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#### Frames in the Polish EU Discourse

Using Corpora for a Cognitive-Oriented Discourse Analysis

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# 1 Introduction: On Opportunities, Dictatorship, and Territory-Frames in the Polish EU-Discourse

In opening a thesis under the title above, an author must confront the essentially lively nature of meaning construction. Discourse, or "language in social practice" (Hart 2015: 322), is subject to change and so are an expression's conventionalized associations. In fact, these two are inextricably linked. The question whether a term like *European Union* activates favorable or unfavorable associations depends not least on the expressions with which it was contextualized. Pursuant to the principle of Hebbian learning (Hebb, 1949) - "neurons that fire together, wire together" (Shatz 1992: 64)- it is hence decisive if the *European Union* was and is mainly related to words like 'security' (Maksymiuk 2017, Gazeta Wyborcza), 'love' (Bartos 2012, na:Temat), 'peace' (IAR 2015, Polskie Radio), and 'opportunity' (Cylka 2018, Gazety Wyborcza), or to words like 'crisis', (Skarżyński 2018, Gazeta Wyborcza), 'problem' (Telewizja Polska Info 2016), 'dictatorship' (Żmigrodzki 2017, Nasza Polska), or 'territory' (Rzeczpospolita 2019).

Now, what seems to be postulated with dubious nonchalance, is rooted in a deep theoretical background. The conventionalized associations, respectively "the structured inventory" (Evans 2007: 86) or the "coherent region" (Croft & Cruse 2004: 14) of human knowledge, have been subsumed under the notion of *frame* in various disciplines. In cognitive terms, frames model "data-structures of stereotyped situations" (Minsky 1975: 212) and are thus vital for the understanding of the overall structure of human thinking. Experience drives the association of entities with situations or events, moves them, after a certain time, into long-term storage (Evans 2007: 86) and provides a frame of knowledge which facilitates the interpretation of new situations. Similarly, frame-semantics in linguistics emphasizes the continuities between language and experience (Fillmore 1982:111). In order to understand or interpret a word, one "must include reference to a background frame rich with world and cultural knowledge" (Goldberg 1995: 27). This knowledge structure which is activated by linguistic expressions is said to be structured along frame elements, namely, slots, fillers, and default values Minsky (1975), making frame theory usable as an analytical tool.

In empirical linguistics, frames have been approached from various angles. Originating from valency grammar, frame-semantic analysis focused mainly on verbs (Fillmore 1968) and their predicational potential, respectively their predicational frames. Others pushed the strict inference between syntax and semantics into the background by looking at metaphors (Lakoff & Johnson 1980; Ziem 2008a). In terms of frame-semantics, the

source and target domains of metaphors are structured through frames. Within the conceptual metaphor theory, for instance, default values of source domains are said to fill slots of target domains (Ziem 2008a: 377). Other concrete approaches to identify frame elements also emphasize the role of collocations and lexeme combinations (Fraas 2001; Klein 1999).

The aim of this thesis is to apply frame theory on diachronic discourse. For reasons of political brisance and concrete tendencies in sociological and political science, the object under investigation is chosen to be the Polish EU-discourse. The unprecedented triggering of Art. 7 TEU is only the peak of the highly explosive relations between Poland and the EU. In the humanities, there is a broad consensus that these relations have worsened after the election of the PiS (Prawo i Sprawiedliwość Party) in 2015 (Vetter 2017; Balcer et al. 2016; Balcer et al. 2017; Buras 2017, 2018). Such a key event provides the opportunity to compare potential EU-related frame differences before and after the change of government. Thus, the purpose of this thesis is to investigate whether the alleged rise of EU skepticism is paralleled by linguistic/frame related alterations.

In adopting a cognitive perspective to discourse one is inclined to enter a seemingly never-ending field of interdisciplinary intertextuality. Language, thinking, and the social world unfold a tight interwovenness, or as put by van Dijk "Sociocognitive Discourse Studies [...] relate discourse structures to social structures via a complex sociocognitive interface" (van Dijk 2017: 27). One particular difficulty is hence to shrink the scope of this thesis at a comprehensive and acceptable level. To achieve this, the priority set here is a methodological one. To put more precisely, the guiding question is: "Can a limited amount of diachronic corpus data reveal particular linguistic changes in the Polish EU discourse"? Setting out to trace, ideally, deep lying semantic changes, this work explores the utility and applicability of Minsky's, Barsalou's and Fillmore's frame theories. For a more fine-grained differentiation, a corpus-driven approach (inspired by the work of Bubenhofer 2009; Bubenhofer & Scharloth 2012; Bubenhofer 2013; Kalwa 2013) will lay the foundation for a corpus-based analysis. The results, in turn, will give rise to a sound interpretation of the topic at hand.

This thesis seeks to provide an answer to the above question. Chapter 2 sets the scene by tracing the notion of "frame" back to its founding fathers and shapers, Marvin Minsky, Charles Fillmore and Lawrence Barsalou. I will go on to outline the interplay between frames and discourse and present frame operationalizations and concepts as they have been put into practice in discourse studies hitherto. This will be followed by present-

ing the methodology and its main foci in chapter 3. Here, I will dedicate several lines to each step taken in the corpus-driven section. The corpus-driven results and the follow-up questions they generate will be presented in chapter 4. In chapter 5, I will use the information gained from chapter 4 for a corpus-based in-depth analysis. Additionally, in returning to the linguistic origin of frames, a focus will be led on verbs. Finally, chapter 6 revisits, conflates, and interprets the core findings by putting them into a broader perspective. Chapter 7 will end this journey by summing it up.

Take into consideration that the main methodological framework I rely on throughout the empirical section of this thesis is corpus linguistics. However, the corpus-based analysis will also include the usage of FrameNet for the verb analyses. In general, the overall argument will draw on a range of approaches stemming, notably, from cognitive linguistics (i.e. entrenchment and construction grammar), and sociology (i.e. Foucauldian discourse analysis and constructionism). Such concepts will be not systematically worked through. Instead, they will pop up, leave their marks, and evaporate again. This versatile approach does not originate from a 'lack of conviction' in any theory or method (cf. Buchstaller & van Alphen 2012: xxii), but rather out of the strong belief that a full picture of the interplay between language, mind, and society calls for maximally inclusive research.

#### 2 THEORETICAL BACKGROUND

Frame semantics emerged out of a critique of semantic decomposition (Barsalou 1992a; Minsky 1977; Rumelhart & Ortony 1977). And rightly so: when adopting the traditional principle of componential analysis to the Greek mythological love story of *Europa and Zeus*, one will encounter one dead-end after another. Following this approach, Europa was then + human, + female and + princess, while Zeus was, bizarrely, + human, - female, + animal, + deity. This list does, however, not reflect Zeus' changeability from a Bull to a human, nor does it take into account that he fathered three children with Europa. Additionally, if this were the only way how the term "Europa" is represented in our mind, we could hardly interact in a debate in which the interlocutors share the presumed knowledge that the Greek mythological figure *Europa* was, as the legend goes, the eponym for the continent *Europe* which consists of various countries out of which 27 to 28 are members in the political and economic union called *European Union*.

Frame semantics proposes a radical alternative to this traditional approach. It raises the question "what is necessary to know in order to understand a linguistics expression" instead of "what is the word's meaning" (Busse 2009: 83). This approach does hence not only reverse basic semantic premises but does also hint at the aspect of knowledge structure. For the proper understanding of a word it is mandatory to understand the whole structure in which it is embedded (Fillmore 1982: 111). These considerations where paralleled, inter alia, by research in the field of artificial intelligence and cognitive psychology. These approaches aim at uncovering overall principles of thinking and use the notion of frame for describing their network-like structure.

The following chapters will shed light on the almost inextricable links between the various disciplinary approaches to frames. Having evolved from inquiries into mental patterns, "schemas" (Bartlett 1932), and having taken shape through findings in artificial intelligence (Minsky 1975; Barsalou 1992) and psychology (Schank & Abelson 1975), frames were taken up as an empirical analytical tool in linguistics (Fillmore 1988; Langacker 1987). Thus, the theoretical section will begin by tracing this dual nature of frames and by providing an outline of three frame-models which are relevant for the present thesis: the linguistic model by Charles Fillmore, and the cognitive models by Marvin Minsky and Lawrence Barsalou. Since the works of these authors are extensively contextualized and related to other research, the following section can be also understood as a literature review.

#### 2.1 Model of Knowledge Representation and Analytical Tool

In asking "What is in a Frame?" (1993: 14) Deborah Tannen refers repeatedly to the notion of "structures of expectations". This notion was coined by R.N. Ross in his study examining how ellipsis is understood in text (1975). As summarized by Tannen, people manage to understand such "gaps" because:

on the basis of one's experience of the world in a given culture (or combination of cultures), one organizes knowledge about the world and uses this knowledge to predict interpretations and relationships regarding new information, events, and experiences. (Tannen 1993: 16).

Crucially, this capability of creating coherence is not only limited to future experiences. Frederic C. Bartlett's pioneering work "Remembering" (1932) had revealed that memory functions in a similar way. Bartlett introduced the notion of "schema" to approach the assumption that "the past operates as an organized mass rather than as a group of elements each of which retains its specific character" (Bartlett 1932: 197). This organized mass, he claims, is constantly subjected to changes and developments. In stating this dynamic he provided an advanced idea of what the "active, developing patterns" in processing experiences might look like while distancing himself from the rather static notion of "schema".

However, subsequent research did not take up the idea of dynamic structures immediately. Since the topic of knowledge representation was predominantly dealt with within the field of artificial intelligence, the foremost aim was to arrive at a technical model. Researchers in this field sought to implement the ability of text understanding on computers (Rumelhart 1975; Schank and Abelson 1975; Minsky 1975). Their research suggested a common denominator hinting at the inseparability of linguistic or text knowledge and encyclopedic knowledge. In order to make sense of a text individuals fall back on experiences which are acquired through socialization (Ziem 2008a: 17). Hence, the question was how this part of knowledge could be coded, formalized and modelled for technical use.

Within this context Marvin Minsky proposed *frames*<sup>1</sup> as a theory of "data structures for stereotyped situations" (Minsky 1975: 212). According to his frame theory, commonly

<sup>&</sup>lt;sup>1</sup> As Busse rightly states, frame theory is tackled in various academic disciplines. The main contributions to this field derive from linguistics, cognitive science, psychology, artificial intelligence, and philosophy (23). However, frames are also object of research in sociology and anthropology. In fact, the term "frame" was

However, frames are also object of research in sociology and anthropology. In fact, the term "frame" was first introduced by the anthropologist Gregory Bateson when analyzing how individuals exchange and interpret signals (Bateson, G.A. 1955. A Theory of Play and Fantasy. New York: Chandler). For this reason, it is essentially to stress that the cognitive and linguistic approach to frames constitute merely two perspectives on frame theory. A concise overview on the work on frames within different disciplines is provided by Deborah Tannen (1993: 14-20).

encountered situations (as a birthday party) consist of slots (food, guests, etc., ...) which are bound to fillers (cake or ice cream, or Martin or Julia, for instance). Most typical slot/filler combinations are said to be default values and do not need to be expressed explicitly. Coming back to the birthday frame this would include defaults like "merry atmosphere", for instance. Additionally, in Minsky's conception, frames are always interrelated with other frames.

In the field of cognitive psychology, Schank and Abelson's script theory (1977) was based on similar considerations. However, their approach gained notoriety for its focus on typical activities and events like going to a restaurant. In the script formalism, world knowledge is organized in frame-like packets. Comparable to Minsky's theory, one's knowledge about such typical events is structured along general knowledge about what usually happens and slots which are filled in each situation.

Akin to Minsky's as well as Schank and Abelson's approach, Rumelhart (1980) advanced the research on schemas. His description of schema instantiation recalls on an abstract level the idea of slots and fillers: "a schema is instantiated whenever a particular configuration of values is bound to a particular configuration of variables at a particular moment in time" (Rumelhart 1980: 36). This notion of schema is frequently used in computational approaches to cognitive psychology.

Despite the variety in terminology, the above-mentioned theories share a common denominator. As Lakoff put it:

Frames, scripts and schemas are all attempts to provide a format for representing human knowledge in computational models of the mind. They attempt to do so by providing conventional propositional structures in terms of which situations can be understood. The structures contain empty slots, which can be filled by the individuals occurring in a given situation that is to be structured. (Lakoff 2008: 116).

Hence, these frames, scripts and schemas refer to constructs which pop up on an ad hoc basis and are bound to a specific moment in time.

In contrast, Fillmore introduced frames into linguistics as knowledge structures activated by words. In the beginning, his work basically focused on syntax and was highly influenced by the work of Tesnière (1959). Both shared the assumption that verbs evoked scenes which required particular actors, respectively syntactic constituents like objects. However, in the course of time, Fillmore postulated that for the proper understanding of a sentence it was necessary to integrate semantic knowledge, as well. Seeking to include all important elements for the understanding of syntactic structures led him to the development of "case frames" (Busse 2009: 82). In his subsequent work, he used the slot/filler structure to approach such (case) frames. By way of illustration, one can consid-

er the sentence *Mary is reading since hours*. This sentence consists of slots which are filled (performer of the action: Mary; duration: since hours) and slots which are empty (object, place, beginning) (Busse 2009: 84). Fillmore described a frame as a "system of linguistic choice" (Fillmore 1977b: 63) or grammatical structures which triggers scenes, or as he put it, a "coherent segment of beliefs or experiences or imaginings" and vice versa (ibid.). On this basis, he introduced his concept of *understanding semantics* (U-semantics) contrasting with truth conditional semantics (T-semantics). U-Semantics explores what is necessary to know for a hearer to interpret a sentence. He concluded that it was necessary to identify "a general account of the relation between linguistics texts, the contexts in which they are instanced, and the process and products of their interpretation" (Fillmore 1985: 222). This statement already indicates Fillmore's underlying ambition to use frame theory in a practical context. In fact, Fillmore made a huge contribution to the advancement of its analytical potential:

In addition to seeing frames as organizers of experience and tools for understanding, we must also see frames as tools for the description and explanation of lexical and grammatical meaning. (1985: 232).

This aim materialized in the realization of the FrameNet project. FrameNet is based on numerous empirical frame-related studies and offers a frame semantic description of linguistics expressions. It focuses mainly on verbs, but other word groups are being constantly added. However, although the whole frame theoretical potential cannot be reflected in such a technical corpus, it provides a large database of lexicologically usable information.

Hence, frames started to be taken up as an analytical tool by other linguistics, too (Fraas 1996; Klein 1999; Ziem 2008a: 15). In the Anglo-American context, the evolution of FrameNet moved in parallel to the development of construction grammar (Fillmore 1988, 1989, Fillmore, Kay & O'Connor 1988). The meaning of constructions, or "form-meaning pairings which flexibly represent the variable character of larger units with different degrees of schematization" (Fischer 2010: 185), is thought of in terms of frame semantics (Kay & Fillmore 1999). Similarly, Goldberg stated that for understanding argument structure it is necessary to fall back on background frames (Ziem 2008a: 15). Additionally, frames found their way into lexicographic research. Salient studies within this field aimed at investigating the "Body Part Terminology in Hebrew" (Petruck 1986), the semantics of verbs of seeing (Fillmore & Atkins 1994) or of the lexeme *risk* (Fillmore & Atkins 1992, 1994). This kind of research was afterwards pursued in FrameNet. Moreover, frames were introduced practically into the field of cognitive semantics. Fauconnier and Turner

implemented the notion of frames in their theory on conceptual blending (1998).

