the research data. The results have demonstrated a tendency to conceptualise rather varied law-related phenomena in terms of bodily malfunction, general state of health and fitness in both English and Lithuanian research articles on criminal law. An interesting tendency was observed in the occurrence of HEALTH AND ILLNESS metaphor in English versus Lithuanian. While in English articles metaphorical patterns relying on the source domain

of HEALTH were significantly more frequent, the Lithuanian research papers showed more creativity and novelty in constructing legal discourse by resorting to medical lexis. As has been shown in this section, HEALTH metaphor is encoded in some institutionalised legal terminology and is part of the discourse community's jargon; however, authors of research articles (especially in Lithuanian) show creativity in employing HEALTH metaphors to express their (negative) evaluation or achieve other communicative goals. The most prominent shared aspect of the way HEALTH metaphor structures criminal law discourse is a clear tendency to conceptualise negative phenomena in law and legal doctrine in terms of ailments and general body malfunction, whereas measures of improving the situation – as medical treatment.

There have been several cross-linguistic differences observed in highlighting different aspects of the source domain of HEALTH AND ILLNESS in the two languages. English research articles showed greater inclination to use lexis related to medical treatment, whereas Lithuanian-specific cases included metaphors employing the imagery of a foreign body, an ulcer, and agony, whereas English used very specific notions of restorative properties of law and justice and treating repetitive criminal conduct as a chronic illness / malfunction.

English research articles contained metaphors with health-related lexemes which foregrounded different conceptual elements of the source domain. The English corpus displayed rather frequent reference to legal cases in terms of physical strength / robustness and weakness / feebleness. In fact, such conceptualisation has been limited to the English sample. Cf.:

- (291) *SAK [sexual assault kit] done makes it easier for a **strong case** because the evidence is fresh.* (EN30)
- (292) *[...] investigators indicated that the presence of physical evidence **strengthened a case**.* (EN30)
- (293) *[...] perhaps some **weak DVRO cases** are nevertheless filed [...]* (EN16).
- (294) *[...] the **weakness** of the mandatory life **sentence** became clearer, precisely for the reason that it fails to [...]* (EN15).

This metaphor is a case of providing a very general way of seeing legal cases in terms of their physical strength and robustness or, conversely, feebleness.

Therefore, a case that is supported by substantial and fresh (example (291)) evidence is likely to be proven as being strong, like a healthy and well-functioning organism. In a similar vein, collecting physical evidence and its presence in court makes a case stronger, analogically to physical, mental, behavioural and chemical remedies of strengthening the health of a human body (example (292)). Finally, the aspect of physical strength and fitness is foregrounded in example (294), which is an excerpt from an article dealing with a highly controversial topic in the UK, i.e. mandatory life sentence for everyone convicted of murder. The author of the research article directly quotes an article issued in *The Guardian* which shed light on the insufficiency of mandatory life sentence for murder to treat different criminals in different terms. Thus a conventional way of referring to some disadvantages or negative effects of the matter is by metaphorically referring to it as being weak, i.e. not functioning properly, at a full potential and in need of being changed or restored.

A systematic metaphorical treatment of cases as if they were organisms that may function well or not so well, i.e. not at their full capacity, cases can also be weak, if they are not supported by considerable evidence and are not likely to be proven and won. The aspect of performance of a body is key to thinking in this metaphorical line since legal cases, when they reach the court, are either won or lost. In many types of competition that require physical strength, physically healthier and stronger bodies are thus also more likely to win, whereas weaker ones are subject to losing. This metaphor, obviously, relies on personification, i.e. on seeing such matters as legal cases as human beings which enables the elements of bodily strength, illness and health to also be highlighted in speaking and writing about the issue.

Besides, it is important to mention that metaphorical patterns that highlight physical/bodily strength or weakness may be considered to be overlapping with other metaphors such as COMPETITION and FITNESS, examples (291) – (294) being a good illustration of the fuzzy boundaries between these three source domains. Because the metaphorical pattern in the above examples is based on lexemes that have rather general meaning such as *strong*, *weak*, *strengthen*,

weakness that may literally refer to both health, fitness, and competition, depending on the context, these metaphors may be said to be peripheral to the category of HEALTH AND ILLNESS and overlapping with other related domains such as FITNESS and COMPETITION. Like a stronger opponent in a fight or competition, cases that are strong are likely to win in court, whereas weaker cases are likely to lose. Similarly, in order to regain vigour and fitness, people can strengthen their bodies so that they could perform better, therefore in order to make cases more convincing in a court of law, attorneys may try to strengthen them by various means. In summary, such examples show that in some cases there is considerable overlap in the source domains that shape the conceptualisation of law.

4.4.3. NATURE metaphors

A set of metaphorical patterns identified in the two datasets are motivated by the source domain of NATURAL OBJECTS such as plants, rivers, mountains, seas, fields, and NATURAL PHENOMENA AND FORCES, such as winds, storms, floods and waves, etc. Table 18 below contains all metaphorical patterns classed as metaphors motivated by the source domain of NATURE which were identified in the two corpora.

Table 18. Metaphorical patterns of NATURE in English and Lithuanian research articles

English	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	13	27 / 1.55%	48.14%	0.70
Metaphorical patterns (number of occurrences) <i>wave of delinquency (7); law and order climate (5); source of crime (2); crime wave (2); drug domain (2); source of violence (2); to cherry-pick cases (1); cherry-picking of cases (1); field of crime (1); outgrowth of disorder (1); area of law (1); field of violence (1); wave of violence (1).</i>				
Lithuanian	Types	Tokens / overall share	mTTR	Normalised frequency /10,000 words
	18	79 / 1.23%	22.78%	2.05
Metaphorical patterns (number of occurrences) <i>teisės šaka (47); teisės šaltinis (14); išplaukti iš kodekso (2); išplaukti iš straipsnio (2); migloti įstatymai (1); nusikalstamumo laukas (1); nusikalstamumas siautėja (1); nusikaltimų banga (1); nusikaltimų ledkalnio viršūnė (1); prevencijos šaltinis (1); užuovėja nuo smurto (1); miglota nuostata (1); X išplaukia iš nuostatos (1); peraugti į veikos stambų masą (1); veikos šerdis (1); įstatymas bręsta (1); nusikalstamumo augimas (1); teisės augimas (1).</i>				

As regards the distribution of metaphorical tokens representing the source domain of NATURE, in both datasets the overall shares of this metaphor were very low in both corpora, namely, it constitutes 1.55% of all metaphors in English and 1.23% in Lithuanian. Despite the rather low shares, the occurrence of NATURE metaphors in both languages has been systematic and makes a coherent set. As far as linguistic variation is concerned, the results have revealed a more distinct variation of the linguistic expression of this metaphor cross-linguistically. As the comparison of the metaphorical type-token ratio in English versus Lithuanian indicated in Table 18 above shows, English research articles showed greater lexical variation of NATURE metaphors in comparison to Lithuanian which was more than twice lower (i.e. 48.14% versus 22.78%). However, this finding should be interpreted carefully since the most significant factor that determined the markedly lower metaphorical type-token ratio in Lithuanian was the fact that two metaphorical patterns (*teisės šaka* ‘branch of law’ and *teisės šaltinis* ‘source of law’) were used frequently since they are conventionalised legal terms. While the type-token ratio indicates that the general lexical variation was different, considering the number of metaphorical tokens alone suggests a similar variation of different linguistic expressions instantiating NATURE metaphors.

Shared metaphorical patterns

Among the metaphors that were encountered in both datasets is a subgroup that contains metaphorical expressions used to refer to crime, delinquency and violence in terms of natural phenomena. Namely, one way of referring to the occurrence of crime and violence in large quantities is in terms of *waves*, e.g.:

- (295) [...] *a particular feature of the UK media coverage of this related to the **crime wave** that was predicted to follow* (EN25).
- (296) [...] *daugiau policijos pareigūnų įtraukti į teisės pažeidėjų paieškas, o to padarinys - „dirbtinė **nusikaltimų banga**“* (LT69).
 ‘more police officers are involved in the search for law breakers which results in an “artificial wave of crime”.’
- (297) *Following centuries of institutional cruelty, the prison was eventually consumed by a **wave** of urban **violence*** (EN14).

In all the examples above, the words *wave* and *bangą* (‘wave’) are used in their conventional metaphorical sense of a (typically sudden) increase in criminal

activity and violent behaviour (LDCE). Both, LDCE and MacmD_e contain a separate entry for the noun phrase *crime wave* which shows how conventional this expression has become in describing recurrent crime. Notably, the concept of *wave* lends its salient cognitive properties to the conceptualisation of inherently negative phenomena (violent and criminal behaviour). Such metaphorical structuring highlights the aspect of lack of control over (sudden) increase in crime events and a generally dangerous character of crime and violence. However, such metaphorisation also results in conceptually hiding the aspect of the wrongdoer's responsibility for offensive and violent behaviour since depicting crime in terms of natural phenomena constructs view of crime as if it was a "product" of the nature rather than people's actions.

Another prominent concept metaphorically structuring the understanding of some law-related issues is that of a *source*, which in its physical sense denotes the beginning of a stream or river (LDCE_e). This noun is metaphorically used in English in combination with such legal nouns as *crime* and *violence*, whereas its Lithuanian equivalent *šaltinis* collocates with *teisė* ('law') and *prevencija* ('prevention'), e.g.:

- (298) *The alternative conception [...] sees the **source** of **crime** in this section of society, as a response to adverse social and economic circumstances [...]* (EN11).
- (299) *Such behaviors can also be the **source** of **violence**, such as in the recent "loud music murder" of Jordan Davis in November 2012* (EN45).
- (300) *[...] precedentas, kaip **teisės šaltinis**, negali pakeisti įstatymo - jis su juo koegzistuoja [...]* (LT17).
 'as a **source** of **law**, precedent cannot substitute legislation; it coexists with it [...]'
- (301) *[...] ši priemonė iš tikrųjų būtų naudinga ir padidintų domėjimąsi specializuotais nusikaltimų **prevencijos šaltiniais*** (LT64).
 'this tool would actually be useful and it would stimulate interest in specialised **sources** of crime **prevention**'

In all examples cited above, the key property mapped onto violent and criminal activity (examples (298) and (299)), law (example (300)) and crime prevention measures (in (301)) is that of the place of origin. The notion of a river or spring comes handy in referring to the beginning or cause of something, such as behaviour or other factors that may invoke violence or lead to criminal conduct. In a similar vein, origins from which laws, statutes, and customary legal practice derive may be compared to the beginning point of an area of water such as river. All metaphorical patterns identified that include the word

source can be considered a conventionalised way of referring to causes of behaviours and documents, legislation, oral legal practice that make up the law and its practice.

To proceed, several metaphorical expressions extracted from the corpora make use of lexis that denote an area of land which instantiate the conceptual mapping (ABSTRACT) AREA IS A PHYSICAL FIELD / DOMAIN. This metaphor is realised via the following metaphorical patterns: *field of crime, drug domain, area of law, field of violence* in English, whereas in Lithuanian the only related expression identified is *nusikalstamumo laukas* ('field/area of crime'). It is fair to treat such conceptualisation as highly conventional since practically all dictionaries include the metaphorical meanings of these words (topic, subjects, area of activity, etc) alongside their basic meanings that refer to an area of land used or controlled by a person, group of people or countries, governments, etc (MacmD_e, LDCE_e, ODE_e). Abstract subjects or areas of activity such as law or crime are complex and include numerous interrelated aspects, yet, at the same time they have presupposed boundaries (they exclude any matter outside the field). Therefore, by being attributed to abstract fields such as crime and law, the conceptual properties of geographical area create a view of these subjects as having physical boundaries.

Another nature-related notion metaphorically used by authors of legal research papers in both languages has to do with plants. More precisely, the metaphorical pattern identified in English and Lithuanian involves a plant-related notion of *outgrowth*, cf.:

(302) [...] *fear is an **outgrowth** of disorder, and fear is what paralyzes a disorder-entrenched community* [...] (EN40).

(303) *Dėl to nusikaltusio asmens teisinė padėtis akivaizdžiai kinta – padaroma daugiau veikų arba **peraugama** į vienos veikos stambų mastą* (LT10).

'As a result, there is an obvious change in the legal status of an offender, i.e. s/he commits more criminal acts or the criminal conduct **outgrows into** a large scale of one criminal act'

As defined by LDCE_e, *outgrowth* is 'something that grows out of something else', which obviously denotes the developmental processes of plants and highlights the key aspect of outgrowing, i.e. resulting in a new part of a plant. Based on such knowledge about plant anatomy, we can use salient cognitive

features related to the notion of *outgrowth* in structuring the understanding of more abstract processes. For example, we rely on this notion in the comprehension of a series of actions that give rise to a new phenomenon or a change in the existing one such as minor criminal activities developing into a large scale criminal conduct, as exemplified in (303) or the development of fear as a result of widespread disorder, evident in (302). On the one hand, since growth processes are largely taking place on their own and can hardly be controlled, it may be argued that the conceptualisation of the outcomes of disorder and crime in terms of outgrowth highlight the potential danger of such uncontrolled processes thereby implying that disorder and crime can hardly be prevented, reduced and controlled. On the other hand, if we interpret this metaphor by restricting it to a horticultural context, it may also be suggestive of the fact that the key to crime prevention, reduction and control lies in taking care of “good” plants (i.e. implementing social and educational policies) and eradicating “bad” ones (targeting crime and violence, deterring crime).

The rest of nature-related metaphorical patterns were specific to one of the two languages in their lexical expression and focussing on them separately allows discerning some cross-linguistic characteristics of metaphorical tendencies of legal thought in the two discourse communities. Since Lithuanian displayed more varied lexical expression of this metaphor, Lithuanian-only patterns are discussed first, following by the analysis of English-specific metaphors.