Frame semantics has been also applied to the analysis of languages other than English. On the one hand, several studies examined how frames based on English data such as 'Revenge' (Petruck 2009), 'Risk' (Ohara 2009; Fillmore & Atkins 1992), 'Communication' (Subirats & Petruck 2010; Boas 2005) or 'Self\_motion' (Fillmore &Atkins 2000; Boas 2001; Iwata 2002) could be applied to languages like Japanese, Hebrew, German, French, or Spanish. On the other hand, FrameNet found its way into other languages, too. Akin to Fillmore's Berkley FrameNet, German (Burchardt et al. 2009), Spanish (Subirats 2009), Japanese (Ohara 2009) or French (Pitel 2009) FrameNets emerged. Some of them use monolingual data (like Japanese, for instance), whereas others exploit multilingual corpora (like French). Hence, it can be concluded that frame semantics is an internationally acknowledged analytical tool.

Contrasting with the traditional frame semantic premises mentioned above (the focus on verbs), Barsalou proposed a concept-oriented frame theory which was internationally received by both, linguistic and cognitive scientists. His approach resembles Minsky's theory in a number of respects. Despite terminological differences, Barsalou's theory gained an impetus from Minsky's slot/filler structures. In Barsalou's approach "attributes" correspond to "slots" while their "fillers" are functionally comparable to "values" (Barsalou 1992a: 21). Additionally, and again akin to Minsky, Barsalou stressed the role of recursiveness of frame structures. Regarding Fillmore's frame semantics, Barsalou shares the assumption that only some aspects of frames are lexically realized, and that the implicit information needs to be inferred for proper understanding (Busse 2009: 90). On the other hand, Barsalou was especially dedicated to investigating a frame's structural elements and their interaction. He did thus not only rename core theoretical aspects but contributed to a more complex and dynamic understanding of frames.

The following chapters will shed light on each of these three approaches. Although this paper does not intend to provide a comparative study, similarities and differences will automatically become apparent. Starting with Fillmore's verb-oriented approach, moving to Minsky's cognitive theory, and concluding with Barsalou's concept frames a cognitive-linguistic theoretical overview will be proposed. Where appropriate, visualizations will be used to replace and/or support complex, abstract and probably insufficient language. "Pictures speak louder than words" and their use is by no means driven by laziness or oversimplification, but by the desire to make the notion of frame as lucid as possible.

#### 2.1.1 C. Fillmore and the Role of Verbs

The personage of Charles Fillmore and the linguistic frame theory are inextricably interwoven. His semantic perspective on syntax, or as Busse nicely put it: his attempt to "semanticise syntax" (2012: 34), opened the door to a deeper understanding of meaning and meaning relations. However, a thorough acquaintance with Fillmore's path of thought would go far beyond the scope of this thesis. His "drift away" from the generativist hegemony was a gradual and about 40-year-long process. Therefore, and for operational reasons, this section will put a focus on Fillmore's initial reflections by carving out the role of verbs.

Entailment. Looking retrospectively at Fillmore's opus magnum, one will notice that the seeds of his frame-theory already germinated in his earliest publications. His article "Entailment rules in a syntactic theory" already hinted at what could be subsumed under semantic epistemology<sup>2</sup>:

There is a sentence X which cannot by itself be interpreted by the ordinary semantic rules. Based on the grammatical structure of X, the entailment rules will convert X in to a set of sentences Y such that each of these sentences can be interpreted by the ordinary semantic rules. The semantic interpretation of the set of sentences Y, then, is provided as the semantic interpretation of the sentence X. (Fillmore 1965: 65-66).

The expression "set of sentences" points tentatively to the notion of implicitness, an essential of his then future *understanding semantics*. Hidden behind this formulation lies also the concept of "inferences", or steps of reasoning which play a crucial role in today's theories on language understanding (Busse 2012: 32). However, this short excerpt does not only touch upon remarkably radical and far-sighted ideas but also reveals that Fillmore did not want to distance himself too much from semantic theories proposed within the transformational framework<sup>3</sup> at that time.

Case frames. Nonetheless, Fillmore pursued his at that time unconventional path of thought and his "emancipation" received a new impetus with his publication "The case for case" in 1968. Fillmore aimed at building up a case grammar and introduced, in this respect, his theories on deep cases and case frames. The invention of deep cases can be

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<sup>&</sup>lt;sup>2</sup> According to Busse, the stark ceasura was, however, in 1971: "Man kann diese Grenzüberschreitung, die man eine 'epistemologische Wende' in der linguistischen Semantik nennen könnte, datieren mit jenem Moment im Jahre 1971, in dem der Begründer der Frame-Semantik Charles J. Fillmore [...] für die linguistische Semantik vorschlägt, die übliche [und seiner Ansicht nach falsche) Frage: 'Was ist die Bedeutung dieser Form?' [...] durch die Frage zu ersetzen: 'Was muss ich wissen, um eine sprachliche Form angemessen verwenden zu können und anderer Leute zu verstehen, wenn sie sie verwenden'?". (Busse 2009: 131).

<sup>&</sup>lt;sup>3</sup> See Katz & Fodor's *The Structure of a Semantic Theory* (1963).

viewed as a semantic reinterpretation of traditional "surface cases" as the nominative, genitive, dative, and accusative, for instance (Busse 2012: 34). Instead of taking up these traditional categories, Fillmore proposed a catalogue of thematic roles (*cases*)<sup>4</sup> which could be ascribed to the syntactic elements governed by a verb. Importantly, not all syntactic elements are always explicitly realized as illustrated in the following example:

#### (1) He buys the car.

In this sentence two deep cases are evident: the "agentive" (replacing the "subject") and the "objective" (later "patient"; replacing the object). However, the "instrumental" (the money which is used for paying) and the "dative" (the seller of the car; later "benefactive") are not realized but are also roles assigned by the verb "to buy" (cf. Ziem 2008a: 15). Fillmore was concerned to determine case frames, hence all deep cases tolerated by a verb. The first case frame entry originated from the verb "to open" and demonstrated the underlying semantic flexibility of traditional grammatical figures (Fillmore 1966:9 qtd. in Busse 2012 36):

- (2) The door opens.
- (3) The caretaker opens the door.
- (4) The key opens the door.

The semantic roles ascribed to the "subjects" hence vary from the OBJECTIVE (2), to the AGENTIVE (3), to the INSTRUMENTAL (3) and build up the case frame of the verb "to open". This observation underpinned the function of verbs as being both the syntactic and semantic cores of sentences.

Tesnière's Valency Grammar. In this context, it is worth mentioning that Fillmore's theory bore a striking resemblance to Lucien Tesnière's valency grammar. Although he did not refer explicitly to Tesnière's work<sup>5</sup>, the analogies become even evident by looking merely at the terminology:

One can compare the verb to an "atom with a particular number of hooks that can - according to the number of hooks - attract a varying number of actants, which it keeps in its dependence. The number of hooks that a verb possesses, and consequently the number of actants that it governs, constitute what we call the valency of the verb. (Tesnière 1959: 238).

Both formulations – "governing actants" (Tesniére) and "ascribing roles" (cf. Fillmore 1966: 9 qtd. in Busse 2012: 36)- share the same central idea; and, therefore, Busse rightly

<sup>4</sup> Note that the concept of semantic roles was introduced to the German-speaking research community by Peter von Polenz' work *Deutsche Satzsemantik: Grundbegriffe des Zwischen-den-Zeilen-Lesens* in 1985.

<sup>&</sup>lt;sup>5</sup> Busse reflects extensively upon that circumstance and criticizes Fillmore for neglecting the European roots of his theory (cf. 2012: 35n39).

states that the valence structure dominated by a verb corresponds to what Fillmore calls case frames (2009: 82).

Scenes-and-Frames Semantics. Although the case frame theory showed a severe weakness, namely the impossibility of exhaustively determining a verb's semantic roles (Ziem 2008a: 15), it paved the way for a more extensive frame theory. In the course of time, even Fillmore himself took a self-critical stance towards the notion of case grammar and case frames. In "The case for case reopened" (1977a), and in "Scenes-and-Frames Semantics" (1977b), as the titles suggests, he resituated frames within the context of schematized scenes. According to Fillmore, meaning is related to scenes and the understanding of a sentence is guided by knowledge which extends over grammatically encoded information. Words activate whole scenes and scenes, in turn, store the conceptual and experiential knowledge about the essentials of a scene and the ways with which it can be expressed (Fraas 2013: 269; Busse 2012:40). Scenes were hence defined as structures of tacit knowledge, whereas frames constituted their linguistic equivalent<sup>6</sup>.

*Perspectivation.* The verb choice when describing a scene has seminal interpretative consequences. Different verbs assign different syntactic roles and provide hence different syntactic perspectives (Croft & Cruse 2004: 208-209; Fraas 2013: 269-270). The notion of perspectivation can be best illustrated with a classic example: the *buy* frame or the [COMMERCIAL EVENT] frame (Fillmore 1977a:16 ff.). The scene activated by the word "buy" can be also activated by the words "sell", "cost", "pay" and "charge". However, each of these verbs expresses different perspectives on the same situation, as visualized after Ungerer and Schmid (2006)<sup>7</sup>:

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<sup>&</sup>lt;sup>6</sup> Later, Fillmore distanced himself from this distinction and defined frames as "any system of concepts related in such a way that to understand any of them you have to understand the whole structure in which it fits; when one of the things in such a structure is introduced into a text, or into a conversation, all the others are automatically made available". (Fillmore 1982: 111).

<sup>&</sup>lt;sup>7</sup> A=buyer, B= goods, C= money, D= seller.

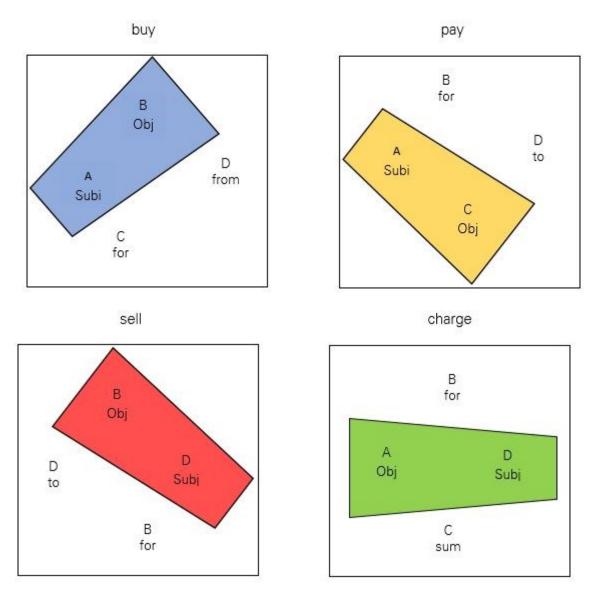


Figure 1: The [Commercial Event] Frame with the Perspectives evoked by the Verbs buy, pay, sell, and charge (after Ungerer & Schmidt 2006: 209).

The four illustrations show that the [COMMERCIAL EVENT] frame can either focus on the buyer's perspective (buy and pay) or on the seller's perspective (see and charge). In claiming that verbs are means of perspectivization<sup>8</sup>, Fillmore proposed an analytical approach which enabled semanticists to grasp such subtle differences in meaning.

Slots, Fillers (and Defaults). Although the notion of slots and fillers is more likely to be ascribed to the work of Marvin Minsky, Fillmore tentatively referred to these elements in his publication *Frame Semantics* (1976) in saying that "A frame is a kind of outline figure with not necessarily all of the details filled in" (Fillmore 1976: 29). In other words, the details are filled in by language users themselves. Fillmore did also use the notion of slots

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<sup>&</sup>lt;sup>8</sup> "the notion of perspective relies on the principle of prominence, i.e. on figure/ground segregation" (Ungerer & Schmid 2006: 208).

and fillers in his "Scenes-and-Frames Semantics" (1977b). *Scenes* are not only understood in a situational sense but can also be viewed within a schematic context. Having, so to say, empty "positions", they resemble a frame's slots which can be variably filled. However, in the beginning Fillmore interpreted frames mainly in a linguistic sense<sup>9</sup>. Busse states that Fillmore interpreted frames against the structures provided by valency grammar (2012: 164)<sup>10</sup>. Hence, in this framework, slots can be interpreted as open positions that need to be filled with the semantic roles (agent, patient, instrument, etc.) assigned by the verb. Without paying too much attention to the concept of default values -Fillmore considered default values to be conventionalized, respectively entrenched (Ziem 2014a: 177)- he introduced slots and fillers as frame elements to the FrameNet project. Hence, his focus on verb domains has been transferred to practical applications and is congruent with the current working method applied by FrameNet.

#### 2.1.2 M. Minsky's Cognitive Grounding

Minsky, in contrast, proposed his frame theory as a "theory of human thinking" (1975: 215)<sup>11</sup>. Astonished by the power and speed of mental activities, he aimed at uncovering basic cognitive processes in order to make them applicable to computers. This implied a strive for complexity reduction which led Minsky to develop a model of knowledge representation consisting of innumerable microworlds. These microworlds are structured by frames. Importantly, not all frames are inextricably linked to language (Geeraerts et al. 2006: 302; cf. Ziem 2008b: 93). Individuals have frames at their disposal which cannot be expressed linguistically (as particular sensual experiences, for instance). Still, all frames are, in a way, guided by language. Research at the interface between linguistics and cognitive science came to the result that language is essential for constituting knowledge and meaning alike (Fraas 2013: 267). Hence, having taken this into account, Minsky's systematic theory provides useful aspects regarding linguistic approaches to frames. Akin to Fillmore, his full work cannot be taken up in this thesis. Thus, the elements outlined here are especially pertinent for the overall discourse-oriented approach herein pursued.

Structural constituents. In contrast to Fillmore's relatively succinct elaboration on the

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<sup>&</sup>lt;sup>9</sup> Importantly, Ziem (2014: 189 f.) observed that Fillmore did not distance himself from a cognitive understanding of frames.

<sup>&</sup>lt;sup>10</sup> He continues in saying that Fillmore did certainly use the notion of slots and fillers more frequently in his later works (Fillmore & Baker 2001). However, he did never make these elements a central object in his work (Busse 2012: 164).

<sup>&</sup>lt;sup>11</sup> Minsky used the concept of frames basically to explain aspects of visual perception (Minsky 1975: 211-230). This demonstrates that his aim was mainly to embed frames within a cognitive theory.

internal structure of frames, Minsky's theory is strongly driven by the identification of frame constituents. According to Minsky, Frames are knowledge structures which are retrieved from memory and which consist of, on the one hand, a fixed core, and, on the other, of variable elements (Busse 2012: 252). Put differently, the data structures in one's mind consist of stable information and of information which can be situationally adjusted in the given situation. The relational nature of this structure becomes evident in the following excerpt:

We can think of a frame as a network of nodes and relations. The "top levels" of a frame are fixed and represent things that are always true about the supposed situation. The lower levels have many terminals- "slots" that must be filled by specific instances or data. Each terminal can specify conditions its assignments must meet. (The assignments themselves are usually smaller "sub-frames.") Simple conditions are specified by markers that might require a terminal assignment to be a person, an object of sufficient value, or a pointer<sup>12</sup> to a sub-frame of a certain type. More complex conditions can specify relations among the things assigned to several terminals. (Minsky 1975: 211).

Slots (resp. terminals) are filled with information that is subcategorized by the slots themselves. This constraint is similar to syntactic positions which only tolerate members of a specific category. Reminding one on the generativist pendant of subcategorization, Busse merges these two terms to "frame-sub-categorization" (Busse 2012: 255).

Besides the fact that Minsky introduces the recursive character of frames (as will be explained below), he also mentions the notion of default values two paragraphs later:

Much of the phenomenological power of the theory hinges on the inclusion of expectations and other kinds of presumptions. A frame's terminals are normally already filled with "default" assignments. Thus, a frame may contain a great many details whose supposition is not specifically warranted by the situation. These have many uses in representing general information, most likely cases, techniques for bypassing "logic", and ways to make useful generalizations. (Minsky 1975: 212).

These default values, or standardizations, have two significant characteristics. First, they are cognitively relieving, and second, they play a significant role in discourse and language change (Ziem 2005: 7-8; Ziem 2008a: 347). Default values show different degrees of epistemic stability. Therefore, they can be displaced through concrete fillings. Since words are semantically charged in discourse, semantic knowledge is reorganized. Described in frame analytics terms, this process can be also viewed as the *entrenchment* of new defaults values (Ziem 2005: 7; Busse 2012: 304). Such processes may, hence, affect shared collective knowledge within a society or community.

Recursion and frame systems. The above quoted "nodes and relations" (Minsky 1975: 211) are closely linked to the principle of recursion and the notion of frame system. Being the first one who explicitly stated that frames are recursive, Minsky proposed a

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<sup>&</sup>lt;sup>12</sup> "Pointers" are interpreted by Busse already as "default-values" (2012: 255).

more complex and multi-layered presentation of knowledge structures. Each frame possesses slots -or, stressing the relational character: connective positions- which can be filled with either "ordinary" fillers or with default values. Crucially, each of these fillers represents a frame itself. Each filler has its own slots and some fillers that turn into frames may share the same slot nodes. Different frames may also have similar fillers, however, the way there may lead through different slot nodes. In a nutshell: frames are structures of frames.

This observation leads to the idea of frame-systems. Frame systems, in turn, can be approached from the angle of *perspectivation*. Similar to Fillmore's [COMMERCIAL EVENT] illustrated above, neighboring frames can refer to the same type of situation by taking different perspectives due to shared slots (Busse 2012: 256). Akin to the economy principle in language, this coordination of information into (dynamic) frame systems is driven by a principle of cognitive economy which reduces processing effort.

Applying a culturalist approach to cognition and knowledge, Minsky proposed additional potentially useful thoughts in terms of the interplay between language, discourse, and thinking. Busse provides a concise overview of Minsky's main points (2012: 304-310) and those relevant for discourse analytic investigation can be summarized as follows:

- -Each filler can be replaced by an alternative filler
- -Frames can be adjusted to new experiences or tasks
- -Language "condenses" social knowledge
- -In understanding language, one makes extensive use of common knowledge
- -Individuals construct meaning

These aspects are worth considering since they point to the dynamic and the unfinishable and interdependent character of frames; characteristics which can be also applied to the nature of discourse.

#### 2.1.3 L. Barsalou's Concept Frames

The idea of frames as knowledge structures has been considerably refined by the cognitive scientist Lawrence Barsalou (1992a). His frame theory contains both, a further development of previous frame theories and several novelties, respectively differentiations. According to Barsalou, frames are dynamic, recursive, non-rigid structures which contain the following (structural) components: attribute-values sets, structural invariants and constraints. In fact, some of these characteristics look highly familiar, whereas others will be herein described in more detail. Akin to Minsky, Barsalou's frames are dynamic and recursive. However, he views them as "flexible, loosely organized bodies of knowledge"

(1991: 27) which consist of more constituents than frames in previous theories; and, in contrast to Fillmore, Barsalou pursues a more concept (nominal) oriented approach to frames. In order to avoid redundancies, the following paragraphs will focus on the structural components (attribute-values, structural invariants, constraints), the unconstrained nature and concept-orientation of Barsalou's frames.

Attribute-Value-Sets. In Barsalou's frame conception, "attributes" are synonymous with slots (Barsalou 1992a: 25), while "values" resemble fillings according to the classic frame terminology. Values are hence features of a more general attribute as illustrated by the following figure:

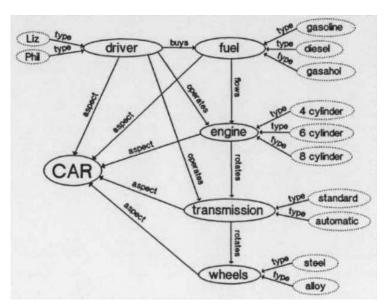


Figure 2: Car Frame (after Barsalou 1992a: 30).

Barsalou defines the core of a frame as "a cooccurring set of attributes" (1992a: 30). In Figure 2, the frame-core for *car* thus consists of attributes for *driver*, *engine*, *fuel tank*, *transmission*, and *wheels*. Crucially, attributes -as well as values- may be incomplete, variable, unsystematic and, due to a lack of knowledge, sometimes even incorrect (Barsalou 1992b: 158). By the same token, values can be both features of an attribute and simultaneously an attribute for a value, hence complex frames themselves. This recursion is embedded into a concept-oriented theoretical baseline:

Attributes are concepts that represent aspects of a category's members, and values are subordinate concepts of attributes. (Barsalou 1992a: 43).

Because values are subordinate concepts, they inherit information from their respective attribute concepts. [...]. Values further inherit the extrinsic fact that they are an aspect of category members. [...]. Values contain additional information not in their respective attributes, thereby making them more specific concepts. (Barsalou 1992b: 30).

Importantly, attribute-value sets are subject to change. People tend to construe new attributes and new values when new aspects of a category come to the fore. This productive nature of frames becomes also evident when considering the relational specifications (cf. Figure 2). Following Barsalou, features in human knowledge are integrated through a variety of relations. Temporal, spatial, causal, and intentional relations, for instance, ascribe thematic relations to attribute-value pairings and features in general (Barsalou 1992b: 157-160). The circumstance that both features of the *car* frame, "uses gas" and "engine", are both related to "pollutes the atmosphere" (Barsalou 1992b: 157) reveals a dense, flexible, and dynamic network of human knowledge.

Structural invariants. Essentially, structural invariants are fixed correlations between attributes (not to be confused with *default values*, respectively, frequent attribute-value cooccurrences). Although resembling simple frequency effects, invariants are not only a cooccurrence phenomenon, but also reflections of conceptual information (Busse 2012: 375). Barsalou paraphrases structural invariants as normative truths about attribute-relations (Barsalou 1992a: 37). Thus, whereas attribute-value sets represent the dynamic nature of frames, structural invariants serve as elements of stasis.

Constraints. Constraints highlight a significant difference to other frame theories by stressing the relations between values. In contrast to structural invariants, value-relations are not normative truths, but are influenced by dynamic and complex reciprocal effects. Barsalou distinguishes global, local, contextual constraints, and optimization.

Global constraints can be expressed by the following formula: "Value X of attribute A compels value Y of attribute B" (Busse 2012: 372). Considering the TRANSPORTATION frame, the value for the attribute SPEED would increase, while the value for DURATION would decrease (Evans 2009: 49). Few of these relations are logical by nature (as SPEED and DURATION, cf. Busse 2012: 376) whereas others social and cultural norms (cf. the contemplative traveler who chooses a slow form of transportation, Barsalou 1992a: 37).

Local constraints, in turn, resembles an existential all-or-nothing approach. The presence of a certain value (of an attribute A) entails the presence of another value (of an attribute B), whereas the absence of a certain value entails the absence of another value. For instance, if the attribute ACTIVITY in the VACATION frame has the value SKIING then the value of the attribute DESTINATION is SKI RESORT (Busse 2012: 376; Evans 2009: 49). Contextual constraints can influence both global and local constraints. They reflect physical (speed constraints duration) and cultural conventions (income constraints taxes). The aspects of a situation are thus closely interrelated and physical and cultural mecha-

nisms restrict the combinations of compatible attribute values.

Optimizations, on the other hand, reflect constraints that are influenced by an agent's goals. Optimizations can be both, attribute (global) or values (local) constraints. For the purpose of clarification, Barsalou proposes the ACTIVITY frame (Barsalou 1992a: 39). If an agent's goal is to get fit, the value of exertion is to be high. Additionally, optimizations usually seek values that excel beyond all other values whereas contextual constraints select satisfying values.

The extent of frames. Frames generate new frames while being innately unconstrained. However, one has to distinguish between content and form. Although the unconstrained nature of frame-content is psychological valid -people have the ability to integrate an indefinitely large number of concepts into a frame (Barsalou 1992a: 44, 63)- the form is restricted. Barsalou assumes that the working memory constraints the number of core attributes of a frame to five (Barsalou 1992a: 44). Further, the recursive depth of frames and the length of constraint chains might be restricted by performance and capacity limits in human cognition (Barsalou 1992a: 44). Still, despite this natural limiting factor, Barsalou's frame theory includes the powerful creation mechanisms in human thinking, providing hence-similar to Minsky- fruitful inspirations for the interplay between frames and discourse and cultural semantics in general.

Concept-frames. Barsalou's frame theory contrasts strongly with Fillmore's predicative approach. Following Busse, these are the two main theoretical directions in frame theory (2012: 551) and their major difference lies in differing foci regarding word class. One might say -with a note of oversimplification- that Barsalou's approach derives from a rather nominal focus, whereas Fillmore's derives from valency structures, hence verbs<sup>13</sup>. Barsalou was primarily concerned with representing the properties and attributes of an entity, whereas Fillmore aimed at uncovering the mechanisms of binding participants in particular state of affairs. Barsalou's proposed rather a theory of concept formation than a theory of semantic representation. Still, despite his relatively differentiated definition of concepts<sup>14</sup>, he tends to exemplify his work by means of nominally realized concepts. According to Busse, this is due to a preference for taxonomic hierarchies, which are problematically applicable to verbs (2012: 552).

<sup>&</sup>lt;sup>13</sup> See Löbner (2018: 197) for a detailed discussion of the differences between case frames and Barsalou 14 "By concept I mean the descriptive information that people represent cognitively for a category, including

definitional information, prototypical information, functionally important information, and probably other types of information as well. In this regard, my use of concept vaguely resembles intension and sense". (Barsalou 1992a:31).

Be that as it may, Barsalou was the first one developing a concept-based frame model by carving out its structural constituents and interplay in such detail. This formal explicitness and precision make his theory also fruitful for the analysis of other parts of speech as well as larger units such as discourses. An extension of his model to verb categories -Barsalou uses verbs solely to describe relations- would be a path towards an integrative and comprehensive frame theory.

#### 2.2 The Interplay between Frames and Discourse

In a way, a discourse analysis resembles a balancing act. One needs to maneuver oneself between the danger of under-specification and overgeneration, an area of tension that has been intensely discussed (Warnke & Spitzmüller 2008: 3-6; Spitzmüller & Warnke 2011: 16; Warnke 2008: 42). Is a frame analytic approach thus the right mean to cope with such requirements?

Not so long ago, Warnke and Spitzmüller proposed a model to deal with this obstacle (2008). DIMEAN (Diskurslinguistische Mehr-Ebenen-Analyse) was developed to establish methodological standards without neglecting the inherent complexity of discourse. They suggested several analytic categories along three main levels, namely the transtextual level, the intratextual level, and the actor's level. This model allows an accurate, extensive, and differentiated discourse analysis. Again, in which way do frames relate to such an analysis? The following illustration may help to situate and describe the frame analytic approach pursued in this thesis:

		[]	
		Ideologien, Gouvernem	entalität, Mentalitäten
	Diskurs-	Historizität	
Transtextuelle Ebene	orientierte	Indexikalische Ordnung	gen, Sozialsymbolik
Locale	Analyse	Diskurssemantische Grundfiguren	
		Frames, Topoi	
		Intertextualität	
Akteure	Disknarprägung upsknarsvica	Medialität	– [] – Handlungsmuster – Kommunikationsformen – Medium
		Diskurspositionen	– [] – Soziale Stratifizierung, Macht – Diskursgemeinschaften – Ideology brokers – Voice – Vertikalitätsstatus
		Interaktionsrollen	– [] – Rezipientenrollen – Produzentenrollen
Intratextuelle Ebene	Textorientierte Analyse Propositions- orientierte Analyse	Visuelle Textstruktur	– [] – Text-Bild-Beziehungen – Typographie – Materialität
		Makrostruktur: Textthema(ta)	- []  - Metaphernfelder  - Lexikalische Felder  - Isotopie- und Oppositionslinier  - Themenentfaltung  - Textfunktionen  - Textsorte
		Mesostruktur: Themen in Textteilen	
		Textuelle Mikrostruktur: Propositionen	- [] - Syntaktische Muster - Rhetorische Tropen und Figures - Metaphernlexeme - Deontische Bedeutung - Implikaturen, Präsuppositioner - Sprechakte
	Wortorientierte Analyse	Mehrwort-Einheiten	- [] - Okkasionalismen - Schlagwörter - Schlüsselwörter - Nomina continuativa - Nomina appellativa, Nomina collectiva - Nomina propria
		Einwort-Einheiten	

Figure 3: Dimean Model (Warnke & Spitzmüller 2011: 201).

Spitzmüller and Warnke situate frames at the transtextual level, that is at the "macro-level of the wider-political, intertextual and discursive context" (Warnke & Spitzmüller 2008: 3). Frames are hence macro-structures distributed through actors (meso-level) by using specific intratextual means (micro-level). However, it is debatable whether a frame analytic approach to discourse linguistics does cover all three levels as proposed by the DIMEAN model.

In Foucauldian terms, discourse analysis is primarily an analysis of "épistémès" (Foucault 1973: 184). As the term suggests, discourse is closely linked to knowledge and a discourse analysis must thus uncover knowledge structures which are, in turn, defined as systems of statements (of énoncé) (Spitzmüller & Warnke 2011: 69), respectively as a

"constellation of epistemic elements" (Busse 2018: 18). In order to analyze such a constellation, Foucault introduced four basic terms: event, series, regularity, and condition of possibility (Kambasu-Kasula 2015: 28). At this point, potential overlaps between frames and discourse surface. Since frames are used as to describe knowledge elements, they can be also suitable for capturing structures and movements in discourse (Busse 2018: 19). For instance, Foucault's notion of "event" can be linked to the synergy effects that evolve in the process of frame extension<sup>15</sup> (Busse 2018: 19). However, it is noteworthy that the relation between frames and discourse is one of reciprocal influence. On the one hand, one may describe discourse in frame analytic terms, whereas, on the other hand, discourse has an impact on a frame's structural elements. For example, discourse may shape frames through the introduction of new fillers (Ziem 2008a: 9; Ziem 2008b: 109-110), or through a series of new fillers which may lead potentially to the emergence of new defaults. Hence, although a frame analytic discourse analysis does not cover all three levels as proposed within the DIMEAN model -the aspect of discourse positions is excluded (Busse 2018: 26)-, it may open up access to epistemic elements in discourse and shed light on the question of how ideas are put into (linguistic) practice. A frame analysis can thus detect subtle, hidden and deep-lying elements in discourse which remain usually undiscovered.