Lithuanian-specific NATURE metaphors

The Lithuanian dataset contained several metaphorical patterns instantiating metaphorical mappings that involve the source domain of a TREE. One of the cases encountered was a conventional expression *teisės šaka* (‘branch of law’) in which the source domain notion of a *branch* grounds the conceptualisation of the division of the law, which has also noted and discussed by some other scholars previously (Makela 2011: 402). From the quantitative perspective, this metaphorical pattern was the most numerous in the Lithuanian data, i.e. the 47 tokens of this pattern constitute more than half of all NATURE metaphors identified in the Lithuanian dataset. Somewhat surprisingly, the English data

contained no expressions *branch(es) of law* which could have been due to slightly different nature of the types of research reported by English-speaking researchers as opposed to Lithuanian researchers. While in their papers Lithuanian experts of criminal law typically include a considerable amount of legal theorising and address numerous theoretical and legislative issues such as definitions provided in the Code and their interpretation, the bulk of English research articles belong to the field of criminology which attempts to correlate societal issues and crime. Such studies are typically performed by applying quantitative methods and they therefore include less general legal theorising. Potentially, this could have determined the fact that such a prominent metaphorical expression was not found in English at all.

Another metaphorically used lexical expression associated with trees that was restricted to Lithuanian, was *šerdis* ('core', 'pith'). It was found in combination with the noun *veika* ('criminal act') and it was used in shaping the conceptualisation of the most important part of the elements of a criminal act distinguished in its definition, e.g.:

- (304) [...] *nusikalstamos veikos šerdis yra BK specialiosios dalies dispozicijoje* [...] (LT35).
 'the **core** (=essence) of **criminal act** is laid down in the special section of the Criminal Code'.

The essence of metaphorically attributing the elements of a core/pith in (266) is emphasising the fact that criminal acts have certain elements that are core, i.e. they are the essence, key elements that constitute a given criminal act. More generally, conceptualising legal notions in terms of plants such as trees also suggests several aspects about the law itself. Since a tree is an organic and living thing which evolves, grows, etc., the tree-metaphor in its own right implies that written laws, legal concepts, legal practices and principles are also a matter of development, change, they are "living" their own lives. In other words, law also evolves, changes, and adapts, while at the same time retaining its fundamental principles and values stable.

Deriving from the domain of NATURAL PHENOMENA comes yet another Lithuanian metaphorical conceptualisation of laws and legal provisions by describing them as foggy or misty, for example:

- (305) [...] *įstatymai dažnai būna migloti ir turi būti interpretuojami prieš juos taikant naujoms byloms* (LT1).
 ‘[...] **laws** are often misty (=vague) and have to be interpreted before they are applied to new cases.’
- (306) [...] *JT konvencijų nuostatos yra gana miglotos ir neduoda tiesaus atsakymo, kokių priemonių valstybės privalo imtis prieš narkotikų vartojimą asmeninėms reikmėms* (LT54).
 ‘[...] the **provisions** of the UN conventions are rather misty (=vague) and they do not provide a direct answer as to what actions states should take against possession of drugs for personal use’

The metaphorical conceptualisation in (305) and (306) deals with clarity of (written) laws and their provisions. The authors of both research articles address the issue of vagueness of legal provisions contained in statutes and other legal documents and metaphorically refer to non-clarity in terms of mistiness. Clearly, such conceptualisation is based on the primary metaphor UNDERSTANDING IS SEEING; therefore, what is clear visually structures the conceptualisation of conceptual clarity whereas anything that prevents clarity of sight such as foggy weather stands for lack of clarity, vagueness, and ambiguity. Since transparency and clarity are particularly significant aspects in legal proceedings and practical application of law, the metaphor instantiating the source domain of a foggy weather adds to the critical overtone and negative evaluation of legislation that is too vague.

Furthermore, two metaphorical patterns extracted from the Lithuanian concordances contained lexis related to natural forces such as winds and storms. In both mappings the source domain of NATURAL FORCE facilitates the conceptualisation of violence and crime. The following examples instantiate this mapping:

- (307) [...] *siautėjant organizuotam nusikalstamumui (1993-1996 metais) buvo naudojamas prevencinis sulaikymas* [...] (LT13).
 ‘[...] during the period when organised **crime** was storming / raging (1993 – 1996), preventive detention was used [...]’
- (308) *Namai suvokiami kaip saugi vieta, užuovėja nuo smurto ir* [...] (LT60).
 ‘Home is perceived as a safe place, a shelter from **violence** and [...]’

According to DLL_e, the verb *siautėti* ('to storm', 'to rage') means 'to manifest severely, to storm, to strike, hit (of natural phenomena and natural disasters)'. Borrowing some properties of storms, ferocious winds, etc., an outrage of criminal activity, especially one which gets beyond control, is similar to a natural disaster that strikes and thereby causes massive damage to the environment. The metaphorical mapping in (307) relies on the core aspects that natural disasters and criminal conduct share, namely, both are characteristically negative phenomena, they cause damage to the affected entity, both may be difficult / impossible to prevent and control, both are recurrent, etc.

In the same way, as example (308) illustrates, violence possesses properties that are similar to severe winds. For example, both are dangerous, both are difficult to control and both can cause great damage. Such metaphorisation, signalled by the lexis denoting a shelter, i.e. a place to hide from winds, highlights the ferocity of violence and its destructive character. It has been shown by metaphor researchers that the source domain of NATURAL PHENOMENA, WEATHER CONDITIONS and especially NATURAL DISASTERS often shape the understanding of such negative matters as financial crises (Silaški & Đurović, 2011; Bounegru & Forceville, 2011), immigration, especially when expressing negative attitudes toward immigrants by local dwellers (Charteris-Black, 2006), interpersonal conflicts (McCorkle & Mills 1992) and other matters which are inherently negative. Thus while emphasising the dangerous nature of crime and violence, metaphorising them in terms of NATURAL DISASTERS and (FEROCIOUS) WEATHER CONDITIONS conceals the element of responsibility on the part of offenders, portrays criminal conduct as if it was an element beyond human control, and evokes fear and imply a degree of powerlessness over these phenomena.

As noted above, some metaphorical patterns realising NATURE metaphors are related to natural bodies of water such as a *source*. Another type of lexical expression related to bodies of water identified in the Lithuanian consists of

the metaphorically used verb *išplaukti* ('to swim out', 'to surface') combining with some law-related nouns, e.g.:

- (309) [...] *požiūris į resocializaciją, kaip esminį ir vienintelį įkalinimo tikslą, išplaukiantį iš pagrindinės visų teisių teisės – žmogiškojo orumo* [...] (LT29).
'approach to resocialisation as the crucial and only purpose of imprisonment, **swimming/floating out** (=following, deriving) from the fundamental right, the right of all rights – human dignity'
- (310) *Tai išplaukia iš Konstitucijos 30 ir 109 straipsnių* [...] (LT61).
'This swims/floats (=follows) from Articles 30 and 109 of the Constitution'
- (311) *Tai plaukia iš nullum crimen, sine lege principio nuostatų* [...] (LT32).
'This swims/surfaces (=derives, follows) from the provisions of the principle nullum crimen, sine lege'

As indicated by the *Dictionary of Contemporary Lithuanian*, the basic sense of the verb (*iš*)*plaukti* is 'to swim, to surface, to rise to the surface of water' (DLKŽ_e). In its conventionalised metaphorical sense, the verb also refers to 'turning out as a result of reasoning'. The contextual meaning of examples (309) – (311) above is exactly that – drawing logical conclusions based on the interpretation of legal documents and their provisions is analogous to an object surfacing in water and becoming visible. This metaphorical conceptualisation relies on several related image schemas (such as depth and surface) and the above-discussed primary metaphor UNDERSTANDING IS SEEING. In accordance with ideas proposed by Lakoff and Johnson (1980) and Grady (1997), one of the most fundamental ways of structuring the concept of understanding is via the source domain of physical sight. Therefore, when objects are hidden, when they are not disclosed or otherwise brought to the field of sight, they are not clear or known. Whereas bringing the content or objects to sight by means of uncovering or making them surface metaphorically stands for clarification, understanding, seeing and knowing. Since a body of water such as rivers, lakes or seas have presupposed depth from which something can rise to the surface, the metaphor of surfacing as a result of reasoning is logical and systematic, in accordance with CMT principles.

Finally, one more metaphorical pattern instantiating the source domain of NATURAL PHENOMENA in the Lithuanian data deals with the image of a mountain, more specifically an *iceberg*:

- (312) [...] *oficialusis (institucinis) nusikaltimų skaičius nukrypsta nuo realios kriminogeninės padėties ir pateikia tik nusikaltimų ledkalnio viršūnę* (LT69).

‘official (institutional) crime rates digress from the actual criminogenic situation and they only reflect the tip of the iceberg of crimes’

The essence of metaphorically treating crimes in terms of an iceberg with only its tip being in sight suggests the magnitude of the problem of crime and the discrepancy between the actual extent of crime and its rates as reported by responsible bodies. Since the major part of an iceberg is under water and cannot be seen, this aspect of the source domain brings out the fact that actual numbers of crimes also remain uncovered and crime is largely underreported.

This section has dealt with NATURE metaphors identified in the Lithuanian dataset and the analysis turns to those metaphorical patterns instantiating the source domain of natural phenomena manifested only in English.

English-specific NATURE metaphors

In comparison to Lithuanian, English contained substantially fewer instances (only two metaphorical patterns, to be precise) of nature-related metaphors that were not identified in Lithuanian. One specific metaphorical pattern involving law-related nouns in English had to do with the lexeme of *cherries*, as in the examples below:

(313) [...] *those that have a lower probability of prosecutorial success would be expected to produce a lower conviction rate compared to other prosecutor's offices that may **'cherry pick'** cases most likely to result in a conviction* (EN16).

(314) [...] *data reflect the routine practice of **cherry picking** of DV cases by prosecutors in the United States* (EN16).

Both examples come from one research article that discusses the unfair practice of choosing best cases of domestic violence that have high chances of resulting in convicting the accused perpetrators. The metaphorical mapping relies on the similar nature of the source and the target domain scenarios. Similarly to picking out the best-looking cherries for oneself from a bowl or tree prosecutor's practice of selecting legal cases that are likely to end in a conviction is unfair, selfish, and perhaps also unethical. It is interesting to note that despite the fact that the expression 'cherry-picking' is conventionalised, the use of it in (313) is clearly conscious on the part of the author which is indicated by inverted commas as an orthographic metaphor-signalling device (cf. Goatly 1997: 189–190); whereas the second time the same phrase is used

the metaphor signalling devices are abandoned. In terms of developing discourse, it is common practice to use some kind of metaphor flag when a metaphorical expression is used for the first time and then carry on using the same metaphorical expression without such signalling devices since the reader is already familiar with it.

The second English-only metaphorical pattern instantiating the source domain of NATURE was related to weather conditions and contained a metaphorically used lexeme *climate*:

(315) [...] *within the current law and order **climate** this option may be a preferable model of reform for politicians unwilling to consider [...]* (EN15).

Climate has to do with the type of weather in a particular geographical area. Similarly, the conditions and general situation related to law and order and the attitudes that people have about it at a particular time can be described in terms of weather conditions. We can therefore speak about economic, political, moral or intellectual climate, as suggested by MacmD_e. The metaphorical mapping that links typical weather conditions in a region and the general situation related to law and order is based on such shared aspects, namely, geographical region corresponds to an abstract area of law and order, weather conditions correspond to general situation which has formed with regard to law and order and attitudes people hold towards the issue. In the long run, both weather conditions and the general public's opinion towards law and order may change. These and other cognitive properties shared by climate as a source domain and law and order as a target domain allow drawing a parallel between weather and law in a systematic and comprehensive way.

To conclude, this section has disclosed the role of NATURE metaphors in the conceptualisation of criminal law issues. From the quantitative point of view, the analysis has shown that despite the fact that Lithuanian contains more metaphorical tokens instantiating this metaphor, English shows a markedly richer lexical variation in its linguistic expression. Among the shared metaphorical patterns were those that relied on the source domains of BODIES OF WATER and GEOGRAPHICAL AREAS which conceptually construct such law-related concepts as crime, violence, and law. Although in both languages it was

common to refer to crime, violence, and delinquency in terms of WAVES, the Lithuanian data proved to be more diverse in the lexical expression of weather-related mappings by instantiating the following metaphors limited to Lithuanian: VIOLENCE IS SEVERE WIND, CRIME IS SEVERE WEATHER / NATURAL DISASTER. In line with previous metaphor studies, the source domain of (SEVERE) WEATHER CONDITIONS and NATURAL DISASTERS was found to shape the understanding of inherently negative phenomena such as crime and violence and they also proved to be useful in expressing negative evaluative attitudes such as criticism directed towards vague laws. The English data, on the other hand, contained a few metaphorical expressions that, potentially, were used deliberately, which was signalled by markers of conscious / deliberate metaphor use.

5. CONCLUSIONS

The main goal of this dissertation was to analyse metaphors in written academic legal discourse in English and Lithuanian in terms of the main source domains focussing on quantitative and qualitative parameters of metaphoricity and on the identification of language-specific trends of conceptual and linguistic metaphorical patterning. This section draws conclusions based on the research findings reported in previous sections of the dissertation and attempts to reflect on them in the wider context of contemporary metaphor studies.