Returning to the transtextual level, one will note that the box includes also the notions of ideology and mentality. This allows to assume a certain closeness between the list's members. In linking this observation to the notion of 'perspectivation' - an aspect of frames often stressed in media studies- it is possible to outline the interplay between frames and linguistic discourse analysis more clearly. Entering the field of communication studies, respectively media studies, the constructive nature of frames comes more to the fore. Entman understood frames as interpretative schemas provided by the media: "To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation" (Entman 1993: 52, qtd.in Scheufele 1999: 107). In quoting a decisive statement by Price et al., Scheufele states that "the framing and presentation of events and news in the mass media can thus systematically affect how recipients of the news come to understand these events" (Price, Tewksbury & Powers, 1995: 4 qtd. in Scheufele 1999: 107). The choice of frame, or perspective (cf. Fillmore 1977a), can be influenced by various factors, inter alia, by the

<sup>&</sup>lt;sup>15</sup> For a detailed description, see Busse's "Diskurs und Wissensrahmen" (2018: 3-29).

journalist's political or ideological orientation (Shoemaker & Reese 1996; Tuchman 1978). Following the cognitive premise of reciprocal effects, this means, in turn, that ideologically shaped communicating texts may impact a reader's or listener's perception of the event or topic at hand. Frames and ideology can be thus closely entwined; however, their interplay opens a broad field of research and its reception would go beyond the scope of this thesis. Yet, what should be emphasized is the dual nature of frames. On the one hand, frames are socially shared and culturally specific (cf. Rettie 2004: 117) knowledge structures (Minsky 1975) which help to interpret new experiences (Ziem 2008a: 14); on the other hand, the notion of framing refers to the procedures which activate particular interpretative schemas and guide, so to speak, the processing of information (Dahinden 2006: 28). This already aforementioned constructivist aspect of frames seamlessly attaches to the notion of mentality. A social group's thinking, feeling, and wanting at a given time, thus, its mentality (Hermanns 1995: 71), materializes in certain discourse patterns/frames and is conversely shaped by them at the same time. In order to grasp the linguistic realization of mentality, Hermanns considers discourse linguistics to be the only appropriate tool, as summarized by Topczewska:

Das Gedachte, das Gefühlte und das Gesollte bzw. Logos, Pathos und Ethos einer sozialen Gruppe machen ihre Mentaliät aus. Die linguistische Analyse kann jeweils nur bestimmte Teile dieser Gesamtheit untersuchen, und zwar indem sie nicht einfach Sprachgebräuche, sondern *Sprachgebräuche-in-Diskursen* untersucht (vgl. Hermanns 1995a: 93). [...] Kognitive, emotiveund volitive Bedeutungen sowie ihr Wandel seien nur diskurslinguistisch zu ermitteln, 'denn nur in Diskursen können sich die Usualitäten von Sprech-, Denk-, Fühl-, Wollensweisen sprachlich zeigen, nämlich in der Serialität der sie zum Ausdruck bringenden sprachlichen Phänomene'. (Hermanns 2007: 203 qtd. in Topczewska 2012: 393-394).

Reminding on Foucault, Hermanns makes the notion of seriality thus a guiding principle of linguistic discourse analysis. His cognitive understanding of discourse patterns allows for considering frame semantics as an analytical tool, while the focus on the changeable nature of mentalities advocates its diachronic use. The notions of ideology and mentality can thus provide a source of interpretative approaches to the empirical frame analysis in this thesis. Importantly, the operationalization of frames for discourse linguistic purposes has been reported on numerous occasions and approached from various angles. For instance, frames have been applied to investigate a metaphor's conceptual content (Ziem 2008a), semantic shifts in economic or political discourse (Klein 1999), or to trace conceptual changes after key events (Fraas 1996). Most of these works are based on Konerd-

ing's *matrix frames* (1993) which enable a researcher to determine a concept's slots via a procedure called *hyperonym type reduction*<sup>16</sup>. Newer approaches include the notion of frames in data-driven discourse analyses (Scharloth et al. 2013) or embed frames into a construction grammar approach to discourse (Lasch 2014).

What unites these works, beyond the subject itself, is, unsurprisingly, their corpus linguistic basis. In a way, all pertain to Busse and Teubert's (1994) discourse model<sup>17</sup> which was inspired by Foucault's notion of discourse. Yet, though inspired by, Busse and Teubert distanced themselves *from* Foucault in speaking of "texts" instead of "énoncé". In this respect, they fall back on the Pêcheux discourse model (Spitzmüller 2005: 44). Briefly, according to Busse and Teubert, discourse relates to a thematically tied "virtual amount" (Busse & Teubert 1994: 14) of texts forming an epistemic-functional unity. Importantly, the notion 'virtual' is here not to be confused with the notion of 'digital'. Although this reference comes easily to mind when speaking of technically advanced approaches to corpus analysis, 'virtual' is used by Busse and Teubert to express the inexhaustive nature of discourse corpora (Ziem 2014b: 60). Discourse corpora are hence to be understood as cleavages of the overall discourse.

The following chapters will focus on three relevant search strategies within corpus linguistics. Since this work starts with a corpus-driven analysis, the relation of frames and keywords will be outlined first. Afterwards, it will be examined in how far collocations and n-grams may support a frame-based discourse analysis. These chapters aim at providing a comprehensive theoretical foundation for the analytical steps carried out in the empirical part.

#### 2.2.1 Frames and Keywords

Keywords can function as powerful analytical anchors serving interdisciplinary purposes. In corpus-linguistic terms, a keyword is defined as a word whose occurrence in a text is

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<sup>&</sup>lt;sup>16</sup> The cognitive plausibility of this approach is being questioned by Busse (2012:505). Moreover, he claims that Konerding's matrix frames are based on an excessive overinterpretation of Minsky's frame definition: "A frame is a collection of questions to be asked about a hypothetical situation [...]". (Minsky qtd. in Busse et al. 2018: 36).

<sup>&</sup>lt;sup>17</sup> Interestingly, Teubert claimed that corpus linguistics and cognitive linguistics should be understood as two autonomous fields of research: "Anders als der kognitiven Linguistik geht es der Korpuslinguistik nicht darum, zu verstehen, was der Sprecher will, wie wir also von einer sprachlichen Äusserung auf die Intentionen des Sprechers schliessen können. Die Diskursteilnehmer, die Mitglieder einer Diskursgemeinschaft mit ihren jeweiligen Intentionalitäten, entziehen sich dem Zugriff der Korpuslinguistik. Nur der Diskurs, verstanden als die vergangene und gegenwärtige Kommunikation zwischen den Diskursteilnehmern, ist ihr Gegenstandsbereich" (Teubert 2006 qtd. in Kalwa 2013: 47). Yet, when understood as a linguistic method, corpus linguistics and cognitive linguistics can easily go hand in hand. The debate about the status and role of corpus linguistics in research is, however, still a hotly debated topic as Kalwa nicely outlined (cf. Kalwa 2013: 47-49).

more frequent than one would expect to occur by chance alone (Scott & Tribble 2006: 55). The keywords in a corpus are calculated in contrast to a much larger reference corpus and by carrying out statistical tests. Keywords are not determined by frequency alone but, hence, by their 'keyness' 18. The keyness metric is viewed as a context-dependent textual feature (Culpeper & Demmen 2015: 99) and keywords are thus seen as contextual "pointers" (Scott 2010: 56). Put differently, keyness "gives an indication of the aboutness of a text, or what items are worthy of further investigation" (Rayson 2015: 41) Thus, in a thematically constrained corpus, a discourse corpus, for instance, a key word does specify this particular discourse alone; logically, its status as a key word might be easily lost in another corpus.

However, no matter whether discursively limited or even overall culturally specific (Wierzbicka 1997) when following the cognitive-linguistic account, keywords are more than just "pointers". Keywords are primarily one thing, namely, words, with all that this implies. Turning to Lakoff, he postulates four morals when discussing frames and their relationship with words:

Moral 1: Every word evokes a frame.

Moral 2: Words defined within a frame evoke the frame.

Moral 3: Negating a frame evokes the frame.

Moral 4: Evoking a frame reinforces that frame (Lakoff 2005).

Now, applying the first morals to statistically calculated keyword lists, those keywords which are ranked the highest hint at the dominant frames within a discourse. Or, stressing the network-like structure, those keywords ranked the highest pop up as frame centers of a whole discourse frame. Nevertheless, keywords can hardly, if at all, reveal any information about the concrete structural elements ("words defined within a frame") of a concept. Slots and fillers, then, would need to be determined more closely in a corpusbased follow-up analysis. Regarding moral three and four, interesting discourse related references emerge. Moral three, being self-explanatory<sup>19</sup>, relates to frame activation in a different context. However, the context of a keyword would need to be also examined in more detail by means of collocational or qualitative concordance analyses. Crucially, whereas the negation of a key word would reinforce the frame it activates (moral four)

<sup>18</sup> keyness = fpmfocus+n fpmref+n

<sup>19</sup> Lakoff usually points to the following anecdote to explain what frame negation means: "When I teach the study of framing at Berkeley, [...], the first thing I do is I give my students an exercise. The exercise is: Don't think of an elephant! Whatever you do, do not think of an elephant. I've never found a student who is able to do this. Every word, like elephant, evokes a frame, which can be an image or other kinds of knowledge...The word is defined relative to that frame. When we negate a frame, we evoke a frame". (Lakoff 2004: 3).

(cf. Langacker 2010: 93-94), its disappearance from the keyword list may lead to a frame (or slot/filler) elimination or replacement which can be equally important for the overall interpretation. What seems to be challenging the positivistic account has a cognitive explanation, since "every use of a structure has a positive impact on its degree of entrenchment, whereas extend periods of disuse have a negative impact" (Langacker 1987: 59). To capture the implications of such a decline or loss, corpus-analytical in-depth analyses as well as a solid, thematically relevant theoretical background would need to go hand in hand.

The far-reaching importance of keywords becomes apparent when looking at (linguistic) cultural studies. Raymond Williams, for instance, being at the height of his fame and influence, published the book entitled 'Keywords: A Vocabulary of Culture and Society' in 1976. By looking at seemingly unspectacular words such as 'Career', 'Communication', 'Ecology', 'Progressive', 'Representative', or 'Taste' he traced social and political thought within the British society at that time. Whereas Williams was a cultural theorist approaching the field of philology, more specifically, the field of historical lexical semantics, Anna Wierzbicka, being a linguist, turned to cultural studies in her 1997 publication 'Understanding a Culture through their Keywords'. Known for her cross-linguistic studies (cf. Goldberg 1995: 223 f.), Wierzbicka analyzed particular keywords in English, Russian, Polish, German, and Japanese to assess differences in cultural core values. Assuming a rigorous non-arbitrary relationship between a culture and the society's vocabulary, Wierzbicka wrote that

[...] some words can be studied as focal points around which entire cultural domains are organized. By exploring these focal points in depth we may be able to show the general organizing principles which lend structure and coherence to a cultural domain as a whole, and which often have an explanatory power extending across a number of domains. A key word such as *dusa* (roughly 'soul') or *sud'ba* (roughly 'fate') in Russian is like one loose end which we have managed to find in a tangled ball of wool: by pulling it, we may be able to unravel a whole tangled "ball" of attitudes, values, and expectations, embodied not only in words, but also in common collocations, in set phrases, in grammatical constructions, in proverbs, and so on (Wierzbicka 1997: 16f.).

This description recalls the network-like structure of frames. In fact, it refers to the encyclopedic knowledge structures entailed in a frame. Interestingly, Wierzbicka claimed that the conversational routines, keywords included, which crystallize in discourse, reveal a network of "culture-specific cultural scripts" (Wierzbicka 1997: 17). And scripts, in turn, are, as well as frames or schemas "all attempts to provide a format for representing human knowledge in computational models of the mind", as quoted earlier (Lakoff 2008: 116). Thus, it is reasonable and potentially useful to approach a frame-oriented discourse analysis, inter alia, by looking at keywords.

#### 2.2.2 Frames and N-Grams

Like the analysis of keywords, the calculation of n-grams lies at the heart of the corpusdriven approach. Basically, n-grams are also known as "lexical bundles, recurrent combinations or clusters" (Rayson 2015: 40) of a length n. For example, the word string *the ball on the hill* contains five 1-grams ('unigrams'), namely *the, ball, on, the, and hill*, four bigrams, namely *the ball, ball on, on the, the hill*, three trigrams, namely *the ball on, ball on the, on the hill*, one 4-gram, *the ball on the*, and one 5-gram, *the ball on the hill*. N-grams are not only bound to words but can be also applied to characters (Capelle & Grabar 2016: 274) allowing, for instance, morphological analyses. Importantly, these multiword units are, similar to keywords, extracted automatically from corpora and may lay the foundation for a corpus-based account.

Before turning to a rather abstract interpretation of the interplay between frames and n-grams, it is worth considering the function of n-grams in discourse. Recurrent phenomena occurring at the textual surface have been reported to be a fruitful research subject in linguistic discourse analyses. Such recurrences can indicate semantic or argumentative fixations as in the form of topoi (Wengeler 2003; Spieß 2018), "reasoning patterns and terms" (Bubenhofer 2008: 407), or metaphors (Böke 1996). Taking the work of Hermanns (1995) into account, such patterns ("Sprachgebrauch") have social, historical and cognitive implications. In other words, they are inextricably interwoven with a social group's mentality. Following also the two-directional cognitive model, linguistic patterns which are identifiable as n-grams reveal thus information about cognitive structures, mental schemes, or frames, while the conventionalization of particular patterns may, in turn, shape perceptions and guide the retrieval of specific interpretative schemas. N-grams can hence function as a mean for detecting subtle elements in discourse while pointing to broader discourse knowledge structures. In this way, they serve the very primal purpose of discourse analysis (cf. Foucault 1969).

Spieß (2018) provides a good example of how particular n-grams interact with frames in discourse. She investigated how the concepts *Burka* (engl. *burka*) and *Vollverschleierung* (referring to the full body veil) were semantically and argumentatively contextualized in the public-political discourse in Germany. In touching upon the field of construction grammar, she demonstrates that the formula, respectively the construction Vollverschleierung/Burka passt nicht zu/in (Burka/ full body veils doesn't/don't fit into/to) is a recurrent linguistic pattern in the above-mentioned discourse. As commonly assumed, constructions consist of *surface frames* (the concrete linguistic realization), constructs,

and *deep seated frames*, constructions, which relate to our overall understanding of the world (Lakoff & Wehling 2009: 73-87). Hence, particular n-grams can activate whole argumentative patterns, while being at the same time a mean of perspectivization (Spieß 2018: 161). Spieß refers to a similar work by Lasch (2015) who detected the construction [[X] [passt] [nicht] [zu/zur/in/zum] [X]] in the discourse on minarets. This similarity suggests the existence of discourse specific n-grams with certain deep-lying functions. Spieß concisely interprets the construction's function in the following way:

Im untersuchten Diskursbereich stellt diese Konstruktion eine umstrittene These dar, die durch Argumente in eine unstrittige These überführt werden muss, die also einen Schlussprozess indiziert, auch wenn dieser sprachlich nicht realisiert wird. Das Verb *passt nicht* evaluiert dabei das Subjekt des Satzes (*Burka*) negativ, denn im zweiten Schritt der Konstruktion werden positiv evaluierte Konzepte in Form beispielsweise von Präpositionalobjekten (*zu offener Gesellschaft, zur freien Gesellschaft, in unser Land, in unsere offene Demokratie, zu unserem weltoffenen Land, zu uns) dem Subjekt gegenüber gestellt und somit wird eine semantische Diskrepanz erzeugt, die zugleich die soziale Gruppe der Burka-Trägerinnen als nicht zu unserer Gesellschaft gehörend bzw. als außerhalb unserer Gesellschaft stehend positioniert. (Spieß: 2018: 184).* 

The analysis of n-grams may shed light on the underlying cognitive processes in discourse. Depending on the research foci, they can be a window to a collectively shared recurrent contextualization of the concept at hand. The construction grammar approach to trace the interplay between frames and n-grams is only exemplary. Metaphors, for instance, and their cognitive account, as advanced by Lakoff and Johnson (1980), allow for frame-based considerations and analyses (cf. Ziem 2008a). Nominal metaphors, for example, can surface, inter alia, in the predicational n-gram x is y, covering both source and target domain.