Based on the normalised frequency count of metaphorical patterns per 1,000 words, this study has revealed that the density of metaphors is significantly higher in Lithuanian research articles on criminal law, criminal justice and criminology in comparison to English. Namely, Lithuanian research articles contained 3.6 times more metaphorical patterns (16.67 metaphorical patterns per 1,000 words) in comparison to English (4.53 metaphorical patterns per 1,000 words). Such results were determined by the significantly higher frequencies of metaphorical legal terminology and other conventional metaphorical patterns identified in the Lithuanian corpus which was not characteristic of the English research articles.

It can be argued that the lower degree of metaphoricity in the English dataset correlates with several factors such as different nature of the two legal systems and different academic writing traditions of the English-speaking and the Lithuanian discourse communities. In particular, because Lithuanian legal system is based on codified laws, legal research articles require criminal law researchers to refer to legal documents, laws, codes, articles, provisions constantly to keep precision and avoid ambiguity. As a result, Lithuanian research articles show very specific lexical cohesion by producing particularly high frequency scores of the topic-specific vocabulary. Since numerous law-related nouns in Lithuanian research articles were elements of metaphorical patterns, their overall high frequency also determined a significantly higher frequency of metaphors in Lithuanian research articles in comparison to English. In addition to the Lithuanian-specific lexical cohesion of research

articles, another factor which could have determined higher metaphoricity in Lithuanian was the difference in discipline-specificity, namely, a stronger tendency of the English-speaking discourse community of criminology experts to concentrate in their research articles on the social aspects of crime which involve common reference to more concrete, physical details of crime and law enforcement procedures as compared to Lithuanian research articles on criminal law and criminology which show an inclination to focus on more abstract legal issues arising from the problematicity of written laws and their application in criminal law and criminal procedure.

The analysis has revealed that the most prominent metaphorical patterns in research articles on criminal law, criminal justice, and criminology in both corpora rely on objectifying and personifying the law. This finding has been in line with numerous other studies of metaphoricity of legal discourse which have also highlighted the significance of OBJECT and PERSON metaphors in different branches of law. Apart from the marked tendency to objectify and personify the law, both English and Lithuanian research articles on criminal law and criminology also systematically relied on constructing legal notions on terms of nature.

Specific source domains structuring written legal discourse in both languages were the same, namely: OBJECT, PERSON, SUBSTANCE, CONTAINER, MACHINERY, STRUCTURE, INSTRUMENT, FIGHT AND COMPETITION, NATURE and HEALTH. However, the cross-linguistic distribution of specific source domains constructing academic legal discourse in English and Lithuanian has revealed significant differences. Namely, the quantitative analysis has shown that while specific source domains distribute rather evenly in the English dataset, Lithuanian criminal law discourse tends to predominantly rely on metaphors of reification, which have constituted 68 percent of all metaphorical patterns.

Although the source domains underlying metaphorical expressions identified in the two corpora were the same, comparing and contrasting metaphors in English and Lithuanian has revealed that shared source domains display

considerable cross-linguistic variation which is reflected by different lexis realising metaphors in language. The evidence from this study therefore suggests that cross-linguistic variation of metaphorical patterning can be best disclosed by examining the language of metaphors.

The contrastive analysis of the lexical variety of metaphors has shown that Lithuanian legal discourse features particularly frequent recurrence of the same metaphorical patterns while English research articles tend to contain a greater variety of metaphorical patterns which are less frequent in the corpus. Such results have been determined by the high frequency of metaphorical legal terms identified in the Lithuanian criminal law discourse which was not characteristic of the English data analysed in this dissertation.

The study has revealed that most metaphors structuring academic criminal law discourse are conventional, which, presumably, is due to discipline-specificity, genre conventions and other factors related to written academic register. With regard to discipline-specificity, numerous metaphorical expressions extracted from the data are part of the specialist lexis of the discourse community and have well-established metaphorical senses. As a genre, research articles are characterised by rather strict rhetorical patterns of organisation and formality of register, which predetermines a lower potential for the use of novel and striking metaphors which other genres, such as university lectures, discipline-specific textbooks or popular science articles, could otherwise provide more room for. In addition, research articles require authors to present their findings in an objective, impersonal and unambiguous way, which might also restrict the potential to use novel and extended metaphors.

Despite preference given to highly conventional metaphors, research articles in both languages tend to employ potentially deliberate metaphors which typically occur in language in inverted commas as a metaphor-signalling device and which may be used for emphasis, argumentation, and, most commonly, expression of evaluation. In the context of contemporary metaphor research, this is in line with the claim that metaphor possesses evaluative properties and may be used in discourse for communicative purposes.

The analysis has also demonstrated that metaphors commonly occur in clusters and criminal law is often metaphorically referred to by mixed metaphors, i.e. simultaneous occurrence of metaphorically used lexis signalling different source domains. Interestingly, in both English and Lithuanian there have been cases of the so-called “multi-layered” metaphors, i.e. cases of metaphors combining different source domains.

Focussing on the quantitative and qualitative tendencies of metaphoricity, this study has been among the first corpus-driven cross-linguistic metaphor analyses to have disclosed the recurrent patterns of metaphors and their linguistic expression in academic legal discourse in English and Lithuanian. These findings add to a growing body of research in confirming that the application of combined quantitative and qualitative approaches to the study of metaphor can disclose multifaceted conceptual and linguistic properties of metaphorical patterning in different discourses, text types and different languages.

This study has enhanced the understanding of the role of metaphor in specialist discourse in general and in the development of legal lexis in particular. As has been shown in the analysis, a significant proportion of metaphorical patterns are criminal law terms and other metaphorical expressions frequently used by criminology researchers. Therefore, this research suggests that metaphors could be a useful tool of enhancing discipline-specific (legal) vocabulary and could be used in the learning and teaching of legal English and Lithuanian. In this regard, the present study has a practical application for the development of discipline-specific language learning and teaching materials as well law-related glossaries. Since the study has focussed on metaphors detected in academic discourse English and Lithuanian based on linguistic evidence collected from research articles, this study may also provide valuable insights and implications for researchers of academic discourse and genre analysis.

This study has been limited in its scope and restricted by the methodology applied in extracting metaphor from corpora, which points at some limitations and avenues for further research into metaphor. The analysis was based on

metaphorical patterns as they emerged from the concordances of twenty most frequent law-related nouns in research articles on criminology and criminal law. “Anchoring” metaphor research to one lexeme as a target domain item is inherently limiting. For the purposes of this study which aimed at examining metaphors which construct academic discourse of criminology and criminal law, the methodology was sufficient; however, it would be interesting to examine the way metaphor works in the development of discourse, for example by examining the use of metaphor in legal texts written by the same author. Having set the framework for examining metaphor in legal research articles, it would be interesting to study metaphor in other genres of scientific legal discourse, for example, legal theory, university lectures on (criminal) law and the use of legal language in other professional settings.

References

- Ahrens, K. 2009. Analysing conceptual metaphors in political language, in Ahrens, K. (ed.). *Politics, Gender and Conceptual Metaphors*. Basingstoke: Palgrave. 1–8.
- Aksan, Y. & M. Aksan. 2012. Armed with patience, suffering an emotion: The conceptualization of life, morality, and emotion in Turkish, in MacArthur, F., J. L. Oncins-Martínez, M. Sánchez-García & A. M. Piquer-Píriz (eds). *Metaphor in Use: Context, Culture, and Communication*. Amsterdam and Philadelphia: John Benjamins. 285–308.
- Alejo, R. 2010. Where does the money go? An analysis of the container metaphor in economics: The market and the economy, *Journal of Pragmatics*, 42 (4): 1137–1150.
- Alexander, M. G. 2011. *Meaning Construction in Popular Science: An Investigation into Cognitive, Digital, and Empirical Approaches to Discourse Reification*. Doctoral dissertation. Glasgow: University of Glasgow.
- Anesa, P. 2012. *Jury Trials and the Popularization of Legal Language: A Discourse Analytical Approach*. Bern: Peter Lang.
- Anthony, L. 2014. *AntConc* (Version 3.4.3) [Computer Software]. Tokyo, Japan: Waseda University. Available from <http://www.laurenceanthony.net/>
- Arcimavičienė, L. 2005. Cognitive domains of HIV / AIDS in Lithuanian, English and Russian languages, *Kalbotyra*, LIV(1): 17–31.
- Arcimavičienė, L. 2008. Morality through metaphor: a cross-linguistic analysis of political discourse, *Kalbotyra* 59(3): 11–19.
- Arcimavičienė, L. 2010. *Morality Models through Metaphors in Public Discourse: A Cross-Linguistic Analysis*. Doctoral Dissertation. Vilnius: Vilnius University.
- Arcimavičienė, L. 2011. The complex metaphor of political animals in media political discourse: a cross-linguistic perspective, *Kalby studijos / Studies about Languages*, 19: 95–100.
- Arcimavičienė, L. 2012. Western media perception of the spy swap 2010: what metaphors construe, *Kalby studijos / Studies about Languages*, 21: 84–91.
- Arcimavičienė, L. 2014. Presidential New Year greetings: what is implied by metaphors, *Kalby studijos / Studies about Languages*, 24: 76–86.
- Arcimavičienė, L. & V. Jonaitienė. 2015. Metaphor evaluation of leadership styles: a case study of presidential New Year greetings, *Open Linguistics*, 1: 345–360.

- Arms, A. 1999. Metaphor, women and law, *Hastings Women's Law Journal*, 10: 257–285.
- Armstrong, S. 2009. Managing meaning: The use of metaphor in criminal justice policy. Available at SSRN: <http://ssrn.com/abstract=1508340> or <http://dx.doi.org/10.2139/ssrn.1508340> [Retrieved march 15, 2012].
- Armstrong, S. & A. Deignan. 2015. Payback and punishment: Figurative language in Scottish penal policy, in Herrmann, B. & T. B. Sardinha (eds). *Metaphor in Specialist Discourse: Investigating Metaphor Use in Specific and Popularized Discourse Contexts*. Amsterdam: John Benjamins. 79–100.
- Arrese, Á. 2015. Euro crisis metaphors in the Spanish press, *Communication & Society*, 28(2): 19–38.
- Arrigo, B. A. & C. Williams. 2000. Reading prisons: a metaphoric-organizational approach, in Ulmer, J. T. (ed.). *Sociology of Crime, Law and Deviance*. Volume 2, New York: Elsevier. 191–231.
- Asprey, M. M. 2003. *Plain Language for Lawyers*. (3rd edition). Sydney: The Generation Press.
- Aubusson, P. J., A. G. Harrison, & S. M. Ritchie (eds). 2006. *Metaphor and Analogy in Science Education*. Dordrecht: Springer.
- Baake, K. 2003. *Metaphor and Knowledge: The Challenges of Writing Science*. New York: State University of New York Press.
- Badryzlova, Y., Shekhtman, N., Isaeva, E. and Kerimov, R. (2013a). Annotating a Russian corpus of conceptual metaphor: A bottom-up approach. *Proceedings of the First Workshop on Metaphor in NLP*. Atlanta: Association for Computational Linguistics, 77–86.
- Badryzlova, Y., Shekhtman, N., Isaeva, E. and Kerimov, R. (2013b). Pravila primeneniya procedury lingvistichyeskoj identifikacii metafory (MIPVU) v ruskoyazychnom korpuse: lingvokognitivnyj opyt (utochneniya i dopolneniya). *Gumanitarnyy Vektor*, 4 (36), 19–29.
- Bailer-Jones, D. M. 2000. Scientific models as metaphors, in Hallyn, F. (ed.). *Metaphor and Analogy in the Sciences*. Dordrecht: Kluwer Academic Publishers. 181–198.
- Beger, A. 2011. Deliberate metaphors? An exploration of the choice and functions of metaphors in US-American college lectures, *Metaphoric.de*, 20: 39–60.
- Berber Sardinha, T. 2012. An assessment of metaphor retrieval methods, in MacArthur, F., J. L. Oncins-Martínez, M. Sánchez-García, & A. M. Piquer-Píriz (eds). *Metaphor in Use: Context, Culture, and Communication*. Amsterdam and Philadelphia: John Benjamins. 21–50.
- Berger, B. L. 2002. Trial by metaphor: rhetoric, innovation, and the judicial text, *Court Review* 39(3): 30–38.

- Berger, L. L. 2004. What is the sound of a corporation speaking? How the cognitive theory of metaphor can help lawyers shape the law, *Journal of the Association of Legal Writing Directors*, 2: 169–208.
- Berger, L. L. 2007. Of metaphor, metonymy, and corporate money: rhetorical choices in Supreme Court decisions on campaign finance regulation, *Mercer Law Review*, 58: 949–990.
- Berger, L. L. 2009. How embedded knowledge structures affect judicial decision making: a rhetorical analysis of metaphor, narrative, and imagination in child custody disputes, *Southern California Interdisciplinary Law Journal*, 18(259): 259–308.
- Berger, L. L. 2011. The lady, or the tiger? A field guide to metaphor and narrative, *Washburn Law Journal*, 50: 275–318.
- Berger, L. L. 2013. Metaphor and analogy: the Sun and Moon of legal persuasion, *Journal of Law and Policy*, 22: 147–195.
- Biber, D. & S. Conrad. 2009. *Register, Genre, and Style*. New York: Cambridge University Press.
- Biber, D., S. Johansson, G. Leech, S. Conrad & E. Finegan. 1999. *Longman Grammar of Spoken and Written English*. Harlow: Longman.
- Black, D. 1976. *The Behaviour of Law*. New York: Academic Press.
- Black, M. 1993. More about metaphor, in Ortony, A. (ed.). *Metaphor and Thought* (2nd ed.). Cambridge: Cambridge University Press. 19–41.
- Boers, F. 1999. When a bodily source domain becomes prominent: The joy of counting metaphors in the socio-economic domain, in Gibbs, R. W. Jr. & G. Steen (eds). *Metaphor in Cognitive Linguistics*. Amsterdam: John Benjamins. 47–56.
- Bolker, J. 1998. *Writing your dissertation in fifteen minutes a day: a guide to starting, revising and finishing your doctoral thesis*. New York: Holt.
- Bounegru, L. & C. Forceville. 2011. Metaphors in editorial cartoons representing the global financial crisis. *Visual Communication* 10(2): 209–229.
- Bowker, L. & J. Pearson. 2002. *Working with Specialized Language: A Practical Guide to Using Corpora*. London & New York: Routledge.
- Boyd, R. 1993. Metaphor and theory change: What is ‘metaphor’ a metaphor for?, in Ortony, A. (ed.). *Metaphor and Thought* (2nd ed.). Cambridge, New York & Melbourne: Cambridge University Press. 481–532.
- Brown, T. L. 2003. *Making Truth: Metaphor in Science*. Urbana: University of Illinois Press.
- Burgers, C., E. A. Konijn, G. J. Steen & M. A. R. Iepsma. 2015. Making ads less complex, yet more creative and persuasive: The effects of conventional metaphors and irony in print advertising, *International Journal of Advertising*, 34(3): 515–532.