Since n-grams may crystallize in discourse at the intratextual and transtextual level of the DIMEAN model, they qualify as a central corpus analytic technique. Hence, they can be operationalized in different ways. The recurrent linguistic units may surface as morphemes, lexemes or complex combinations of both (Bubenhofer 2008: 409). Paradoxically, the concrete practical examination of frames through n-grams is based on a rather abstract, surface structure related frame definition. For instance, akin to the concept of "schematic units with more or less open slots" in construction grammar (cf. Behrens 2011: 375), the corpus query syntax of n-grams can be understood in terms of a slot/filler structure. Recurrent sequences can be semantically or grammatically specified by leaving particular slots of phrases unspecified (cf. Rayson 2015: 46.) or by investigating the n-grams textual context. The notion of frames does intersect with n-grams thus in a two-fold way: on the one hand, n-grams may point to frames in discourse through cognitive units as topoi or metaphors, while having, on the other hand, a structure which can be easily interpreted in a "framelike" manner and applied to a corpus query syntax.

#### 2.2.3 Frames and Collocations

In contrast to keywords and n-grams, collocations are suitable as objects of investigation in corpus-based (follow-up) analyses. Their potential for uncovering discourse is at least equally powerful as that of keywords and n-grams. Crucially, the latter is often confused with collocations. To disentangle matters it shall be noted that collocations are frequently recurring co-occurrences which can but must not occur next to each other (Baker 2010: 127; Xiao 2015: 106). Since n-grams are necessarily fixed sequences, a sentence like *The* office building was demolished yesterday may be described as containing five bigrams, while consisting only of two collocations (office building and to demolish a building) (cf. Sketch Engine). However, if occurring in adjacency, collocations can be also defined as a special kind of n-gram. Such collocations commonly materialize as terminological expressions (e.g. "heart attack"), proper names (e.g. "European Union") or verb/adjective phrases (e.g. "angry with"). These "neighborhood collocations" indicate an empirically measurable co-occurrence relation between words, while "coherence collocations" (words not occurring next to each other) indicate associative relations (Xiao 2015: 107). Coherence collocations refer to conceptually based relations and point to "the cohesion that results from the co-occurrence of lexical items that are in some way or other typically associated with one another, because they tend to occur in similar environments" (Halliday & Hasan 1976: 287). This applies, for instance, to the collocates tell and story. Although occurring in various positions (e.g. story to tell, let the story tell itself, that story does not tell anything) story and tell are conceptually tied and manifested in language (cf. Baker 2010: 24). Depending on the definition, different statistical methods, such as the mutual information score, t-test, z-score, and log-likelihood test<sup>20</sup>, can be carried out to determine significant collocations.

The examination of collocations has been frequently applied to corpus analytic linguistic discourse studies. In fact, collocations can be seen as one of the linguistic concepts "which have benefited the most from advances in corpus linguistics "(Krishnamurthy 2000: 33-34 qtd.in Xiao 2015: 106). Tracing collocations in corpora can be reinterpreted as the uncovering of entrenched language use. Their occurrence hints at particular ways of information packaging which evoke certain cognitive structures, and which are, in turn, shaped by these structures, respectively frames. The psychological impact of collocations can be well described by including the notion of priming. In quoting Hunston

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<sup>&</sup>lt;sup>20</sup> Cf. Baker 2010: 24f.; Xiao 2015: 108-112.

These two words have a very high mutual information score. Hunston suggests that the existence of the fixed phrase *illegal immigrant* could in some cases lead people to accept without question that movement from one country to another is wrong, and further to that, all immigration is wrong. And even when the word *immigrant* occurs on its own, without the collocate *llegal*, we may be primed to think of the word *illegal* due to all of the other cases in which we have heard the word. So even though we may not automatically assume that immigration is illegal, this priming effect may have an impact on our attitudes. (Hunston 2002: 19 qtd. in Baker 2010: 128).

This finding is in line with a cognitive approach to discourse linguistics. It reveals the reciprocal effects between language and certain mind sets in social groups. Similar studies have been carried out by looking, for instance, at the collocational phrases such as *working mother* (Stubbs 1996) or the base word *elderly* and its collocates (Mautner 2007).

As mentioned above, frames and collocations are associated with one another. When reading the existing literature on cognitive discourse studies, it is apparent that collocations serve as frame identifiers (cf. Klein 1999; Fraas 1996; Kalwa 2013; Scharloth et al. 2013). Collocations may specify and focus frames. Klein, for instance, demonstrated how the German term Lohnnebenkosten (incidental wage costs) underwent a semantic shift by providing a frame-based interpretation of collocational structures. The slot Veränderung (change) was frequently filled in discourse with the term Senkung (reduction/decrease) making it a default value. Klein linked this observation to a radial prototype<sup>21</sup> model in concluding that the slot category 'change' moved from the periphery to the center of the slot Lohnnebenkosten (Klein 1999: 170). Fraas, to name another example, also reported collocations, respectively "usuelle Wortverbindungen" (1996) to be strong indicators of frame-related knowledge. She applied the analysis of collocation to the German unification discourse prior and after 1989. Her study has shown that the concepts Identität (Identity) and Deutscher (German) contained a wider variety of fillers in the texts after 1989. Kalwa, on the other hand, described the concept Islam by examining the collocates which occur with words typically evoking the concept, such as Moslem or Muslim (Kalwa 2013: 58). Lastly, an example of a data-driven approach to frame identification is provided by Scharloth et at. (2013). In this work, frames are defined as collocational clusters which can be visualized as graphs consisting of nodes and edges. Importantly, they rely on the frame theory as introduced to the social sciences by Goffman (1974). Modelled as the "organization of experience" (Goffman 1974: 13), he aimed at defining frames as structures of experience which in turn structure expectations about

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<sup>&</sup>lt;sup>21</sup> Cf. Elenor H. Rosch's 'Prototype Theory': in *Natural Categories* (1973).

events<sup>22</sup>. Inspired by Kämper's notion of linguistic upheavals ("Sprachliche Umbrüche") (Scharloth et al. 2013: 356), they applied a corpus-driven method to determine linguistic and, in doing so, social or political upheavals.

Practically, in corpus research collocations and frames have been, similarly to n-grams, linked on an abstract level. Frames have been defined as recurrent discontinuous sequences, which consist of words in fixed positions and empty slots in other positions (Baker 2010: 114). For instance, the sequence the lany word of contains the fixed words, or put frame-analytically, filled slots, namely the and of. Baker reported that frequent collocates occurring in the middle are end, number, use, rest, etc. (ibid.). Sticking closely to the concept of "neighborhood collocations, such analyses may provide information about the semantics of particular constructions. However, as demonstrated above, collocations can be applied in various ways to frame identification and the description of concepts. Hidden (cognitive) aspects of discourse can be effectively uncovered through corpusdriven and corpus-based collocational analyses which do not necessarily need to apply the formal notion of frames cited above.

#### 2.3 Interim Conclusion (and Research Gap)

It is reasonable to contemplate a frame analysis as a starting point for a broader discourse analysis. In using frames as an analytical category, a discourse analysis inevitably segues into a cognitive discourse analysis. Embracing the principle of the inseparable ties between 'word' and 'world' knowledge, as examined, proclaimed, and followed in cognitive linguistics, a cognitive discourse analysis has to bear in mind that semantic meaning and language use are inextricably interwoven and reciprocally influential. In other words, discourse 'equips' a word with semantic potential, and this semantic potential, in turn, shapes an individual's or a group's perception. Frames can function as representational formats for this type of knowledge. Yet, frames can also trigger the activation of other frames and guide, so to speak, the interpretation of words, experiences, or situations. This dual nature of frames needs to be considered in discourse studies in order to, at least, approach a comprehensive analysis.

The previous chapters looked at frame theory as it emerged in linguistics and cognitive science and outlined its relation *to* and its operationalization *for* discourse analysis. In linguistics, the main anchor point for frames were verbs and their valence structure (cf. Fillmore 1968, 1977a, 1977b). In reinterpreting common 'surface cases' like the subject

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<sup>&</sup>lt;sup>22</sup> A concise overview of Goffman's frame model is provided by Tannen (1993: 150f.)

as the agentive, for instance, Fillmore provided a semantic account to syntax. These considerations, respectively the roles which can be ascribed by a verb, are also the guiding theoretical framework of the research network FrameNet.

In cognitive sciences, on the other hand, frames developed as an overall model of knowledge representation. The slot/filler structure introduced by Minsky (1975) was embedded into a dynamic, highly connective and socially changeable frame model. Furthermore, the notion of default values entails references to the process of entrenchment which allows to explain how linguistic concepts are created and shaped through use. Advancing the idea of structural frame elements, Barsalou (1992a) then extended frame constituents by adding more specific elements such as constraints and structural invariants. His model makes it thus possible to integrate culture and language in a particularly nuanced way into a cognitive account. Turning to the interplay between frame and discourse, it shall be noted that a considerable amount of literature suggests frames as a suitable approach to the examination of discourse. In doing so, one is hence far away from 'reinventing the wheel'. Since the detection of knowledge structures lies at the heart of discourse analysis (Foucault 1973), frames can provide a cognitive grounding to discourse processes and reveal subtle information (Busse 2018: 19) which is usually hardly to achieve. However, there is no standardized and unique way of operationalizing frames for discourse analytic purposes. Hence, in taking such a methodological decision one is prompted to select an option from a pool of options.

In has been shown that frames have been approached from a corpus-driven (Scharloth et al. 2013), a corpus-based (Fraas 1996) or a mixed angle (Kalwa 2013). Undoubtedly, both methods can come neatly intertwined in a cognitively based discourse analysis. The chapters 2.2.1-2.2.3 demonstrated how a) keywords, b) n-grams, and c) collocations can be operationalized for a frame-based analysis. Whilst keywords and n-grams can be viewed as classical openers in a corpus-driven study, collocations may be used as an analytical category for contextualizing the previously assessed findings in a corpus-based follow-up investigation. Crucially, in the process of corpus analytic frame identification frames are subjected to a formal and abstract reinterpretation. The application of slots and fillers to a corpus linguistic query syntax allows to confer frames to fixed phrases or frequent lexical combinations (Baker 2010; Xiao 2015). This, in turn, can be a powerful tool when it comes to the determination of a concept's or construction's semantic potential.

Speaking of semantic potentials, the outset of this paper picked several terms which

were linked to the European Union in Polish newspapers. Recent political developments in Poland have led to a proliferation of studies and articles dealing with Polish-EU relations (Buras 2018; Vetter 2017). The interdisciplinary shared consensus about the worsening of these relations leads to the question of whether a frame-based cognitive discourse analysis can contribute to this topic. In fact, no research has been found that surveyed this subject from this perspective. Hence, this allows to draw on the above-mentioned methods to examine the Polish EU-discourse.

Following the combination of a corpus-driven and corpus-based method, an analysis will be carried out examining keywords and n-grams first. This will prepare the ground for the hypotheses, respectively guiding questions which will be tested in a corpus-based follow-up analysis. Moreover, it will be explored to which degree Minsky's and Barsalou's considerations can enhance the analytic and interpretative sections. The corpus-based part will make use of collocations to assess the semantic contexts. Building the bridge to the founding father of frames in linguistics, Charles Fillmore, one research focus will be led on verb collocations which will be analyzed with the help of FrameNet. In this way, it will be examined if such a valency-based account allows to derive any analytical advantageous. Thus, this paper sets out to approach the conceptualization of "EU" through a quantitative and qualitative lens. The following chapter will begin by laying out the methodological dimensions of this research, and looks at the object of inquiry, the corpus and the analytical instruments used for exploiting it.

#### 3 METHODOLOGY

The potential changes within the Polish EU-discourse will be traced with the help of corpora. Corpus analysis was reported to be an appropriate tool for discourse and culture studies on numerous occasions (Bubenhofer 2008, 2009; Bubenhofer and Schröter 2012; Bubenhofer & Scharloth 2012; Felder 2012; Vogel 2012; Thunert 2010; Bopp 2010; Lasch 2014). Regardless of the research foci, corpora allow to shed light on analytical categories which used to be previously overlooked. Owing to the corpus-driven approach it is possible to generate hypotheses directly from the corpus, instead of testing hypotheses with predetermined analytical categories (Scharloth et al. 2013: 348). In this way, corpora may extend from being "Belegkästen oder Zettelsammlungen in elektronischer Form" to a unique corpus linguistic perspective (Perkuhn & Belica 2006: 2). The findings resulting from a data-driven analyses may then be further analyzed using corpus-based techniques.

The following chapter will first introduce the object of inquiry. The background information provided in this section can facilitate the subsequent overall interpretation. After-

wards, the corpus will be presented by looking at the tool Sketch Engine, the corpora building process and the size, respectively, the number of extracted articles and the number of tokens. Beginning with a corpus-driven analysis, this work follows this inductive paradigm. The steps associated with the driven method will be shortly introduced and explained. Finally, the corpus-based method will be introduced by outlining the analytical steps which allow a more fine-grained analysis of the hypotheses deduced from the corpus-driven part. The results will be presented along these two methodological paradigms.

## 3. 1 Object of Inquiry

Since the fall of communism, Polish-EU relations underwent broadly three distinct phases. Gromadzki notes that Poland's stance towards the European Union moved from a generally pro-integrational determination in the 1990s to an integrational stagnation in the post-accession period and culminated in integrational regress since the PiS-party came to power in 2015 (Gromadzki 2018: 2-3). In strive for modernization, post-communist Poland regarded the European Union as a great promise. Stability, security, prosperity were the key terms which shaped the Eu-discourse at that time (Buras 2018). However, after Poland joined the European Union in 2004, EU's popularity is said to have decreased among the Polish population and politicians. Buras claims that the Polish idea of a strong EU weakened in times of multiple crises (es the European debt crisis, for instance) while clashing meanwhile with a strengthened Polish self-confidence and patriotic aspirations (Buras 2018). Furthermore, the EU as a "community of values" became more and more scrutinized. As put by Buras, the more the Polish confidence and success has grown, the more the ostensible or factual values shared by the EU -such as secularization, multiculturalism, and dog-eat-dog capitalism- became perceived as a threat to the national narrative (ibid.). Hence, the right-wing, populist-nationalist politics as forwarded by the PiSparty fell on fertile soil in the 2015 election<sup>23</sup>.