- Butt, P. & R. Castle. 2001. *Modern Legal Drafting: A Guide to Using Clearer Language*. Cambridge: Cambridge University Press.
- Caballero, M. R. 2003a. Metaphor and genre: The presence and role of metaphor in the building review, *Applied Linguistics*, 24: 145–167.
- Caballero, M. R. 2003b. How to talk shop metaphor: Bringing metaphor research to the ESP classroom, *English for Special Purposes Journal*, 22 (2): 177–194.
- Caballero, M. R. 2006. *Re-viewing Space: Figurative Language in Architects' Assessment of Built Space*. Berlin: Mouton de Gruyter.
- Cameron L. 1999. Operationalising 'metaphor' for applied linguistic research, in Cameron, L. & G. Low (eds). *Researching and Applying Metaphor*. Cambridge: Cambridge University Press. 3–28.
- Cameron, L. 2003. *Metaphor in Educational Discourse*. London: Continuum.
- Cameron, L. & A. Deignan. 2006. The emergence of metaphor in discourse, *Applied Linguistics* 27(4): 671–690.
- Cameron, L. & G. Low (eds). 1999. *Researching and Applying Metaphor*. Cambridge: Cambridge University Press.
- Cesiri, D. & L. A. Colaci. 2011. *Metaphors on the global crisis in economic discourse: A corpus-based comparison of The Economist, Der Spiegel and Il Sole 24 ORE* in *Rassegna Italiana di Linguistica Applicata*, 43: 201–224.
- Charteris-Black, J. 2004. *Corpus Approaches to Critical Metaphor Analysis*. Basingstoke: Palgrave Macmillan.
- Charteris-Black, J. 2005. *Politicians and Rhetoric: The Persuasive Power of Metaphor*. Basingstoke: Palgrave Macmillan.
- Charteris-Black, J. 2006. Britain as a container: Immigration metaphors in the 2005 election campaign, *Discourse & Society*, 17: 563–581.
- Charteris-Black, J. 2009. Metaphor and political communication, in Musolff, A. & J. Zinken (eds). *Metaphor and Discourse*. Basingstoke: Palgrave Macmillan. 97–115.
- Charteris-Black, J. 2011. *Politicians and Rhetoric: The Persuasive Power of Metaphor* (2nd ed.). Basingstoke: Palgrave Macmillan.
- Charteris-Black, J. 2012. Shattering the bell jar: Metaphor, gender and depression, *Metaphor & Symbol*, 27 (3): 199–216.
- Charteris-Black, J. 2013. *Analysing Political Speeches: Rhetoric, Discourse and Metaphor*. Basingstoke: Palgrave Macmillan.
- Charteris-Black J. 2016. 'The 'dull roar' and the 'burning barbed wire pantyhose; Complex metaphor in accounts of chronic pain', in Gibbs, R. W. Jr. (ed.) *Mixing Metaphor*. Amsterdam: Benjamins. 155–176.

- Charteris-Black, J. & T. Ennis. 2001. A comparative study of metaphor in Spanish and English financial reporting, *English for Specific Purposes*, 20: 249–266.
- Chilton, P. & M. Ilyin. 1993. Metaphor in political discourse: the case of the 'Common European House', *Discourse & Society*, 4: 7–31.
- Charteris-Black, J. & C. Seale. 2010. *Gender and the Language of Illness*. Basingstoke: PalgraveMacmillan.
- Chilton, P. 1996. *Security Metaphors: Cold War Discourse from Containment to Common European Home*. Berne & New York: Peter Lang.
- Chilton, P. 2005. Manipulation, memes and metaphors: The case of Mein Kampf, de Saussure, L. & P. Schulz (eds.), *Manipulation and Ideologies in the Twentieth Century*. Amsterdam & Philadelphia: John Benjamins. 5–45.
- Chiu, S. & W. Chiang. 2011. Fight metaphors in legal discourse: what is unsaid in the story?, *Language and Linguistics*, 12(4): 877–915.
- Cibulskienė, J. 2005. Konceptualioji kelio metafora Lietuvos rinkimų diskurse, *Kalbotyra*, LIV(1): 51–64.
- Cibulskienė, J. 2006. *Konceptualioji metafora Lietuvos ir Didžiosios Britanijos rinkimų diskursuose*. Doctoral dissertation. Vilnius: Vilniaus universitetas.
- Cibulskienė, J. 2012. The development of the journey metaphor in political discourse. *Metaphor and the Social World*, 2 (2): 131–153.
- Cibulskienė J. 2013. The FORCE Metaphor in Conceptualizing Economic Recession, *Respectus Philologicus*, 23(28): 11–26.
- Cienki, A. & C. Müller (eds). 2008. *Metaphor and Gesture*. Amsterdam: John Benjamins.
- Cohen, L. E. & M. Felson. 1979. Social change and crime rate trends: A routine activity approach, *American Sociological Review*, 44: 588–605.
- Deignan, A. 1999. Corpus-based research into metaphor, In Cameron L. J. & G. Low (eds). *Researching and Applying Metaphor*. Cambridge: Cambridge University Press. 177–199.
- Deignan, A. 2005. *Metaphor and Corpus Linguistics*. Amsterdam: John Benjamins.
- Deignan, A. 2006. The grammar of linguistic metaphors, in Stefanowitsch, A. & S. Th. Gries (eds). *Corpus-based Approaches to Metaphor and Metonymy*. Berlin: Mouton de Gruyter. 106–122.
- Deignan, A. 2008a. Corpus linguistic data and conceptual metaphor theory, in Zanotto, M., L. Cameron & M. Cavalcanti (eds). 2008. *Confronting Metaphor in Use*. Amsterdam: John Benjamins. 149–162.

- Deignan, A. 2008b. Corpus linguistics and metaphor, in Gibbs, R. W. (ed.). *The Cambridge Handbook of Metaphor and Thought*. Cambridge: Cambridge University Press. 280–294.
- Deignan, A. 2010a. The cognitive view of metaphor: Conceptual metaphor theory, in Cameron, L. & R. Maslen (eds). *Metaphor Analysis. Research Practice in Applied Linguistics, Social Sciences and the Humanities*. London: Equinox. 44–56.
- Deignan, A. & L. Cameron. 2009. A re-examination of UNDERSTANDING IS SEEING, *Cognitive Semiotics*, 5(1-2): 220–243.
- Deignan, A. & E. Semino. 2010. Corpus techniques for metaphor analysis, in Cameron, L. & A. Maslen (eds). *Metaphor Analysis: Research Practice in Applied Linguistics, Social Sciences and Humanities*. London: Equinox. 161–179.
- Deignan, A., J. Littlemore & E. Semino. 2013. *Figurative Language, Genre and Register*. Cambridge: Cambridge University Press.
- Demjén, Z., E. Semino & V. Koller. 2016. Metaphors for ‘good’ and ‘bad’ deaths: A health professional view, *Metaphor and the Social World*, 6(1): 1–19.
- Dobrovól’skij, D. & E. Piirainen. 2005. *Figurative Language: Cross-cultural and Cross-linguistic Perspectives*. Amsterdam: Elsevier.
- Dorst, A. G. & G. Philip. 2015. Workshop *Tools and Methods: Corpora* conducted in the 5th RaAM Seminar, Leiden University, Leiden, the Netherlands, 10–12 June 2015. Book of abstracts available from <http://www.raam.org.uk/wp-content/uploads/2013/07/Overview-abstracts-workshops-RaAM-2015-seminar-Leiden.pdf> [Retrieved 5 June 2015].
- Dyer, C. R. 2010. A Bibliographic Essay on Cognitive Linguistics for Law Librarians and Legal Researchers. Available from: [http://www.charlesrdyer.com/PDFs/Dyer,Cognitive Linguistics for Law Librarian %20and Legal Researchers,Jun2010.pdf](http://www.charlesrdyer.com/PDFs/Dyer,Cognitive%20Linguistics%20for%20Law%20Librarian%20and%20Legal%20Researchers,Jun2010.pdf) [Retrieved 30, July 2015].
- Ebbesson, J. 2008. Law, power and language: beware of metaphors, *Scandinavian Studies in Law* 53: 259–269.
- El Refaie, E. 2003. Understanding visual metaphor: The example of newspaper cartoons, *Visual Communication*, 2(1): 75–95.
- Esenova, O. 2011. *Metaphorical conceptualisation of anger, fear and sadness in English*. Doctoral dissertation. Budapest: Eötvös Loránd University.
- Finatto, M. J. B. 2010. Metaphors in scientific and technical languages: challenges and perspective, *DELTA: Documentação de Estudos em Lingüística Teórica e Aplicada*, 26: 645–656. <https://dx.doi.org/10.1590/S0102-44502010000300012>

- Firth, J. R. (1957). Modes of meaning. In *Papers in Linguistics, 1934–1951*. Oxford: Oxford University Press.
- Forceville, C. 1996. *Pictorial Metaphor in Advertising*. London: Routledge.
- Forceville, C. 2000. Compasses, beauty queens and other PCs: Pictorial metaphors in computer advertisements, *Hermes, Journal of Linguistics*, 24: 31–55.
- Forceville, C. 2007. Multimodal metaphor in ten Dutch TV commercials, *The Public Journal of Semiotics*, I(1): 15–34.
- Forceville, C. 2008. Pictorial and multimodal metaphor in commercials, in McQuarrie, E. F. & B. J. Phillips (eds). *Go Figure: New Directions in Advertising Rhetoric*. Armonk: M. E. Sharpe. 178–204.
- Forceville, C. 2012. Creativity in pictorial and multimodal advertising metaphors, in Jones, R. (ed.). *Discourse and Creativity*. Harlow: Pearson / Longman. 113–132.
- Forceville, C. & E. Urios-Aparisi (eds). 2009. *Multimodal Metaphor*. Berlin & New York: Mouton de Gruyter.
- Frye, B. L. 2015. IP as metaphor, *Chapman Law Review*, 18(3): 735–758.
- Fusaroli, R. & S. Morgagni. 2013. Conceptual metaphor theory: thirty years after, *Journal of Cognitive Semiotics* 5(1-2): 1–13.
- Gedzevičienė, D. 2015. Metaforinė ribų ir ribojimų konceptų raiška teisės mokslo darbuose, *Respectus Philologicus*, 28(33): 99–108.
- Gentner, D. & M. Jeziorski. 1993. The shift from metaphor to analogy in Western science, in Ortony, A. (ed.). *Metaphor and Thought*. Cambridge, New York & Melbourne: Cambridge University Press. 447–480.
- Gibbs, R. W. 2007. Why cognitive linguists should be concerned with empirical methods, in Gonzalez-Marquez, M., I. Mittelberg, S. Coulson & M. Spivey (eds). *Methods in Cognitive Linguistics*. Amsterdam: John Benjamins. 2–18.
- Gibbs, R. W. 2010. The wonderful, chaotic, creative, heroic, challenging world of researching and applying metaphor: A celebration of the past and some peeks into the future, in Low, G., Z. Todd, A. Deignan & L. Cameron (eds). *Researching and Applying Metaphor in the Real World*. Amsterdam: John Benjamins. 1–18.
- Gibbs, R. W. 2011. Evaluating conceptual metaphor theory, *Discourse Processes*, 48(8): 529–562.
- Gibbs, R. W. (ed.). 2016. *Mixing Metaphor*. Amsterdam & Philadelphia: John Benjamins.
- Gibbs, R. W. & G. Steen (eds). 1997. *Metaphor in Cognitive Linguistics*. Amsterdam & Philadelphia: John Benjamins.

- Gledhill, Ch. 2000. *Collocations in Science Writing*. Tübingen: Gunter Narr Verlag.
- Glynn, D. 2010. Corpus-driven cognitive semantics, in Glynn, D. & K. Fischer (eds). *Quantitative Methods in Cognitive Semantics: Corpus-Driven Approaches*. Berlin & New York: Mouton de Gruyter. 1–42.
- Goatly, A. 1997. *The Language of Metaphors*. London & New York: Routledge.
- Goatly, A. 2007. *Washing the Brain: Metaphor and Hidden Ideology*. Philadelphia: John Benjamins.
- Goatly, A. 2011. *The Language of Metaphors*. (2nd ed.), London & New York: Routledge.
- Goschler, J. 2005. Embodiment and body metaphors, *Metaphoric.de*: 33–52. Available from: http://www.metaphorik.de/sites/www.metaphorik.de/files/journal-pdf/09_2005_goschler.pdf [Retrieved July 3, 2014].
- Grady, J. E. 1997. *Foundations of Meaning: Primary Metaphors and Primary Scenes*. Doctoral dissertation. Berkeley: University of California.
- Gražytė R. & N. Maskaliūnienė. 2009. Translation of conceptual metaphors in the legal discourse of EU White Papers, *Vertimo studijos. Mokslo darbai*, 2: 71–87.
- Halliday, M. A. K. 2006. *The Language of Science*. London: Continuum.
- Hallyn, F. 2000. Atoms and letters, in Hallyn, F. (ed.). *Metaphor and Analogy in the Sciences*. Dordrecht: Kluwer Academic Publishers. 53–69.
- Hanks, P. 2006. Metaphoricity is gradable, in Stefanowitsch, A. & S. Gries (eds). *Corpus-based Approaches to Metaphor and Metonymy*. Berlin and New York: Mouton de Gruyter. 17–35.
- Harrison, V. S. 2007. Metaphor, religious language, and religious experience, *Sophia*, 46(2): 127–145. Available from: <http://link.springer.com/article/10.1007/s11841-007-0018-3> [Retrieved November 15, 2015].
- Heffer, C. 2005. *The Language of Jury Trial: A Corpus-Aided Analysis of Legal-Lay Discourse*. Basingstoke & New York: Palgrave Macmillan.
- Herrmann, J. B. 2013. *Metaphor in academic discourse: Linguistic forms, conceptual structures, communicative functions and cognitive representations*. Doctoral dissertation. Utrecht: LOT dissertation series.
- Herrmann, B. & T. B. Sardinha (eds). 2015. *Metaphor in Specialist Discourse: Investigating Metaphor Use in Specific and Popularized Discourse Contexts*. Amsterdam: John Benjamins.
- Hibbits, B. 1994. Making sense of metaphors: Visuality, auralty and the reconfiguration of American legal discourse, *16 Cardozo Law Review*, 229: 229–356.

- Holmgreen, L.-L. 2003, Setting the neo-liberal agenda: How metaphors help shape socio-economic "realities", *Metaphorik.de*, 5: 90–115. Available from https://www.researchgate.net/profile/Lise-Lotte-Holmgreen/publication/253533058_Setting_the_neo-liberal_agenda_How_metaphors_help_shape_socio-economic_realities/links/564c38e508ae4ae893b83530.pdf [Retrieved August 15, 2015].
- Imamović, A. 2013. Metaphor and metonymy in legal texts, *Jezikoslovlje*, 14(23): 295–306.
- Jäkel, O. 1999. Kant, Blumenberg, Weinreich: Some forgotten contributions to the Cognitive Theory of Metaphor, in Gibbs, R. W. Jr. & G. Steen (eds). *Metaphor in Cognitive Linguistics*. Amsterdam & Philadelphia: John Benjamins. 9–28.
- Jäkel, O. 2002. Hypotheses revisited: The cognitive theory of metaphor applied to religious texts, *Metaphorik.de*, 2: 20–42.
- Johnson, M. L. 1987. *The Body in the Mind*. Chicago: University of Chicago Press.
- Johnson, M. L. 2002. Law incarnate, *Brooklyn Law Review*, 67(4): 949–962.
- Johnson, M. L. 2007. Mind, metaphor, law, *Mercer Law Review*, 58: 845–868.
- Johnson, M. L. & S. Larson. 2003. “Something in the way she moves” – metaphors of musical motion, *Metaphor and Symbol*, 18(2): 63–84.
- Juzelėnienė, S. & S. Šarkauskienė. 2011. Vaizdažodinė (multimodalinė) metafora spausdintinėje reklamoje, *Lietuvių kalba*, 5. Available from: <http://www.lietuviukalba.lt/index.php/lietuviukalba/article/view/34/83> [Retrieved 12 April, 2014].
- Kaspar, K. & A. Vennekötter. 2015. Embodied information in cognitive tasks: Haptic weight sensations affect task performance and processing style, *Advances in Cognitive Psychology*, 11(3): 64–76.
- Koller, V. 2004. *Metaphor and Gender in Business Media Discourse: A Critical Cognitive Study*. Basingtoke: Palgrave Macmillan.
- Koller, V. 2008. CEOs and ‘working gals’: The textual representation and cognitive conceptualisation of businesswomen in different discourse communities, in Harrington, K., L. Litosseliti, H. Sauntson & J. Sunderland (eds). *Gender and Language Research Methodologies*. Basingdoke: Palgrave Macmillan. 211–226.
- Koller, V. 2009. Missions and empires: religious and political metaphors in corporate discourse, in Musolff, A. & J. Zinken (eds). *Metaphor and Discourse*. Basingstoke: Palgrave. 116–34.
- Koller, V. & E. Semino. 2009. Metaphor, politics and gender: A case study from Germany, in Ahrens, K. (ed.). *Politics, Gender and Conceptual Metaphors*. Basingstoke: Palgrave. 9–35.

- Koženiauskienė, R. 2005. Konceptualiųjų metaforų etinis aspektas advokatų kalbose, *Filologija* 10: 52–56.
- Koženiauskienė, R. 2009a. *Juridinės retorikos pagrindai*. Vilnius: Registrų centras.
- Koženiauskienė, R. 2009b. Tropų fenomenas ginčytino teksto ekspertizėse, *Žmogus ir žodis*, 1: 52–60.
- Krennmayr, T. 2008. Using dictionaries in linguistic metaphor identification, in Johannesson, N. -L. & D. C. Minugh (eds). *Selected Papers from the 2006 and 2007 Stockholm Metaphor Festivals*. Stockholm: Department of English, Stockholm University. 97–115. Available at http://lingwistyka.pbworks.com/f/Krennmayr_07.pdf [Retrieved April 29, 2015].
- Kucheruk, L. 2015. *Modern English Legal Terminology: linguistic and cognitive aspects*. Doctoral dissertation. Université Michel de Montaigne - Bordeaux I. Available from: <https://tel.archives-ouvertes.fr/tel-01124133/document> [Retrieved April 14, 2016].
- Kuhn, T. S. 1993. Metaphor in science, in Ortony, A. (ed.), *Metaphor and Thought* (2nd ed.). Cambridge: Cambridge University Press. 533–542.
- Kvašytė, R. & S. Papaurėlytė. 2013. Kai kurie koncepto *LIGA* bruožai Lietuvos viešajame diskurse, *Filologija*, 18: 107–117.
- Kövecses, Z. 1990. *Emotion Concepts*. New York: Springer Verlag.
- Kövecses, Z. 2000. *Metaphor and Emotion: Language, Culture, and Body in Human Feeling*. Cambridge: Cambridge University Press.
- Kövecses, Z. 2002. *Metaphor: A Practical Introduction*. Oxford: Oxford University Press.
- Kövecses, Z. 2010. *Metaphor: A Practical Introduction* (2nd edition). Oxford: Oxford University Press.
- Kövecses, Z. 2011. Methodological issues in conceptual metaphor theory, in Handl, S. & H.-J. Schmid (eds). *Windows to the Mind: Metaphor, Metonymy and Conceptual Blending*. Berlin and New York: Walter de Gruyter. 23–39.
- Lakoff, G. 1987. *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*. Chicago: University of Chicago Press.
- Lakoff, G. 1991a. “Metaphor in politics. An open letter to the internet from George Lakoff.” Available from: <http://philosophy.uoregon.edu/metaphor/lakoff-1.html> [Retrieved October 5, 2005]
- Lakoff, G. 1991b. Metaphor and war: the metaphor system used to justify war in the Gulf, *Peace Research*, 23 (2/3): 25–32.

- Lakoff, G. 1993. The contemporary theory of metaphor, in Ortony, A. (ed.). *Metaphor and Thought* (2nd ed.). Cambridge: Cambridge University Press. 202–251.
- Lakoff, G. 1996. *Moral Politics: What Conservatives Know That Liberals Don't*. Chicago & London: University of Chicago Press.
- Lakoff, G. & M. Johnson. 1980/2003. *Metaphors We Live By*. Chicago: The University of Chicago Press.
- Lakoff, G. & M. Johnson. 1999. *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*. New York: Basic Books.
- Larsson, S. 2011. *Metaphors and Norms: Understanding Copyright Law in a Digital Society* [doctoral dissertation]. Lund: Media-Tryck.
- Larsson, S. 2013a. Copy me happy: the metaphoric expansion of copyright in a digital society, *International Journal for the Semiotics of Law*, 26: 615–634.
- Larsson, S. 2013b. Metaphors, law and digital phenomena: the Swedish pirate bay court case, *International Journal of Law and Information Technology*, 21(4): 354–379.
- Lee, D. Y. W. 2001. Genres, registers, text types, domains, and styles: clarifying the concepts and navigating a path through the BNC jungle, *Language Learning & Technology*, 5(3): 37–72.
- Lipshaw, J. M. 2011. Metaphors, models, and meaning in contract law, *Penn State Law Review*, 116 (4): 987–1042.
- Loughlan, P. 2006. Pirates, parasites, reapers, sowers, fruits, foxes... The metaphors of intellectual property, *Sydney Law Review*, 28(2): 211–226. Available from http://sydney.edu.au/law/slr/slr28_2/Loughlan.pdf [Retrieved October 10, 2012].
- Low, G., Z. Todd, A. Deignan & L. Cameron (eds). 2010. *Researching and Applying Metaphor in the Real World*. Amsterdam and Philadelphia: John Benjamins.
- Low, G. and Z. Todd, Z. 2010. Good practice in metaphor analysis: guidelines and pitfalls, in Cameron, L. & R. Maslen (eds). *Metaphor Analysis. Research Practice in Applied Linguistics, Social Sciences and the Humanities*. London: Equinox. 217–229.
- Luporini, A. 2013. *Metaphor in Times of Crisis: Metaphorical Representations of the Global Crisis in The Financial Times and Il Sole 24 Ore 2008*. Doctoral dissertation. Pisa: University of Pisa. Available from: http://www.isfla.org/Systemics/Print/Theses/Luporini_PhD_Thesis.pdf [Retrieved September 4, 2015].
- Maalej, Z. 2001. Processing pictorial metaphor in advertising: A cross-cultural perspective, *Academic Research*, 1: 19–42.
- Maalej, Z. 2004. Figurative language in anger expressions in Tunisian Arabic: An extended view of embodiment, *Metaphor & Symbol*, 19 (1): 51–75.

- Makela, F. 2011. Metaphors and models in legal theory. *Les Cahiers de Droid*, 52(3-4): 397–415, Available from: <https://www.erudit.org/revue/cd/2011/v52/n3-4/1006668ar.pdf> [Retrieved June 21, 2015].
- Marcinkevičienė, R. (1999). Atminties labirintuose. Kognityvinės ir tekstynų lingvistikos sąveika, *Darbai ir Dienos*, 10/19, pp. 109–124.
- Marcinkevičienė, R. (2010). *Lietuvių kalbos kolokacijos*. Kaunas: Vytauto Didžiojo universitetas.
- Maley, Y. 1994. The language of the law, in Gibbons, J. (ed.). *Language and the Law*. London: Longman. 11–50.
- Mark, G. A. 2006. Personification in three legal cultures: the case of the conception of the corporate unit, *The University of Chicago Law Review*, 54 (4): 1441–1483.
- Matlock, T. & R. W. Jr. Gibbs. 2001. Conceptual knowledge and polysemy: psycholinguistic studies on the meanings of *make*, *Communication and Cognition. Monographs* 34(3-4): 231–256.
- McArthur, T. 1992. *The Oxford companion to the English language*. New York: Oxford University Press.
- McEnery, T. & A. Wilson. 2001. *Corpus linguistics: An Introduction*. Edinburgh: Edinburgh University Press.
- Mellinkoff, D. 1963. *The Language of the Law*. Boston: Little, Brown & Co.
- Messner, S. F. & G. M. Zimmerman. 2012. Community-level influences on crime and offending, in Welsh, B. C. & D. P. Farrington (eds). *The Oxford Handbook of Crime Prevention*. Oxford & New York: Oxford University Press. 155–172.
- Meunier, F. & S. Granger (eds). 2008. *Phraseology in Foreign Language Learning and Teaching*. Amsterdam & Philadelphia: John Benjamins.
- Mischler, J. J. 2013. *Metaphor across Time and Conceptual Space*. Amsterdam & Philadelphia: John Benjamins.
- Morra, L., P. Rossi & C. Bazzanella. 2006. Metaphor in legal language: clarity or obscurity?, in Wagner, A. & S. Cacciaguidi-Fahy (eds). *Legal Language and the Search for Clarity: Practice and Tools*. Bern et al: Peter Lang. 141–174.
- Musolff, A. 2003. Ideological functions of metaphor: The conceptual metaphors of health and illness in public discourse, in Dirven, R., R. Frank & M. Pütz (eds). *Cognitive Models in Language and Thought: Ideologies, Metaphors and Meaning*. Berlin & New York: Mouton de Gruyter. 327–352.
- Musolff, A. 2004. *Metaphor and Political Discourse: Analogical Reasoning in Debates about Europe*. Basingtoke: Palgrave Macmillan.