However, despite ongoing gradual changes in the pre-election time, the PiS's electoral victory is considered to be a turning point in terms of Poland's EU-related politics. The PiS-party pursued several political strategies which have called the attention of the European Union. Domestically, reforms to take control of state media and the politization and lowering of recruitment standards of the Polish civil service, for instance, were

<sup>&</sup>lt;sup>23</sup> This observation has significant interdisciplinary implications and should be approached from various angles. Note that this thesis cannot provide an extensive and exhaustive reflection on the Polish-EU relations, its changes and scientific explanations.

early indications of democratic backsliding in Poland. Regarding EU/foreign policy, Poland made headlines after opposing the binding decision of the distribution of migrants according to quotas in 2015, justifying it with the notion of internal security or by stressing economic and cultural differences (Maldini & Takahashi 2017: 63). Still, the action which caused the greatest flurry of debates, and, crucially, the triggering of Art. 7 TEU, was the legislative offensive against the Constitutional Tribunal as well as the assault on the independence of judiciary (Matczak 2018: 2-5). Consequently, the decisions which have been implemented under the PiS-party since 2015 raised questions about Poland's record as a firm liberal democracy (Rohac 2016). Unsurprisingly, those legislative changes have been discussed thoroughly in Polish as well as in international media. The intention that lies at the heart of this thesis is to sketch out how the term 'European Union' was discussed in Polish magazines before and after the election in 2015. The main goal is to determine if and how the change of government influenced the concept of the European Union by using linguistic means. Following a cognitive approach, it is assumed that changes in one of peripheral systems, such as culture, politics, language, or perception, for instance, influence the other systems, as well (cf. Panter & Radden 2011: 4). Cognition is thus understood as a two-directional way and measurable linguistic changes might thus provide context for the overall understanding of a cultural or political phenomenon. To add some data to this seemingly intuitive choice of this research subject, consider the recently evolved blend 'Polexit'. Without placing to much weight on the results provided by Google Trends, the following graph suggests clear-cut interpretations:

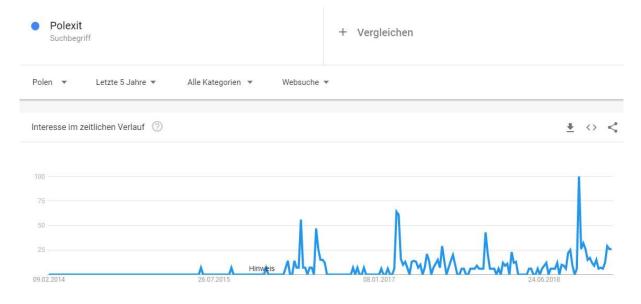


Figure 4: Google Trend for 'Polexit' within the last 5 years.

Although the term 'Polexit' does only refer indirectly to the concept of the European Union, its date of emergence (shortly after the election in 2015) is striking and its discursive context worth considering. In order to zoom into such findings, a more concrete analysis is in demand. The combination of corpus-driven and corpus-based research allows, in turn, for combining quantitatively deduced hypotheses with a qualitative review (cf. Bubenhofer 2008: 407). The following chapters will present the corpus, introduce the corpus analytic instruments and hopefully permit to literally *zoom* into the Polish EU discourse and to sketch the concept 'European Union' in Polish media diachronically.

## 3.2 The Corpus

In order to meet the aforementioned aims the corpus analysis was carried out using Sketch Engine. Sketch Engine is a web-based corpus query tool which enables to access and explore a large number of general reference web corpora. More than 90 languages are covered in Sketch Engine (Sketch Engine 2018) and users may build own web corpora by providing either seed words, a list of URLs or by downloading complete websites. An analytically powerful key feature of Sketch Engine is the *Word Sketch*. It allows to view a word's grammatical and collocational behavior on an automatically derived one-page overview.

In this thesis, the corpus was derived from two Polish magazines: *Wprost* and *Polityka*. Both are weekly magazines with a relatively high proportion of political articles (Dupuis 2012: 132; Filas & Planeta 2004: 534f.). However, they differ in terms of their political orientation. *Polityka*, founded in 1957, can be located at the center-left spectrum (Lichtenstein 2014: 148) and is highly respected for a high-quality and independent journalism (Dobek-Ostrowska 2012: 38f.; Dupuis 2012: 132). *Wprost*, founded in 1982, is said to follow a right-wing conservative line (Dupuis 2012: 132) and to consist mainly of opinion pieces (Lichtenstein 2014: 148). However, both have a freely accessible online archive which facilitated the process of corpus building.

Since the aim of this thesis is to compare the linguistic contexts of the concept 'EU' diachronically, four corpora have been built, each covering a period of 12 months: May 2013- April 2014; May 2014-April 2015; May 2015- April 2016, and May 2016- April 2017. The relevant articles were retrieved by searching articles containing either 'Unia Europejska' (engl. European Union) or its shortening 'UE' in the headline. The URLs which met this criterion were copied into the Sketch Engine corpora building tool and compiled into an annotated corpus. Hence, the corpora entail articles in which "UE" or "Unia Europe-

jska" occurred at least once being congruent with the definition of "discourse corpora" (Kalwa 2013: 50, cf. Gardt 2007: 30). In order to ensure that none of these URLs has been copied twice, each corpus was recompiled using expert settings such as "remove duplicated content". The following table presents the four corpora with regard to their number of articles and their number of tokens:

Period	Number of Articles	Number of Tokens
2013-2014	1,163	765,514
2014-2015	1,134	710,294
2015-2016	802	715,206
2016-2017	864	789,960
Total:	3,963	2,971,974

Table 1: Corpora: Number of Articles and Number of Tokens

As the table indicates, the number of articles containing "UE" or "Unia Europejska" in the headline declined by roughly 30% after the 2015 election. Crucially, this does not apply to the number of tokens. The following table illustrates the ratio between the number of articles and the number of tokens:

Period	Mean Number of Tokens per
	Article
2013-2014	658.223
2014-2015	626.361
2015-2016	891.778
2016-2017	914.305

Table 2: Mean Number of Tokens per Article.

Surprisingly, the mean number of tokens increased by ca. 38% between the periods 2013-2014 and 2016-2017. It follows that the magazines published fewer, but longer articles with headlines containing one of the above-mentioned search items. Although this circumstance invites several interpretations, the applied corpus exploitation techniques provide deeper insights to the above illustrations.

## 3.3 Corpus Exploitation Techniques

As indicated above, this thesis is based on the combination of corpus-driven and corpus-based research. Regarding the concrete procedure, a corpus-driven beginning is stated to be indispensable, since it allows to uncover structures which usually take covertly effect in discourse (Bubenhofer 2009: 102). Furthermore, making the corpus-driven analysis the first step in research, it is possible to dispute or refute widely accepted assumptions or even to extrapolate hitherto unnoticed linguistic information. Or, as put by Tognini-Bonelli: "recurrent patterns and frequency distribution are expected to form the basic evidence for linguistic categories; the absence of a pattern is considered potentially meaningful" (2001: 84). Following this inductive principle, a corpus-driven approach is not an instrument for backing pre-exiting theories.

Practically, a corpus-driven beginning is habitually realized by generating word lists from the corpus (Anthony 2005: 732, qtd.in Kalwa 2013: 60). This is usually considered a prerequisite for key word extractions when using tools such as AntConc<sup>24</sup>. However, working with Sketch Engine keywords can be easily determined according to their keyness by using a reference corpus. The dashboard entails the option "keywords" and advanced options which may specify the analysis by choosing other reference corpora or determining the minimum frequency, for instance. However, due to practical constraints, this thesis cannot provide a comprehensive analysis of keyword extractions contrasted with various reference corpora. Yet, the reader shall bear in mind that other reference corpora could probably, to some degree, affect the keyword lists obtained which, in turn, would require different follow-up analyses and interpretations<sup>25</sup>. Instead, to ensure con-

<sup>&</sup>lt;sup>24</sup> AntConc is a freeware corpus analysis toolkit including, inter alia, a concordancer, a word frequency generator and tools for cluster analyses.

<sup>&</sup>lt;sup>25</sup> The choice and impact of reference corpora is a contentious topic in corpus research, though not extensively studied (Scott 2009; Goh 2011). In general, there are two main tendencies of building reference corpora: "Typical approaches to corpus comparison compare research data with either (i) a much larger reference corpus that represents some kind of norm of the language in general or (ii) a similar sized, similarly constructed corpus" (Jeffries & Walker 2018: 24). In addition, the role of thematic aspects in reference corpora are judged differently. Whilst Kalwa (2013: 53) states that thematic differences between the focus and the reference corpus allow more specific conclusions about the topic at hand, Issel-Dombert and Wieders-Lohéac write that thematic closeness between both corpora serves a comparative goal ([...] pour notre analyse, nous avons choisi un corpus préexistant sur Sketch Engine [...] Ce corpus se prête parfaitement à notre analyse, car il nous permet de comparer deux textes du même univers discursif [...]" (Issel-Dombert & Wieders-Lohéac 2016: 127). However, it remains an open question whether the 'univers discursif' can be best approached through the comparison of thematically similar or thematically different corpora. Hence, if pursuing a high degree of cognitive plausibility, a methodological combination of both could provide promising results. The same can be applied to the choice of reference corpus when working with multiple data sets. Multiple data sets allow to compare the corpora against each other. Yet, although this approach may shed light on subtle differences, it "will overlook what the data sets have in common, 'hiding' shared discourse" (Jaworska & Kinloch 2018: 115). Further on, Jaworska and Kinloch state that comparing data sets against each other "would limit the perspectives on how discourses travel across contexts making it impossible to explore re-

sistency, the keywords extracted for each corpus were calculated in reference to the "Polish Web 2012" corpus. Picked automatically by Sketch Engine and consisting of more than 9,000,000 tokens, this corpus may provide "some kind of norm of the language in general" (Jeffries & Walker 2018: 24, cf. footnote 29). Finally, the differences or striking similarities between the four corpora allowed to generate guiding questions.

The second corpus-driven step was the detection of frequent n-grams in each corpus. Sketch Engine allows to choose an n-gram length between two and six words. Additionally, the basic setting offers the option to include nonwords and to treat capitals and lowercase letters the same. Since nonwords exclude further semantic considerations, they were expelled from the n-gram extraction, whilst capitals and lowercase letters were treated the same. Following Kalwa (2013: 76), the n-gram length was set to four. Moreover, it is possible to further adjust the settings ('Advanced') for the extraction. For instance, words can be explicitly excluded or predefined according to criteria such as "starting with letters" or "containing letters". This function is important when it comes to the elimination of noise in the corpus.

The third analytical step pursues a twofold aim. On the one hand, the focus is on verb collocates of the term "EU". This is easily accomplished by using the word sketch (cf. chapter 3.2). On the other hand, the collocational analysis seeks to contextualize the previous corpus-driven findings in more detail. Whilst the analysis of verb collocations draws on the concept of 'coherence collocations' (cf. 2.2.3), the further examination of keywords and n-grams makes predominantly use of the neighborhood principle. Importantly, this implies the search of frequency collocations. For doing so, Sketch Engine provides a complex query language (CQL) helping to analyze a phrase's or construction's linguistic environment ('Kotext'). CQL allows to include also empty slots in more or less fixed sequences. Written in square brackets, the query syntax can include, inter alia, lemmas, words, tags, coordination ('&'), repetition ('{}') or distance, respectively empty slots ([]). The concrete query syntax used for the analysis will be presented in the corpusbased section.

contextualiz

contextualizations and intertextuality. Using one reference corpus as a benchmark can therefore be more insightful for research based on multiple data sets in that it allows the researcher to reveal keywords that are both unique and also shared across data sets. Unique keywords highlight the contextual specificity, while shared keywords can be useful pointers to discursive recontextualizations and intertextuality" (Jaworska & Kinloch 2018: 115). In view of all that has been mentioned in this footnote, the reference corpus used in this thesis can be defined as a) "larger reference corpus" [Jeffries & Walker 2018: 24) consisting of b) a thematically different content (Kalwa 2013: 53) used as c) a single, comparative figure (Jaworska & Kinloch 2018:115).

## 4 CORPUS-DRIVEN ANALYSIS

After having introduced the object of inquiry as well as the corpus and the corpus exploitation techniques, the following section will present the results which have been gained from the corpus-driven analysis. The results will be subsequently interpreted and summed up. Finally, the core observations will be transformed into testable hypotheses building the bridge to a corpus-based follow-up analysis.

# 4.1 Keywords

For reasons of clarity, the results and their interpretation are separated into two chapters. The results are illustrated with the help of tables and comments are reduced to bare essentials. In the interpretation section, the findings will be subjected to a more fine-grained classification and discussed from an interdisciplinary angle.

#### 4.1.1 Results

As mentioned in 3.3, a corpus-driven analysis shall begin by extracting keyword lists. In using Sketch Engine, keywords can be easily determined according to their keyness, since the most frequent words are calculated in relation to their occurrence in a reference corpus<sup>26</sup>. The reference corpus used here is entitled "Polish Web 2012" consisting of 9,387,142,186 tokens distributed over 22,089,423 documents. Overall, four key word lists have been extracted. The following tables depict the first twenty keywords and their absolute frequency in each corpus.

Ranking	Absolute Frequency	Word
1	2,370	Polska
2	1,615	Ukraina
3	1,282	Europa
4	1,172	Rosja
5	1,112	UE
6	974	Unia
7	686	Europejski

<sup>&</sup>lt;sup>26</sup> As put by Jaworska and Kinloch in quoting the co-author of Sketch Engine, Adam Kilgarriff: "Sketch Engine provides a keyword score based on a normalised frequency ratio 'word W is N times as frequent in corpus X versus corpus Y' with a simple math parameter added to account for the zero problem in divisions. (Kilgarriff 2005)" (Jaworska and Kinloch 2018: 115).

8	600	Tusk
9	576	Polak
10	533	PiS
11	490	Na
12	390	USA
13	351	Niemcy
14	330	Kaczyński
15	326	Putin
16	308	Bruksela
17	307	Kijów
18	293	Janukowycz
19	292	РО
20	283	То

Table 3: Keyword Ranking 2013-2014.

Ranking	Absolute Frequency	Word
1	2,355	Polska
2	1,483	Rosja
3	1,156	Europa
4	1,145	Ukraina
5	1,033	UE
6	962	Tusk
7	898	Europejski
8	862	Unia
9	582	Polak
10	534	Putin
11	436	PiS
12	397	Na
13	369	Donald
14	359	Bruksela
15	353	Niemcy
16	314	Francja
17	308	USA
18	300	PO

19	296	Brytania
20	279	Wielki

Table 4:Keyword Ranking 2014-2015.

Ranking	Absolute Frequency	Word
1	2,475	Polska
2	1,355	Europa
3	1,194	PiS
4	767	Unia
5	641	Europejski
6	588	Niemcy
7	587	Polak
8	544	Rosja
9	520	UE
10	440	Kaczyński
11	424	Grecja
12	407	Na
13	378	Francja
14	314	Niemiec
15	314	Bruksela
16	298	Ukraina
17	246	II
18	241	РО
19	241	Brytania
20	236	Turcja

Table 5: Keyword Ranking 2015-2016.