- Musolff, A. 2007. Which role do metaphors play in racial prejudice? The function of anti-Semitic imagery in Hitler's 'Mein Kampf'. *Patterns of Prejudice*, 41(1): 21–44.
- Musolff, A. 2014. Metaphorical parasites and “parasitic” metaphors: Semantic exchanges between political and scientific vocabularies, *Journal of Language and Politics*, 13 (2): 218–233.
- Muşat, L. 2003. Metaphorical Terminology in English and Italian. In *Annales Universitatis Apulensis*, 2: 325–330. Available from: http://www.uab.ro/reviste_recunoscute/philologica/philologica_2003_tom2/51.musat_luminita.pdf [Retrieved May 9, 2015]
- Nacey, S. 2013. *Metaphors in Learner English*. Amsterdam and Philadelphia: John Benjamins.
- Nerlich, B. & D. D. Clarke. 2003. Blending the past and the present: Conceptual and linguistic integration, 1800–2000, in Dirven, R. & R. Pörings (eds). *Metaphor and Metonymy in Comparison and Contrast*. Berlin: Mouton de Gruyter. 555–593.
- Nie, J. B., A. Gilbertson, M. de Roubaix, C. Staunton, A. van Niekerk, J. D. Tucker & S. Rennie. 2016. Healing without waging war: Beyond military metaphors in medicine and HIV cure research, *The American Journal of Bioethics*, 16 (10): 3–11.
- Niedzviegienė, L. 2013. *Apie metaforiškas ir metonimiškas emocijų konceptualizacijas Else Lasker-Schüler ir Salomėjos Nėries lyrikoje*. Summary of doctoral dissertation. Vilnius: Vilnius University.
- Núñez, R. E. 2000. Conceptual metaphor and the embodied mind: what makes mathematics possible?, in Hallyn, F. (ed.), *Metaphor and Analogy in the Sciences*. Dordrecht, Boston and London: Kluwer Academic Publishers. 125–145.
- O'Connor, K. Th. 1998. Money and finance as solid, liquid, and gas in Spanish, *Metaphor & Symbol*, 13(2): 141–157.
- Papaurėlytė-Klovienė, S. 2004. *Liūdesio konceptas lietuvių ir rusų kalbose*. Doctoral dissertation. Vilnius: Vilnius University.
- Papaurėlytė-Klovienė, S. 2006. Konceptualioji metafora LIŪDESYS yra KRYPTIS ŽEMYN lietuvių kalbos pasaulėvaizdyje, *Kalbos aktualijos*, 8: 27–32.
- Partington, A. 2006. Metaphors, motifs and similes across discourse types: Corpus-Assisted Discourse Studies (CADS) at work, in Stefanowitsch, A. & S. T. Gries (eds). *Corpus-Based Approaches to Metaphor and Metonymy*. Berlin: Mouton de Gruyter. 267–304.
- Pragglejaz Group. 2007. MIP: A method for identifying metaphorically used words in discourse. *Metaphor and Symbol*, 22 (1): 1–39.
- Radman, Z. 1997. *Metaphors: Figures of the Mind*. Dordrecht: Kluwer Academic.

- Rayson, P. 2004. Log-likelihood calculator. Available at: www.ucrel.lancs.ac.uk.
- Reali, F. & C. Arciniegas. 2015. Metaphorical conceptualization of emotion in Spanish: Two studies on the role of framing, *Metaphor and the Social World*, 5(1): 20–41.
- Rideout, J. C. 2010. Penumbra thinking revisited: metaphor in legal argumentation, *Journal of the Association of Legal Writing Directors*, 7: 155–191.
- Robins, S. & R. E. Mayer. 2000. The metaphor framing effect: Metaphorical reasoning about text-based dilemmas. *Discourse Processes* 30 (1): 57–86.
- Rumelhart, D. 1993. Some problems with the notion of literal meanings, in Ortony, A. (ed.). *Metaphor and Thought* (2nd ed.). Cambridge, New York & Melbourne: Cambridge University Press. 71–82.
- Semino, E. 2008. *Metaphor in Discourse*. Cambridge: Cambridge University Press.
- Semino, E. & V. Koller. 2009. Metaphor, politics and gender: A case study from Italy, in Ahrens, K. (ed.) *Politics, Gender and Conceptual Metaphors*. Basingstoke: Palgrave. 36–61.
- Semino, E. & M. Masci. 1996. Politics is football: Metaphor in the discourse of Silvio Berlusconi in Italy, *Discourse & Society*, 7(2): 243–269.
- Semino, E., A. Deignan & J. Littlemore. 2013. Metaphor, genre, and recontextualization, *Metaphor and Symbol*, 28: 1, 41–59.
- Semino, E., Z. Demjén, J. Demmen, V. Koller, S. Payne, A. Hardie & P. Rayson. 2015. The online use of Violence and Journey metaphors by patients with cancer, as compared with health professionals: A mixed methods study, *BMJ Supportive & Palliative Care*, 0: 1–7.
- Smetonienè, I. 2006. Konceptualizacija metaforos reklamoje, *Kalbos aktualijos*, 8: 33–37.
- Smith, M. R. 2006. *Rhetoric theory and legal writing: an annotated bibliography*. Available from: <http://www.alwd.org/wp-content/uploads/2013/04/pdf/jalwd-fall-2006-smith.pdf> [Retrieved July 11, 2015].
- Smith, M. R. 2007. Levels of metaphor in persuasive legal writing, *Mercer Law Review*, 58: 919–947.
- Pérez-Sobrino, P. & N. Julich. 2014. Let's talk music: A corpus-based account of musical motion, *Metaphor and Symbol*, 29(4): 298–315.
- Silaški, N., & A. Kilyeni. 2011. The MONEY IS A LIQUID metaphor in economic terminology – a contrastive analysis of English, Serbian and Romanian, *Professional Communication and Translation Studies*, 4(1–2): 63–72.

- Sinclair, J. (1991). *Corpus, Concordance, Collocation*. Oxford: Oxford University Press.
- Sontag, S. 1978. *Illness as Metaphor*. New York: Farrar, Straus and Giroux.
- Steen, G. 2007. *Finding Metaphor in Grammar and Usage*. Amsterdam: John Benjamins.
- Steen, G. 2008. The paradox of metaphor: why we need a three-dimensional model of metaphor. *Metaphor and Symbol*, 23: 213–241.
- Steen, G. 2011a. Metaphor, language, and discourse processes, *Discourse Processes*, 48(8): 585–591.
- Steen, G. 2011b. What does “really deliberate” really mean? More thoughts on metaphor and consciousness, *Metaphor and the Social World*, 1(1): 53–56.
- Steen, G. 2011c. Issues in collecting converging evidence: Is metaphor always a matter of thought?, in Schönefeld, D. (ed.). *Converging Evidence: Methodological and Theoretical Issues for Cognitive Research*. Amsterdam & Philadelphia: John Benjamins. 33–54.
- Steen, G. 2013. The contemporary theory of metaphor – now new and improved!, in González-García, F., M. S. Peña Cervel, & L. Pérez Hernández (eds). *Metaphor and Metonymy Revisited beyond the Contemporary Theory of Metaphor*. Amsterdam & Philadelphia: John Benjamins. 27–66.
- Steen, G. 2015. Developing, testing and interpreting deliberate metaphor theory. *Journal of Pragmatics*, 90: 67 – 72.
- Steen, G. J., A. G. Dorst, J. B. Herrmann, A. A. Kaal, T. Krennmayr & T. Pasma. 2010a. Metaphor in usage. *Cognitive Linguistics*, 21 (4): 757–788.
- Steen, G. J., A. G. Dorst, J. B. Herrmann, A. A. Kaal, T. Krennmayr & T. Pasma. 2010b. *A Method for Linguistic Metaphor Identification: from MIP to MIPVU*. Amsterdam: John Benjamins.
- Steen, G. J., E. Biernacka, A. G. Dorst, A.A. Kaal, I. López-Rodríguez, I. & T. Pasma. 2010c. Pragglejaz in practice: Finding metaphorically used words in natural discourse, in Low, G., Z. Todd, A. Deignan & L. Cameron (eds). *Researching and Applying Metaphor in the Real World*. Amsterdam and Philadelphia: John Benjamins. 165–184.
- Stefanowitsch, A. 2004. HAPPINESS in English and German: A metaphorical-pattern analysis, in Achard, M. & K. Suzanne (eds). *Language, Culture, and Mind*. Stanford: SLI Publications. 137–149.
- Stefanowitsch, A. 2005. The function of metaphor. Developing a corpus-based perspective, *International Journal of Corpus Linguistics*, 10: 161–198.
- Stefanowitsch, A. 2006. Words and their metaphors: A corpus-based approach, in Stefanowitsch, A. & T. Th. Gries (eds), *Corpus-based Approaches to*

- Metaphor and Metonymy*. Berlin and New York: Mouton de Gruyter. 61–105.
- Stefanowitsch, A. & J. Goschler. Sex differences in the usage of spatial metaphors: A case study of political language, in Ahrens, K. (ed.). *Politics, Gender and Conceptual Metaphors*. Basingstoke: Palgrave. 166–183.
- Sullivan, K. 2013. *Frames and Constructions in Metaphoric Language*. Amsterdam and Philadelphia: John Benjamins.
- Svanlund, J. 2007. Metaphor and convention, *Cognitive Linguistics*, 18(1): 47–89.
- Sweetser, E. 1990. *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure*. Cambridge: Cambridge University Press.
- Šeškauskienė, I. 2008. The language of linguistic research: is there room for meaning extension?, *Kalbotyra*, 59 (3): 271–280.
- Šeškauskienė, I. 2009. *The paper suggests*: inanimate subject + active verb in English academic discourse, *Kalbotyra*, 60 (3): 84–93.
- Šeškauskienė, I. 2010. Who discusses: the paper or the author of the paper? Inanimate subject + active verb in Lithuanian linguistic discourse as compared to English, *Respectus Philologicus*, 18 (23): 83–99.
- Šeškauskienė, I. 2011. The language of research: *argument* metaphors in English and Lithuanian, *Vertimo studijos/Translation Studies*, 4: 46–60.
- Šeškauskienė, I. 2012. Metaforų tyrimo klausimu, arba kaip nustatyti metaforas, *Darbai ir dienos*, 58: 65–79.
- Šeškauskienė, I. 2013. Metaphoricity of academic metadiscourse: what can be raised in English and Lithuanian?, in: Šeškauskienė, I. & J. Grigaliūnienė (eds). *Anglistics in Lithuania: Cross-Linguistic and Cross-Cultural Aspects of Study*. Newcastle upon Tyne: Cambridge Scholars Publishing. 93–120.
- Šeškauskienė, I. & T. Levandauskaitė. 2013. Conceptualising music: metaphors of classical music reviews, *Kalby studijos / Studies about Languages*, 23: 78–88.
- Šeškauskienė, I. & J. Stepančuk. 2014. Evidence speaks for itself: metaphors in courtroom hearings, *Filologija*, 19: 102–120.
- Takahashi, H. 2010. Central banking as “fluid dynamics”: A comparative study of English and Japanese metaphors of money, *Language Research Bulletin*, 25: 1–18.
- Thibodeau, P. H. & L. Boroditsky. 2011. Metaphors we think with: the role of metaphor in reasoning, *PloS ONE*, 6 (2): 1–11.
- Thibodeau, P. H. & L. Boroditsky. 2013. Natural language metaphors covertly influence reasoning, *PloS One*, 8(1): 1–7.

- Thibodeau, P. H. & L. Boroditsky. 2015. Measuring effects of metaphor in a dynamic opinion landscape, *PloS One*, 10(7): 1–22.
- Thibodeau, P. H. & K. Gehring. 2015. Comparing metaphors reveals their persuasive capacity, in Noelle D. C., R. Dale, A. S. Warlaumont, J. Yoshimi, T. Matlock, C. D. Jennings & P. P. Maglio (eds.). *Proceedings of the 37th annual meeting of the cognitive science society*. Austin: Cognitive Science Society.
- Tiersma, P. M. 1999. *Legal Language*. Chicago & London: University of Chicago Press.
- Tiersma, P. M. 2006. Some myths about legal language, *Journal of Law, Culture and Humanities* 2(1): 29–50.
- Tognini-Bonelli, E. 2001. *Corpus Linguistics at Work*. Amsterdam & Philadelphia: John Benjamins.
- Trosborg, A. 1997. *Rhetorical Strategies in Legal Language: Discourse Analysis of Statutes and Contracts*. Tübingen: Gunter Narr Verlag.
- Twardzisz, P. 2013a. Metaphors in commercial contracts, in Johannesson, N.-L. & D. C. Minugh (eds.). *Selected Papers from the 2008 Stockholm Metaphor Festival*. 207–220.
- Twardzisz, P. 2013b. *The Language of Interstate Relations: In Search of Personification*. Basingstoke: Palgrave Macmillan.
- Urbonaitė, J. 2015a. A cross-linguistic study of metaphor in legal research articles: the case of criminal justice, *Thought Elaboration: Linguistics, Literature, Media Expression/Tarp eilučių: lingvistikos, literatūros ir medijų erdvė: TELL ME 2014*. Collection of scientific articles: 13–28, Available from: http://www.khf.vu.lt/dokumentai/failai/katedru/germanu/TELL_ME_leidinys_2015_3.pdf.
- Urbonaitė, J. 2015b. Metaphor identification procedure MIPVU: an attempt to apply it to Lithuanian, *Taikomoji kalbotyra*. 1–25. Available from: www.taikomojikalbotyra.lt.
- Urbonaitė, J. & I. Šeškauskienė. 2007. HEALTH metaphor in political and economic discourse: a cross-linguistic analysis, *Kalbų studijos / Studies about Languages*, 11: 68–73.
- Ureña, J.M. & P. Faber. 2010. Reviewing imagery in resemblance and non-resemblance metaphors, *Cognitive Linguistics*, 21(1): 123–149.
- Vaičėnienė, J. 2000. The conduit metaphor in English and Lithuanian: A corpus-based approach. *Darbai ir Dienos*, 24. 143–167.
- Vaivadaitė-Kaidi, E. 2011. ROJAUS konceptualiosios metaforos Sigito Gedos Korano vertime, *Lietuvių kalba*. Available from www.lietuviukalba.lt/index.php/lietuviukalba/article/download/36/88 [Retrieved June 5, 2011].

- Wallis, P. & B. Nerlich. 2005. Disease metaphors in new epidemics: The UK media framing of the 2003 SARS epidemic, *Social Science & Medicine*, 60: 2629–2639.
- Winter, S. L. 1989. Transcendental nonsense, metaphoric reasoning, and the cognitive stakes for law, *University of Pennsylvania Law Review*, 137: 1105–1237.
- Winter, S. L. 2001/2003. *A Clearing in the Forest: Law, Life, and Mind*. Chicago & London: University of Chicago Press.
- Winter, S. L. 2007. Re-embodiment of law, *Mercer Law Review*, 58: 869–897.
- Winter, S. L. 2008. What is the “color” of law?, in Gibbs, R. W. Jr. (ed.). *The Cambridge Handbook of Metaphor and Thought*. Cambridge: Cambridge University Press. 363–379.
- Wood, J. 2005. Balancing innocence and guilt: A metaphorical analysis of the US supreme court’s rulings on victim impact statements, *Western Journal Of Communication*, 69(2): 129–146.
- Yu, N. 2004. The eyes for sight and mind, *Journal of Pragmatics*, 36: 663–686.
- Zanotto, M., L. Cameron & M. Cavalcanti (eds). 2008. *Confronting Metaphor in Use*. Amsterdam: John Benjamins.

Appendix 1. Articles collected to build the English corpus

Articles from the journal *Criminology and Criminal Justice*:

- (EN1) Abel, G. (2014). A decade of decriminalization: Sex work 'down under' but not underground. *Criminology and Criminal Justice*, 14(5), 580-592.
- (EN2) Scoular, J. and Carline, A. (2014). A critical account of a 'creeping neo-abolitionism': Regulating prostitution in England and Wales. *Criminology and Criminal Justice*, 14(5), 608-626.
- (EN3) Condry, R. and Miles, C. (2014). Adolescent to parent violence: Framing and mapping a hidden problem. *Criminology and Criminal Justice*, 14(3), 257-275.
- (EN4) Player, E. (2014). Women in the criminal justice system: The triumph of inertia. *Criminology and Criminal Justice*, 14(3), 276-297.
- (EN5) Ham, J. and Gerard, A. (2014). Strategic in/visibility: Does agency make sex workers invisible?. *Criminology and Criminal Justice*, 14(3), 298-313.
- (EN6) Andresen, M., Frank, R. and Felson, M. (2014). Age and the distance to crime. *Criminology and Criminal Justice*, 14(3), 314-333.
- (EN7) Kirby, A. and Jacobson, J. (2014). Public attitudes to the sentencing of drug offences. *Criminology and Criminal Justice*, 14(3), 334-350.
- (EN8) Robinson, G., Priede, C., Farrall, S., Shapland, J. and McNeill, F. (2014). Understanding 'quality' in probation practice: Frontline perspectives in England & Wales. *Criminology and Criminal Justice*, 14(2), 123-142.
- (EN9) O'Neill, M. and McCarthy, D. (2014). (Re)negotiating police culture through partnership working: Trust, compromise and the 'new' pragmatism. *Criminology and Criminal Justice*, 14(2), 143-159.
- (EN10) Hamilton-Smith, N., Mackenzie, S., Henry, A. and Davidones, C. (2014). Community policing and reassurance: Three studies, one narrative. *Criminology and Criminal Justice*, 14(2), 160-178.
- (EN11) Patel, T. (2014). 'We'll go grafting, yeah?': Crime as a response to urban neglect. *Criminology and Criminal Justice*, 14(2), 179-195.
- (EN12) Raynor, P., Ugwudike, P. and Vanstone, M. (2014). The impact of skills in probation work: A reconviction study. *Criminology and Criminal Justice*, 14(2), 235-249.

- (EN13) Lord, N. (2014). Responding to transnational corporate bribery using international frameworks for enforcement: Anti-bribery and corruption in the UK and Germany. *Criminology and Criminal Justice*, 14(1), 100-120.
- (EN14) Welch, M. (2013). Penal tourism and a tale of four cities: Reflecting on the museum effect in London, Sydney, Melbourne, and Buenos Aires. *Criminology and Criminal Justice*, 13(5), 479-505.
- (EN15) Fitz-Gibbon, K. (2013). The mandatory life sentence for murder: An argument for judicial discretion in England. *Criminology and Criminal Justice*, 13(5), 506-525.
- (EN16) Nelson, E. (2013). Police controlled antecedents which significantly elevate prosecution and conviction rates in domestic violence cases. *Criminology and Criminal Justice*, 13(5), 526-551.
- (EN17) Ellison, G., Pino, N. and Shirlow, P. (2013). Assessing the determinants of public confidence in the police: A case study of a post-conflict community in Northern Ireland. *Criminology and Criminal Justice*, 13(5), 552-576.
- (EN18) Canton, R. (2013). The point of probation: On effectiveness, human rights and the virtues of obliquity. *Criminology and Criminal Justice*, 13(5), 577-593.
- (EN19) Hopkins, M. and Wickson, J. (2013). Targeting prolific and other priority offenders and promoting pathways to desistance: Some reflections on the PPO programme using a theory of change framework. *Criminology and Criminal Justice*, 13(5), 594-614.
- (EN20) Mythen, G., Walklate, S. and Kemshall, H. (2013). Decentralizing risk: The role of the voluntary and community sector in the management of offenders. *Criminology and Criminal Justice*, 13(4), 363-379.
- (EN21) Martin, D., Mackenzie, N. and Healy, J. (2013). Balancing risk and professional identity, secondary school teachers' narratives of violence. *Criminology and Criminal Justice*, 13(4), 398-414.
- (EN22) Kearon, T. (2013). Surveillance technologies and the crises of confidence in regulatory agencies. *Criminology and Criminal Justice*, 13(4), 415-430.
- (EN23) Sagar, T. and Jones, D. (2013). Priorities for the minority? Street-based sex work and Partnerships and Communities Together (PACT). *Criminology and Criminal Justice*, 13(4), 431-445.
- (EN24) Davis, C., Bahr, S. and Ward, C. (2013). The process of offender reintegration: Perceptions of what helps prisoners reenter society. *Criminology and Criminal Justice*, 13(4), 446-469.

(EN25) Baker, S., Madoc-Jones, I., Parry, O., Warren, E., Perry, K., Roscoe, K. and Mottershead, R. (2013). More sinned against than sinning? Perceptions about European migrants and crime. *Criminology and Criminal Justice*, 13(3), 262-278.

Articles from the Journal of Criminal Justice:

(EN26) Pollock, W., Menard, S., Elliott, D. and Huizinga, D. (2015). It's Official: Predictors of Self-Reported vs. Officially Recorded Arrests. *Journal of Criminal Justice*, 43(1), 69-79.

(EN27) Corsaro, N., Frank, J. and Ozer, M. (2015). Perceptions of Police Practice, Cynicism of Police Performance, and Persistent Neighborhood Violence: An Intersecting Relationship. *Journal of Criminal Justice*, 43(1), 1-11.

(EN28) Caudy, M., Folk, J., Stuewig, J., Wooditch, A., Martinez, A., Maass, S., Tangney, J. and Taxman, F. (2015). Does substance misuse moderate the relationship between criminal thinking and recidivism?. *Journal of Criminal Justice*, 43(1), 12-19.

(EN29) Blasko, B., Roman, C. and Taylor, R. (2015). Local gangs and residents' perceptions of unsupervised teen groups: Implications for the incivilities thesis and neighborhood effects. *Journal of Criminal Justice*, 43(1), 20-28.

(EN30) Campbell, B., Menaker, T. and King, W. (2015). The determination of victim credibility by adult and juvenile sexual assault investigators. *Journal of Criminal Justice*, 43(1), pp.29-39.

(EN31) Kleck, G. (2015). The Impact of Gun Ownership Rates on Crime Rates: A Methodological Review of the Evidence. *Journal of Criminal Justice*, 43(1), 40-48.

(EN32) Schwartz, J. and Beaver, K. (2014). A biosocial analysis of the sources of missing data in criminological research. *Journal of Criminal Justice*, 42(6), 452-461.

(EN33) Lee, H., Vaughn, M. and Lim, H. (2014). The impact of neighborhood crime levels on police use of force: An examination at micro and meso levels. *Journal of Criminal Justice*, 42(6), 491-499.

(EN34) Caudill, J., Trulson, C., Marquart, J., Patten, R., Thomas, M. and Anderson, S. (2014). Correctional destabilization and jail violence: The consequences of prison depopulation legislation. *Journal of Criminal Justice*, 42(6), 500-506.

(EN35) 10_JCJ: Mancini, C., Reckdenwald, A., Beauregard, E. and Levenson, J. (2014). Sex industry exposure over the life course on the onset and frequency of sex offending. *Journal of Criminal Justice*, 42(6), 507-516.

- (EN36) Doherty, E. and Ensminger, M. (2014). Do the adult criminal careers of African Americans fit the “facts”?. *Journal of Criminal Justice*, 42(6), 517-526.
- (EN37) Bishopp, S. and Boots, D. (2014). General strain theory, exposure to violence, and suicide ideation among police officers: A gendered approach. *Journal of Criminal Justice*, 42(6), 538-548.
- (EN38) Williams, M. and McCarthy, B. (2014). Assessing stereotypes of adolescent rape. *Journal of Criminal Justice*, 42(6), 557-567.
- (EN39) Rocque, M. and Plummer-Beale, J. (2014). In the eye of the beholder? An examination of the inter-rater reliability of the LSI-R and YLS/CMI in a correctional agency. *Journal of Criminal Justice*, 42(6), 568-578.
- (EN40) Gau, J., Corsaro, N. and Brunson, R. (2014). Revisiting broken windows theory: A test of the mediation impact of social mechanisms on the disorder–fear relationship. *Journal of Criminal Justice*, 42(6), 579-588.
- (EN41) Hewitt, A. and Beauregard, E. (2014). Sexual crime and place: The impact of the environmental context on sexual assault outcomes. *Journal of Criminal Justice*, 42(5), 375-383.
- (EN42) Jennings, W., Richards, T., Dwayne Smith, M., Bjerregaard, B. and Fogel, S. (2014). A Critical Examination of the “White Victim Effect” and Death Penalty Decision-Making from a Propensity Score Matching Approach: The North Carolina Experience. *Journal of Criminal Justice*, 42(5), pp.384-398.
- (EN43) Beaver, K., Nedelec, J., da Silva Costa, C., Poersch, A., Stelmach, M., Freddi, M., Gajos, J. and Boccio, C. (2014). The association between psychopathic personality traits and health-related outcomes. *Journal of Criminal Justice*, 42(5), 399-407.
- (EN44) Tzoumakis, S., Lussier, P. and Corrado, R. (2014). The persistence of early childhood physical aggression: Examining maternal delinquency and offending, mental health, and cultural differences. *Journal of Criminal Justice*, 42(5), 408-420.
- (EN45) Warner, B. (2014). Neighborhood factors related to the likelihood of successful informal social control efforts. *Journal of Criminal Justice*, 42(5), 421-430.
- (EN46) Ingram, J. and Terrill, W. (2014). Relational demography and officer occupational attitudes: The influence of workgroup context. *Journal of Criminal Justice*, 42(4), 309-320.

- (EN47) Walters, G. (2014). Pathways to early delinquency: Exploring the individual and collective contributions of difficult temperament, low maternal involvement, and externalizing behavior. *Journal of Criminal Justice*, 42(4), 321-326.
- (EN48) Bierie, D. (2014). Fugitives in the United States. *Journal of Criminal Justice*, 42(4), 327-337.
- (EN49) Barnes, J. (2014). Catching the Really Bad Guys: An Assessment of the Efficacy of the U.S. Criminal Justice System. *Journal of Criminal Justice*, 42(4), 338-346.
- (EN50) Holt, T., Turner, M. and Lyn Exum, M. (2014). The Impact of Self Control and Neighborhood Disorder on Bullying Victimization. *Journal of Criminal Justice*, 42(4), 347-355.