Ranking	Absolute Frequency	Word
1	2,427	Polska
2	1,605	Europa
3	1,108	PiS
4	958	Unia
5	795	UE
6	788	Europejski

684	Polak
602	Tusk
595	Kaczyński
554	Niemcy
550	Brytania
505	Francja
481	Rosja
427	Na
421	Wielki
366	USA
343	Donald
334	Niemiec
326	Bruksela
309	Jarosław
	602 595 554 550 505 481 427 421 366 343 334 326

Table 6:Keyword Ranking 2016-2017.

For reasons of clarity and comparability, the following table contains all keyword lists.

Ranking	Keywords 2013-2014	Keywords 2014-2015	Keywords 2015-2016	Keywords 2016-2017
1	Polska	Polska	Polska	Polska
2	Ukraina	Rosja	Europa	Europa
3	Europa	Europa	PiS	PiS
4	Rosja	Ukraina	Unia	Unia
5	UE	UE	Europejski	UE
6	Unia	Tusk	Niemcy	Europejski
7	Europejski	Europejski	Polak	Polak
8	Tusk	Unia	Rosja	Tusk
9	Polak	Polak	UE	Kaczyński
10	PiS	Putin	Kaczyński	Niemcy
11	Na	PiS	Grecja	Brytania
12	USA	Na	Na	Francja
13	Niemcy	Donald	Francja	Rosja
14	Kaczyński	Bruksela	Niemiec	Na
15	Putin	Niemcy	Bruksela	Wielki
16	Bruksela	Francja	Ukraina	USA

17	Kijów	USA	II	Donald
18	Janukowycz	PO	РО	Niemiec
19	PO	Brytania	Brytania	Bruksela
20	То	Wielki	Turcja	Jarosław

Table 7: Keyword Ranking 2013-2017.

Importantly, each keyword list previously included the term "prenumerata". After looking in more detail at the cotexts, this notion was found to be acting as noise and was, therefore, manually eliminated. The remaining keywords, however, can be classified as representatives of an EU discourse corpus. In the following subchapter the listed keywords will be contextualized and interpreted.

# 4.1.2 Description and Interpretation: Keywords

Keywords serve as an access point to discourse studies. In order to exploit their vast potential in diachronic discourse, it is imperative to look closely at both stasis and dynamics. The questions that need to be tackled are thus the following: "What remained as it was?", "What emerged?", "What reemerged?", "What changed in terms of 'ranking'?", and "What vanished?". The approach chosen in this thesis (cf. footnote 29) allows to trace the Polish EU discourse as it "travel[s] across contexts" (Jaworska & Kinloch 2018:115). To further reiterate from previous chapters, it is necessary to focus, on the one hand, on what is unique, and, on the other, on what is shared (ibid.). At first glance, the four keyword lists suggest a noticeable congruity. Given this, admittedly intuitive, observation, it was decided to begin by looking at the commonalities since this, in turn, allows to move systematically from general to more specific contexts. Reflecting the shared content, the questions "What remained as it was?" and "What changed in term of 'ranking'?" will be the first ones envisaged.

From the data in table 7, it is apparent that there are eleven keywords which occur across all four periods. These are: *Polska* ("Poland"), *Europa* ("Europe"), *Rosja* ("Russia"), *UE* ("UE"), *Unia* ("Union"), *Europejski* ("European"), *Polak* ("Pole"), *PiS* ("PiS"), *Na* ("in"/"on"), *Niemcy* ("Germany"), *Bruksela* ("Brussels"). Words such a UE, Europa, Unia, and Europejski can be classified as typical representatives of an EU discourse corpus. References to national and international concepts, such as Polak, Polska or Russia and Germany can be also viewed as elements of a [European Union] frame, since EU related discourse is likely to meander within the trichotomy of nationality, the European level, and the non-European level. Crucially, the most striking observation to emerge from this data comparison is the occurrence of the preposition *na*. This seems

unusual since keyword lists normally consist of lexical words. Grammatical words, in turn, are assumed to be evenly distributed in general language and not bound to a particular discourse (cf. Kalwa 2013: 66). To trace the function and meaning of *na* in the Polish EU discourse requires a deeper analysis. It can be suspected that a construction grammar approach (cf. Spieß 2018; Lasch 2014, 2015) could shed light on this distinctive feature. Thus, *na* allows to merge the corpus-driven and corpus-based approach.

Apart from looking at the sheer commonalities, it is also worth to examine a word's behavior in terms of ranking. Some concepts occur constantly in the upper quarter (*Polska* and *Europa*), whilst others have a tendency to appear in the lower third or lower quarter (*Bruksela* and *na*.) However, despite several constants, most concepts underwent a change of rank. Some of these changes are more prominent than others and the overall development can be best visualized in the following graph:

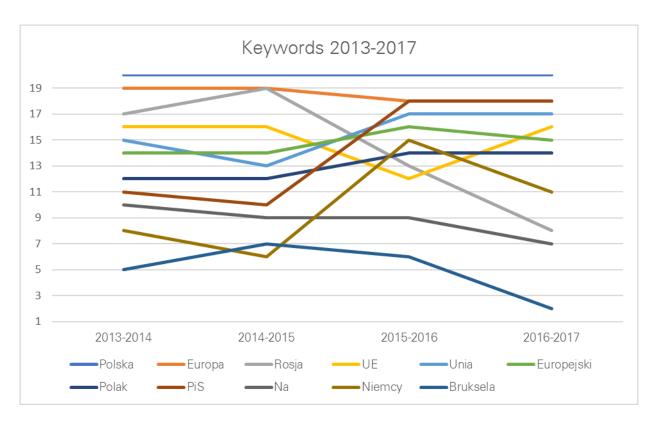


Figure 5: Development of Shared Keywords Across all Corpora

Overall, it can be stated that those words which are shared across the four corpora tend to appear in the upper half of the keyword lists. This allows the assumption that these words function as primary shapers of discourse. Put frame analytically, the recurrent keywords act as more or less fixed frame elements which provide a superordinate framework for the general EU discourse in this period. However, again, it should be recalled that language and culture mutually influence each other. One can thus suspect that

the above illustration partially reflects what was thought, felt, and wanted (cf. Hermanns 1995) at this particular time. In addition, mentality, as far as it materializes in linguistic patterns or phenomenon, is not independent of concrete events. In order to put the findings into a more qualitative context, it can be useful to recapitulate which words underwent minor changes, strong changes or no changes at all in the given time:

No Change	Minor Change	Major Change
Polska	Polak	Rosja
	Na	PiS
	Bruksela	Niemcy
	Europa	
	Unia	
	Europejski	
	UE	

Table 8: Shared Keywords and their Degree of Change.

As this table suggests, self-reference is the most stable element in the corpus at hand. This insinuates, unsurprisingly, that the EU is mainly discussed in relation to Poland. Taking the risk of overinterpretation, respectively overgeneration (cf. Spitzmüller & Warnke 2008: 3-6, chapter 2.2), the concept *Polska* and its occurrence can point to, for instance, national aspirations or, indirectly, also to the dichotomy of supranationalism and intergovernmentalism which is a strong and typical figure in EU related discourse (cf. Matonytė & Morkevičius 2012: 109). However, in order to obtain an impression of its semantics, *Polska* would also require a more detailed corpus-based analysis.

Yet, looking at the minor changes, it can be hypothesized that they also affect *Polska's* semantic potential. Given the highly relational character of frames (cf. chapter 2.1.2 and 2.1.3), context can never be overestimated. Interestingly, those concepts which underwent a minor change can be further subdivided into those which moved back and forth, and those which continuously either elevated or decreased with respect to their ranking. Concretely, the preposition *na* and the concept *Europa* underwent a one-directional decline, whilst the word *Polak* constantly gained in ranking. In connection to the steady occurrence of *Polska* one can suppose a stronger semantic fixation of national concepts in the Polish EU discourse. In connection to *Europa's* decline, a specific interpretative schema surfaces tempting to suspect that *Polak* increased at *Europa's* expense. In light of this interpretation, quantificational and evaluative conclusions can be easily confused. Taking into account that "bad is down" and "good is up" (Lakoff & Johnson 1980:

15-16), one is likely to assume that *Europa* was usually embedded into negative contexts. However, statements regarding the evaluative contexts require a deeper analysis.

The remaining words were not subjected to a similarly steady development. Interestingly, Bruksela which often functions as a pars pro toto for the EU increased slightly in ranking between 2013 and 2015 and decreased afterwards. This allows, inter alia, the presumption that the concept's role as a pars pro toto might have diminished after the election, or that *Brussel* became a default value, or "cognitive routine" (Langacker 1987: 59) which does not require any further explication. A similar post-election development underwent the term UE. However, its decrease was followed by an increase after 2015/2016. Bearing in mind that the corpus building process was guided by the occurrence of UE in the headlines, it can be concluded that the article's content was subjected to a slight thematic change after the election. Although EU relevant, the data suggests that the main foci shifted from EU core concepts (such as Bruksela or simply UE) to national topics materializing in terms such as Polak. Nevertheless, this scenario should be also studied further, especially when compared to the development of Unia and Europejski. In contrast to UE and Bruksela, these two terms experienced a slight increase after the election, moving, more or less, in parallel. This parallel movement may point to the occurrence of the noun phrase Unia Europejska. It must be noted that the keywords displayed in sketch engine are presented as lemmata. This explains a potential mismatch in gender when combining *Unia* and *Europejski*. The fact that *Unia* occurred more frequently than Europejski allows to assume that Unia was used as a short form for the same referent (Unia Europejska). However, its slight rise after the election can point to a specific semantic potential since similar (and even shorter) eurolects such as UE decreased in the post-election period. To obtain certainty in this matter it would be necessary to look at Unia's cotext. In addition, it should be excluded that Unia points to other concepts, respectively other 'unions' than the EU. Europejski, in turn, is a "highly productive EUrelated adjective" (Biel 2018: 301) occurring in numerous Polish EU-related concepts. Still, it is again mandatory to examine for which contexts the adjective's potential was exploited. Biel reported that in her corpus europejski occurred mainly in noun phrases such as parlament europejski' (European Parliament), europejski nakaz aresztowania (European arrest warrant), or normy europejskie (European standards) (Biel 2018: 301). The frequent occurrence of Europejski in noun phrases can be also attested for the present corpus. However, it remains unclear whether its rise was paralleled by certain semantic fixations allowing for a deeper cultural analysis. This would require a broader textual analysis.

Finally, by looking at the concepts Rosja, PiS, and Niemcy one enters the field of major changes. Having in mind Langacker's notion of entrenchment, it can be assumed that strong changes, as found in the herein presented corpus, can be perceived as a threat to cognitive routines. Disentangling the findings, it should be noted that while PiS and Niemcy demonstrate a rise after 2014-2015, Rosja constantly decreased at that time. Whilst PiS increase after the party's electoral victory is hardly surprising, the other concept's development gives rise to questions. Interestingly, it can be observed that PiS and Niemcy moved in parallel. It is questionable if this analogical movement mirrors word association or maybe, if at all, a broader textual association. In any case, both manifestations could have an impact on one's mental semantic knowledge. To trace the interplay between these two words requires more textual context and, for instance, a collocation analysis. Nevertheless, regarding the past years and the media coverage of German-Polish topics it can be assumed that PiS and Niemcy were often conflated. For example, the revived demands for German war reparation payments by Polish PiS officials (Grochal 2017; Wieliński 2017), the "Polish death camp controversy" 27, and the refugee 'crisis' and its political and legal consequences led to the frequent association of PiS, Niemcy and the European Union (cf. Krzyżak 2017). Admittedly, the events just mentioned are seemingly selective, yet, they serve an illustrative purpose which is in accordance with interdisciplinary findings. Reiterating from previous chapters, there is a broad consensus on the worsened relationship between Poland and Germany and Poland and the EU since 2015 (Buras 2017, 2018, Chromiec 2017: 2). However, although the graphical parallelism can be traced back to actual political events, it remains unclear if any or which evaluations or perspectivizations have been undertaken. To determine the whole constructionist potential of language, the above-mentioned finding would need to be approached in more detail to allow assertions about its 'framing' (cf. Entman 1993; chapter 2.2). Be that as it may, if the keywords PiS and Niemcy share a similar development in the same textual contexts, a cognitive follow-up analysis would provide more profound information about the conceptual interrelation.

The third strong change which was detected is the decrease of Rosja since 2014-

<sup>&</sup>lt;sup>27</sup> In March 2018, the Polish PiS-government passed a bill (also known as the 'Holocaust Law') which allows to punish the use of the phrase "Polish death camps" under criminal law. The debate about the bill reached an intercultural peak in the media when a Polish holocaust survivor sued the German broadcaster ZDF over this legally forbidden phrase. The German Federal Court of Justice decided that this legal action would breach the European *ordre public*.

2015. Its rank and increase since 2013-2014 can be explained with its highly charged role in the discourse on the annexation of Crimea. Yet, its decrease after 2015 leaves room for speculations. Polish-Russian relations have a long turbulent history and its reflection would be decidedly outside the scope. However, it shall be noted that Poles have traditionally a rather negative stance towards Russia and its politics (Wenerski & Kacewicz 2017: 18). The annexation of Crimea by Russia as well as Russia's policy in Syria reinforced Polish critique and Russia's conceptualization as an aggressor (ibid.). Essentially, the critique of Russia in Poland has also a party-specific touch. Due to the Smolensk tragedy in 2010, Polish views of Russia have been confirmed (Wenerski & Kacewicz 2017: 9) and intensified by PiS officials. In this light, Rosja's decrease after 2015 appears even more unusual. One could assume that PiS officials would have made use of their political position in order to enhance anti-Russian statements. The fact that Rosia decreased as a keyword can be, inter alia, explained with the emergence of other EU relevant subdiscourses. For instance, the observation that Niemcy increased in contrast to Rosja in the corpus suggests that the refugee 'crisis' and Germany's role constitute another discourse which has been superimposed on the discourse on Crimea. Hence, given this striking contrast between Russia and Germany it can be supposed that the international focus in the Polish EU discourse shifted thematically from Russia to Germany. A further investigation could reveal if the shift had any impact on the (selective or evaluative) framing of the European Union.

The remaining keywords can shape the just mentioned results in more detail and shed light on possible discursive shifts. Some of them vanished, others emerged, some reemerged and some (re)emerged and vanished again in the overview (Table 7). For the sake of clarity, their classification can be best summarized visually in the following list:

Vanished Keywords	New Keywords	Inconsistent	
Ukraina	Francja	Tusk	
Putin	Brytania	USA	
Kijów		Donald	
Janukowycz		Kaczyński	
PO		Wielki	
То		Turcja	
		Grecja	
		II	

Table 9: Keyword Classification.

Crucially, most keywords that vanished can be subsumed under the discourse on Crimea. Typical representatives of this topic are *Ukraina* ("Ukraine"), *Kijów* ("Kiev"), *Putin*, and *Janukowycz* ("Yanukovych"). Their evaporation in the corpus is in accordance with the above stated hypothesis assuming a shift in the Polish EU discourse. Interestingly, *Putin's* disappearance contrasts with the constant occurrence of the keyword *Rosja*. Given this difference, it can be assumed that the media coverage moved towards a depersonalized language regarding Russia. It remains to be further investigated in which way this finding may have perceptual effects.