Appendix 2. Articles collected to build the Lithuanian corpus

Articles from the journal *Jurisprudencija*:

- (LT1) Fedosiuk, O. (2014). Neformalus baudžiamojo įstatymo taikymas: poreikis, ribos, doktrinos. *Jurisprudencija*, 21(4), 1079-1101.
- (LT2) Žalnieriūnas, L. ir Gutauskas, A. (2014). Fizinio smurto sporte baudžiamasis teisinis įvertinimas. *Jurisprudencija*, 21(3), 885-906.
- (LT3) Grinevičiūtė, K. (2014). Fizinio skausmo sukėlimo nustatymo ir BK 140 straipsnyje numatyto nusikaltimo pripažinimo mažareikšmiu probleminiai aspektai. *Jurisprudencija*, 21(2), 599-614.
- (LT4) Petkus, A. (2014). Teismų praktikos aktualijos baudžiamosiose bylose dėl korupcinio pobūdžio nusikalstamų veikų. *Jurisprudencija*, 21(2), 615-629.
- (LT5) Zaksaitė, S. (2014). Fikcijos baudžiamajame procese: tarp ontologinės „tikrovės“, teisėkūros ir teisės taikymo. *Jurisprudencija*, 21(1), 244-258.
- (LT6) Babachinaitė, G. (2014). Kai kurios kriminologinės problemos dvidešimtmečio socialinių pokyčių Lietuvoje kontekste. *Jurisprudencija*, 21(1), 259-278.
- (LT7) Gutauskas, A. (2013). Nusikalstamų veikų, susijusių su narkotinėmis ir psichotropinėmis medžiagomis, kvalifikavimo ypatumai teismų praktikoje. *Jurisprudencija*, 20(2), 775-786.
- (LT8) Pranka, D. (2013). Nusikalstamos veikos ir administracinio teisės pažeidimo atribojimo problemos: teisės pažeidimai, susiję su disponavimu narkotinėmis ar psichotropinėmis medžiagomis. *Jurisprudencija*, 20(4), 1510-1523.
- (LT9) Zajančkauskienė, J. (2013). Teismų praktikos aktualijos baudžiamosiose bylose dėl juridinių asmenų padarytų nusikalstamų veikų. *Jurisprudencija*, 20(4), 1524-1534.
- (LT10) Jurka, R. (2013). Provokacija kaip priemonė renkant įrodymus baudžiamajame procese. *Jurisprudencija*, 20(1), 249-265.
- (LT11) Drakšas, R. (2013). Kai kurie baudimo už turto pasisavinimą probleminiai aspektai. *Jurisprudencija*, 20(1), 283-299.
- (LT12) Fedosiuk, O. (2013). Baudžiamoji atsakomybė už vertimąsi neteisėta komercine, ūkine, finansine ar profesine veikla: optimalių kriterijų beieškant. *Jurisprudencija*, 20(1), 301-317.
- (LT13) Pakšaitis, L. (2013). Neteisėtas praturtėjimas kaip nusikalstama veika: ištakos, kriminalizavimo problema, taikymas, perspektyvos. *Jurisprudencija*, 20(1), 319-341.

- (LT14) Pečkaitis, J. S. (2013). Baudžiamoji atsakomybė už aplaidų buhalterinės apskaitos tvarkymą. *Jurisprudencija*, 20(1), 343-357.
- (LT15) Gruodytė, E. (2012). Baudžiamosios atsakomybės už trečiųjų šalių piliečių darbą taikymo ypatumai ir problematika Lietuvoje įgyvendinant direktyvą 2009/52/EB. *Jurisprudencija*, 19(4), 1603-1618.
- (LT16) Babachinaitė, G. (2012). Šiuolaikinio registruoto nusikalstamumo Lietuvoje pagrindiniai bruožai. *Jurisprudencija*, 19(4), 1619-1632.
- (LT17) Fedosiuk, O. (2012). Baudžiamųjų įstatymų prieš neteisėtas pajamas ir korupciją leidyba: tarp gerų siekių ir legitimumo. *Jurisprudencija*, 19(3), 1215-1233.
- (LT18) Jurka, R. ir Rimšelis, E. (2012). Baudžiamojo proceso optimizavimas: rašytinio proceso prielaidos ir galimybės. *Jurisprudencija*, 19(2), 753-769.
- (LT19) Kiškis, A. ir Kuodytė, A. (2012). Nusikalstamumo prevencijos programų rengimo Lietuvoje tyrimas. *Jurisprudencija*, 19(2), 771-801.
- (LT20) Milinis, A. (2011). Probleminiai žmogaus gyvybės pradžios ir pabaigos klausimo aspektai nužudymo kontekste. *Jurisprudencija*, 18(3), 1123-1143.
- (LT21) Babachinaitė, G. (2011). Kriminalinės viktimizacijos Lietuvoje pagrindinių statistinių rodiklių kriminologinė analizė. *Jurisprudencija*, 18(3), 1163-1176.
- (LT22) Piesliakas, V. (2011) Neteisėtu būdu gautų pajamų konfiskavimas Lietuvos baudžiamojoje teisėje: siekiai ir realybė. *Jurisprudencija*, 18(2), 675-688.
- (LT23) Gruodytė, E. (2010). Nusikalstamų veikų, susijusių su neteisėtu disponavimu narkotinėmis ir psichotropinėmis medžiagomis, dalyko probleminiai aspektai. *Jurisprudencija*, 4(122), 153-167.
- (LT24) Fedosiuk, O. (2010). Sukčiavimas pridėtinės vertės mokesčio srityje: samprata ir kvalifikavimo pagrindai. *Jurisprudencija*, 4(122), 169-187.

Articles from the journal Teisė:

- (LT25) Višinskis, G. (2014). Savavaldžiavimo nusikaltimo sudėties didelės žalos asmens teisėms ar teisėtiems interesams požymis. *Teisė* (90), 211-225.
- (LT26) Makūnaitė, S. (2014). Neteisėto praturtėjimo nusikaltimo dalykas. *Teisė* (90), 175-187.

- (LT27) Girdauskas, M. (2014). Teismo įgaliojimai keisti inkriminuojamos veikos kvalifikavimą: Konstitucijos reinterpretavimo prielaidų paieška. *Teisė* (90), 126-141.
- (LT28) Švedas, G. (2014). Bausmės skyrimo asmeniui, pirmą kartą teisiamam už nesunkų arba apysunkį tyčinį nusikaltimą, nuostatos Lietuvos aukščiausiojo teismo jurisprudencijoje. *Teisė* (90), 7-18.
- (LT29) Sakalauskas, G. (2013). Įkalinimo atvėrimas: prielaidos ir galimybės Lietuvoje. *Teisė* (89), 37-54.
- (LT30) Levon, J. (2013). Baudžiamojo poveikio priemonių instituto atsiradimas Lietuvos Respublikos Baudžiamajame kodekse. *Teisė* (88), 181-194.
- (LT31) Girdauskas, M. (2013). Teismo įgaliojimų keisti inkriminuojamos veikos kvalifikavimą griežtesniu suderinamumas su konstituciniais baudžiamojo proceso tikslais ir principais. *Teisė* (88), 144-163.
- (LT32) Vosyliūtė, A. (2013). Vagystės kvalifikuotų sudėčių konstravimo Lietuvos Respublikos Baudžiamajame kodekse ypatumai. *Teisė* (88), 129-143.
- (LT33) Bieliūnas, E. and Švedas, G. (2013). Lietuvos Respublikos Baudžiamojo kodekso straipsnių pavadinimai ir jų reikšmė. *Teisė* (88), 41-52.
- (LT34) Aliukonienė, R. (2013). Baudžiamųjų įstatymų, reglamentuojančių atsakomybę už sunkų sveikatos sutrikdymą Lietuvoje, raida. *Teisė* (88), 23-40.
- (LT35) Aliukonienė, R. (2013). Veika kaip vienas iš sunkaus sveikatos sutrikdymo objektyviųjų požymių. *Teisė* (87), 20-33.
- (LT36) Žukovaitė, I. (2013). Bendrininkavimo institutas plėšimo bylų jurisprudencijoje. *Teisė* (86), 160-173.
- (LT37) Veršekys, P. (2012). *Nullum crimen sine lege* principo ir vertinamųjų nusikalstamos veikos sudėties požymių koreliacijos problema. *Teisė* (85), 196-212.
- (LT38) Levon, J. (2012). Baudžiamojo poveikio priemonių nevykdymo atidėjus bausmės vykdymą teisiniai padariniai. *Teisė* (84), 97-111.
- (LT39) Jovaišas, K. (2012). Kaltės įrodinėjimas baudžiamajame procese: problemos ir paradoksai. *Teisė* (82), 225-237.
- (LT40) Veršekys, P. (2012). Nusikalstamos veikos sudėties požymio samprata ir ją lemiantys veiksniai. *Teisė* (82), 198-214.
- (LT41) Vaišvilienė, R. (2012). Tarptautinės ir nacionalinės baudžiamosios jurisdikcijos santykio aspektai: konkuruojanti papildanti jurisdikcija. *Teisė* (82), 146-158.

- (LT42) Michailovič, I. (2012). Kai kurie smurto šeimoje problematikos aspektai. *Teisė* (82), 26-40.
- (LT43) Švedas, G. (2012). Veikos kriminalizavimo kriterijai: teorija ir praktika. *Teisė* (82), 12-25.
- (LT44) Vaišvilienė, R. (2011). Tarptautinė baudžiamoji išimtinė ir konkuruojanti pirminė jurisdikcija. *Teisė* (81), 186-200.
- (LT45) Merkevičius, R. (2011). Įtariamo (kaltinamo) asmens teisės į procesą per kuo trumpiausią laiką užtikrinimas. *Teisė* (80), 34-52.
- (LT46) Goda, G. (2011). Absoliučiai draudžiami veiksmai baudžiamajame procese. *Teisė* (80), 19-33.
- (LT47) Zaksaitė, S. (2011). Sukčiavimo sporto srityje samprata ir kriminalizavimo ypatybės. *Teisė* (79), 157-171.

Articles from the journal *Teisės problemos*:

- (LT48) Sakalauskas, G. (2014). Ar prasminga probacijos tarnybų darbą vertinti pagal apbruojamųjų recidyvą? *Teisės problemos* 4(86), 5-28.
- (LT49) Daukšaitė, I. (2014). Kelių transporto priemonių vairavimo, esant vairuotojams neblaiviams: ar reikalinga plėsti baudžiamosios atsakomybės ribas? *Teisės problemos* 4(86), 29-67.
- (LT50) Nikartas, S. ir Čepas, A. (2014). Laisvės atėmimo iki gyvos galvos bausmė Lietuvoje (I): refleksija žmogaus teisių standartų kontekste. *Teisės problemos* 2(84), 5-25.
- (LT51) Sakalauskas, G. (2013). Lygtinis paleidimas iš įkalinimo įstaigų įsigaliojus Probacijos įstatymui: teorija ir praktika. *Teisės problemos* 4(82), 5-39.
- (LT52) Čepas, A. (2013). Tyčios turinio reikšmė skiriant bausmes už nužudymus Lietuvos teismų praktikoje. *Teisės problemos* 4(82), 40-46.
- (LT53) Zaksaitė, S. (2013). Manipuliacijos sporto varžybomis Lietuvoje: tarp kriminalizavimo ir *ultima ratio* principo. *Teisės problemos* 3(81), 56-75.
- (LT54) Lankauskas, M. (2013). Narkotikų kontrolės politika ir teisinių režimų ypatumai Europoje ir Lietuvoje. *Teisės problemos* 2(80), 81-117.
- (LT55) Čepas, A., Dobryninas, A., ir Valickas, G. (2013). Nužudymai Lietuvoje: teisiniai, sociologiniai ir psichologiniai aspektai. *Teisės problemos* 1(79), 5-42.

- (LT56) Bikelis, S. (2013). Permažstant sankcijas už kontrabandą: proporcingumo problema (II). *Teisės problemos* 1(79), 43-57.
- (LT57) Bikelis, S. (2012). Permažstant sankcijas už kontrabandą: proporcingumo problema (I). *Teisės problemos* 4(78), 5-24.
- (LT58) Kalpokas, V. ir Marcinauskaitė, R. Tapatybės vagystė elektroninėje erdvėje: technologiniai aspektai ir baudžiamasis teisinis vertinimas. *Teisės problemos* 3(77), 30-52.
- (LT59) Michailovič, I. (2012). Nusikalstamumo baimės šiuolaikinėje miesto visuomenėje problematika. *Teisės problemos* 3(77), 53-71.
- (LT60) Žukauskaitė, J. (2012). Nepilnamečių nusikalstamas elgesys: psichologiniai meditacijos taikymo aspektai. *Teisės problemos* 2(76), 96-110.
- (LT61) Bikelis, S. (2011). Neturtinės žalos atlyginimas (?) baudžiamosiose bylose dėl gyvybės atėmimo ir sunkaus sveikatos sutrikdymo. *Teisės problemos* 4(74), 6-51.
- (LT62) Ivoška, G. (2011). Baudžiamosios politikos kontrabandos ir muitinės apgaulės kontrolės srityje įgyvendinimo Lietuvos teisinėje sistemoje problemos. *Teisės problemos* 2(72), 39-62.
- (LT63) Nikartas, S. (2011). Bendruomenės vaidmuo nusikalstamumo prevencijoje: užsienio šalių patirties analizė. *Teisės problemos* 2(72), 63-94.
- (LT64) Justickaja, S. (2011). Nusikaltimų prevencija Lietuvoje: perėjimas nuo intuityvios prie įrodymais grindžiamos. *Teisės problemos* 1(71), 81-108.
- (LT65) Kavoliūnaitė-Ragauskienė, E. (2011). Nusikalstamos veikos tyrimo išlaidų priteisimo iš kaltininko galimybių teisinis įvertinimas. *Teisės problemos* 1(71), 59-80.
- (LT66) Nikartas, S. (2011). Religija kaip socialinės kontrolės veiksnys ir jos prevencinis poveikis nusikalstamumui. *Teisės problemos* 1(71), 109-125.
- (LT67) Zaksaitė, S. ir Lukošūtė-Stanikūnienė, I. (2010). Neteisėto disponavimo sporte draudžiamomis medžiagomis ir metodais kriminalizavimo problemos. *Teisės problemos* 4(70), 103-132.
- (LT68) Kalpokas, V. (2010). Skaitmeninės erdvės reguliavimas ir kontrolė: saugumo aspektai. *Teisės problemos* 4(70), 133-157.
- (LT69) Pocienė, A. ir Dobrynina, M. (2010). Socialinis demografinis nuteistųjų už nusikalstamas veikas, susijusias su narkotinėmis ir psichotropinėmis medžiagomis, portretas. *Teisės problemos* 2(68), 5-40.

(LT70) Ūselė, L. (2010). Jaunų pilnamečių (18-20 metų) socialinė branda – nepilnamečių baudžiamosios atsakomybės ypatumų jiems taikymo veiksnys. *Teisės problemos* 2(68), 58-91.