Regarding the development of PO (short form for Platforma Obywatelska, Civic Platform) an unambiguous interpretation suggests itself. Being known as the main political opponent of the ruling PiS, the fading of PO in the corpus leads to the assumption that the Polish EU discourse became biased excluding a broader political spectrum. Noteworthy, the PiS party's extreme national-conservative political agenda and its prospering influence after 2015 are in line with previous findings (cf. the rise of Polak). In cognitive terms, this observation can be paraphrased as the decline of the concrete filler PO in the Polish EU frame. This can lead to a filler's replacement and to a frame-semantic shift. Frame-semantically, however, the decrease of a keyword or its disappearance from the keyword list does not necessarily mean that a filler is fully eliminated from the frame<sup>28</sup>. This would also contradict non-reductionist and highly inter-relational frame models (cf. 2.1.3). Instead, it should be also taken into consideration that a constant decline of an explicated filler can point to its transformation into a new default value. Returning to the case of PO, its interpretation as a new default should be envisaged for the sake of completeness and accuracy. Anticipating the following paragraphs and reiterating from the keyword list (see Table 7) at the same time, it can be hypothesized that PO's possible transformation into default could be related to the keyword Tusk. Referring to Donald Tusk, the former Polish Prime Minister, co-founder of the Civic Platform and the current President of the European Council, it can be assumed that his party affiliation (PO) is an element which comes to mind first, at least in the Polish discourse. Following the cognitive paradigm, one could thus say that a formerly explicated filler was mapped as a default to another frame. However, the question whether the PO became gradually either a less important aspect in the Polish EU discourse or part of implicit knowledge requires a deeper contextual analysis.

<sup>&</sup>lt;sup>28</sup> Note that according to Minsky (and Barsalou), each filler does represent a frame itself (cf. p. 14, chapter 2.2.2). A keyword is thus both a filler in a frame and a system with its own slots and nodes.

The last keyword which vanished is *To* and serves several (grammatical) purposes. As a demonstrative pronoun it can also function as subject and copula (*Czas to pieniądz*, engl: time is money) in a sentence. Moreover, *To* occurs as a particle as in "a to pech" ("What bad luck?") or "no to co?" ("So what?") and as a conjunction as in "jeśli chcesz, to przyjdź" ("if you want, then come"). Regarding the latter function, it is worth noting that *To* is used as the introductory element of an apodosis in conditional sentences. In terms of logic, *To* does thus link discourse segments which take the form of an antecedent and consequent. The fact that to decreased after 2013-2014 can implicate that this type of conditional construction decreased as well<sup>29</sup>. However, it is mandatory to determine if other uses of *To* declined in a similar way. Regarding the preposition *na*, it can be said that *To*'s appearance in a keyword list is equally surprising. Again, a more profound examination could reveal deep lying interrelations and allow to uncover practices in discourse which remain usually uncovered.

Now, before turning to the words that emerged as new prominent keywords in the overview, it might be useful to make a comment about the herein assumed definition of 'emergence'. Briefly, emerged keywords are those which popped up in the overview and recurred in the following periods. This contrasts with those keywords that exhibited a back-and-forth development.

The list with new keywords makes up a relatively small number of words. Solely Francja ("France") and Brytania ("Britain") showed up as new concepts in the period 2014-2015. Their sudden and lasting appearance can be traced back to cultural and political events. Intuitively, the occurrence of Francja in the period between 2014-2015 can be linked to the Charlie Hebdo Shooting<sup>30</sup>, the Paris Attacks and the actions and discourses resulting thereof. At least due to the Riga Statement<sup>31</sup> that was issued by the European Council three weeks after the attacks on Charlie Hebdo, the debate became embedded into an EU discourse. It can be assumed that Polish media took up also other subdiscourses which evolved from the above cited events and which have been often conflated with France. This includes, inter alia, the discourse on Islam, radicalization, and se-

<sup>&</sup>lt;sup>29</sup> It must be remarked that the study of conditional sentences is a broad field and heavily debated topic at least since the Stoics (cf. Sanford 1989). Thus, although the focus on *to*-conditionals in the Polish EU discourse might provide relevant cognitive information, its discussion would go beyond the scope of this thesis.

<sup>30</sup> The role of the Charlie Hebdo Shooting on media attention and its global circulation has been intensely discussed by Sumiala et al. (2018).

<sup>&</sup>lt;sup>31</sup> In the Riga Statement the European Council affirmed "that terrorism and radicalization are amongst the principle threats of the EU's internal security and that counter-terrorism efforts need to be reinforced at both national and Union level" (Greer at al. 2018: 42).

curity<sup>32</sup>. Consequently, the emergence of *Francja* in the keyword list has both concrete political and discursive correlates.

Unlike *Francja, Brytania's* emergence takes more effort to be traced back to a concrete event. One is tempted to link its emergence to the Brexit in 2016, however, *Brytania* popped up in the list already in 2014-2015. Still, the debate on the referendum was intruded into public consciousness in December 2015 the latest. At this time, the European Union Referendum Act was approved by the House of Commons legislating for a referendum to be held in the UK on whether to remain in the European Union or not. This act and the subsequent and ongoing debates about Britain's EU membership can give an explanation to the concept's behavior in the herein examined corpus. In sum, it can be tentatively assumed that the emergence of both keywords and their possible contexts added a negative connotation to the concept of the European Union in the Polish discourse. The above-mentioned events could have demonstrated the EU's fragility and its vulnerability to crises which is likely to have had an impact on the overall perception of the EU.

Last but not least, it will be looked at those keywords which can be neither classified as vanished nor emerged. This group includes eight keywords, namely Tusk, USA, Donald, Kaczynski, Wielki (Great), Turcja (Turkey), Grecja (Greece), and the roman number II. Jaroslaw was added to this class because its sudden occurrence in 2016-2017 does hardly allow to assume a constant phenomenon. Broadly, these keywords are proper nouns (except for Wielki) which refer either to persons or to places. Beginning with the latter, one is faced with the limitations of keyword analyses. For instance, the sudden disappearance (or decrease) of USA in the period between 2015-2016 can only be approached speculatively. Also, it remains to be further investigated if there is a correlation between the similar behavior of Donald and USA. Donald can be used to refer to both Donald Trump and Donald Tusk. A follow-up analysis could shed light on this peculiarity. In contrast, Turcja can be easily linked to one event. Its occurrence in the 2015-2015 corpus is congruent with the Turkish coup d'état attempt in 2016. This event was echoed in international media and prompted numerous reactions from states and superordinate bodies as the EU alike. Its appearance in the Polish EU discourse is not surprising. A similar clear-cut interpretation can be applied to the keyword Grecja. The concept Greece was used internationally in media coverage about the Greek government-debt-crises at that

<sup>&</sup>lt;sup>32</sup>MacDonald & Hunter (2019) demonstrate how the discourse on security has been used as a response to major terror attacks. The construction of a state of exception was outlined as a major strategy and can be applied to the état d'urgence, which lasted until 2017.

time. This interpretation is supported when looking at the portmanteau 'Grexit'. Like the aforementioned 'Polexit', Grexit blends 'Greece' and 'exit'. In accordance with the keyword list, the following Google trend graph shows that Greece (or 'Grexit') was a hot topic between 2015 and 2016:

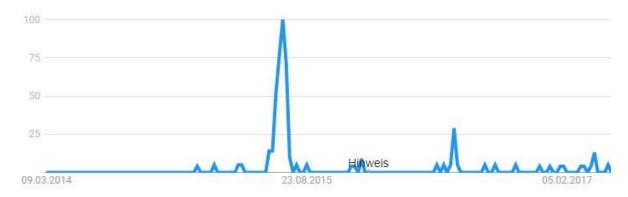


Figure 6: Google Trend for 'Grexit' within the last 5 Years.

Again, the debate about the Greek withdrawal from the eurozone found its way into Polish public consciousness and the Polish media. Regarding *Wielki*, it must be first determined if it is used an adjective or as part of the noun phrase *Great Britain*. In fact, the concordances have shown that *Wielki* 's role as a keyword can be traced back to references to *Great Britain*. Yet, it seems that *Wielki* is not a mandatory element in theses references. As in other languages, too, *Brytania* can stand alone. It can be thus assumed that *Wielki* is used an element of specification. When reconsidering that *Brytania* and *Francja* popped as keywords at the same time, it can be speculated that both terms introduced structures of knowledge into public debate which could lead to overlaps that, in turn, needed to be entangled. In other words, it can be assumed that the concept *Francja* has slots for administrative regions, for instance, which includes also Brittany. In Polish, 'Britain' and 'Brittany' constitute a minimal pair: /britana/ (*Brytania*) and /brɛtana/ (*Bretania*). Thus, it might be that *Wielki* found its way into discourse not only as an element of a noun phrase but also as a means of distinction.

Regarding the remaining keywords, concordances have shown that *Donald* refers to both *Donald Trump* and *Donald Tusk*. However, a cotext analysis has demonstrated that *Tusk* is decisively the more frequent first word to the right:



Figure 7: 10 Most Frequent Word Forms in Right Position to 'Donald'.

Tusk emerged in the period between 2013-2014, thus the time in which he was elected President of the European Council. In the following years, he was constantly associated with the EU. However, after the election in 2015-2016 Tusk as well as Donald vanished from the list. Instead, Kaczyński surfaced after having disappeared from the list in 2014-2015. It can be assumed that this is due to the electoral victory of the PiS party in 2015. His personage became more and more important which is also reflected in the sudden appearance of Jaroslaw at the end of the list in 2016-2017. The fact that both surnames Tusk and Kaczyński appear next to each other can be explained or interpreted by looking at the overall (EU)-political context. Being the founder of a Eurosceptic party (PiS), Kaczyński pursues targets which are antagonistic to Tusk's. Having this in mind, their positions in the list can be read as a quantificational support for a qualitative analysis (cf. Bubenhofer 2013). The final keyword which was detected as a unique phenomenon in the number //. Intuitively, one is tempted to assume a context which deals with World War II. However, for a more precise analysis it was advisable to determine the concrete contexts. This was accomplished by looking at both the first word to the left and the first word to the right. The first words to the left were mainly referring to Pope John Paul II, and, surprisingly, also to Frederick the Great:

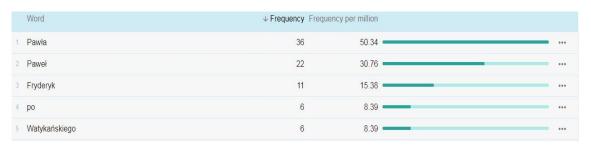


Figure 8: 5 Most frequent Words Occurring as the First Word to the Left of 'II'.

PO was used as a temporal conjunction in the construction po II wojnie światowej ("after World War II). Watykański, on the other hand, refers to the Second Vatican Council (Sobór

Watykański //). To get a complete contextual overview of //, the following figure illustrates those words which occurred directly to the right:



Figure 9: 5 Most Frequent Words Occurring as the First Word to the Right of 'II'.

As can be seen from figure 9, the first elements occurring after // are punctuation marks. The first lexical word occurring to the right is *Wojny*, hence the genitive case of "war". It is followed by the conjunction ("and") and by *RP*, the short form of // *Rzeczpospolita* (Second Polish Republic). Hence, the words which surround // can be ascribed to a religiohistorical context which needs to be tackled in more detail.

Although the examination of the *PO*-construct can be useful when adopting a construction grammar approach leading to potentially new findings, such an analysis would go beyond the scope of this thesis. The same applies to the conjunction *i*. The coordinated entities could reveal some information about the context of *II*, but their interpretation would, in turn, require follow-up analyses making it difficult to come to an end.

Instead, the interpretative focus will be on John Paul II, the Second Vatican Council, World War II, the Second Polish Republic, and Frederick the Great. Beginning with the religious aspects, it is necessary to mention that Catholicism is perceived by Polish citizens as a constitutive element of their social and political identity. This circumstance was reinforced by Pope John Paul II's commitment to the Solidarność movement in the 1980s. The Solidarność demonstrations against the Soviet occupation lead to an "extroverted Polish nationalism" (Meyer Resende 2015: 87) which, in turn, enhanced the conflation of religion, nationalism, and freedom. As a result, Poland was faced with a more politicized and popularized Catholic church. Being a native of Poland, Pope John Paul II's contribution to this process was influential. However, bearing in mind that his personage seems to be linked to the Polish EU discourse, it is difficult to determine the interpretative schemes or contexts in which he is mentioned. On the one hand, it is possible that John Paull II occurs in EU-friendly contexts since he himself was a proponent of the European Union (Rotte 2014:222). On the other hand, it is imaginable that the values promoted by the Catholic church in the 1980s are contrasted and opposed to those promoted by the European Union. It can be suspected that this would require a deeper analysis

of the concept 'freedom'. It is conceivable that the idea of freedom as understood within the Catholic church under John Paul II is presented as conflicting with the rather liberal and secular understanding of freedom as vocalized by the European Union. To support either the one or the other interpretation it could be useful to analyze the fillers which can be detected in frames containing the EU and John Paul II.

Of course, the same procedure can be applied to the Second Vatican Council. Although its frequency is not that high, the Second Vatican Council is considered a landmark in the process of Polish-German Reconciliation. However, its function in the Polish EU discourse gives rise to questions. In can be hypothesized that it surfaced in the corpus is due to reasons of time. In 1965, the Council run out. It can be thus assumed that its occurrence in 2015 is linked to the 50<sup>th</sup> anniversary of the end of the Council's fourth period. The evaluative elements surrounding the Second Vatican Council in the EU discourse need to be assessed separately. Turning to the more clear-cut historical contexts of //, the appearance of Frederick the Great and the Second Polish Republic are certainly unexpected in this respect. Whereas World war II is a frequently debated topic, especially in Polish and German commemorative culture, Frederick the Great and the Second Polish Republic are not to be suspected as prominent elements in political magazines. However, given that meaning is dependent on context, it is worth dedicating a few words on the use of World War II before embarking on the analysis of the other two concepts.

Much has been written about the PiS's historico-political positions (Vetter 2015; Bucholc 2018; Sutwoski 2018; Łuczewski 2016; Stoll et al. 2016) and this topic is still hotly debated (for example Hassel 2019). Of course, the discourse on World War II is one of numerous and even present sub-discourses (cf. the dispute over the Museum of the Second World War in Gdańsk). Yet, in general, it can be assumed that the PiS party adopts a more or less overt revanchist approach to commemorative culture of World War II which materializes in the above-mentioned war reparation claims (Bucholc 2018). Bucholc states that the PiS is using Lévi-Strauss' concept of Bricolage<sup>33</sup> to contextualize the commemoration of World War II. Thus, the war reparation claim can be paraphrased as a cognitive strategy to solve other political problems in an incoherent manner (cf. Bucholc: 2). In how far can this affect the Polish EU discourse? For instance, it can be hypothesized that the war reparation claim was vocalized as an evasive maneuver to respond to EU's critique regarding the constitutional changes in Poland (cf. chapter 3.1; cf. Becker 2018). In addition, since revanchist attitudes are likely to be accompanied by a self-

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<sup>&</sup>lt;sup>33</sup> Lévi-Strauss, Claude. 1962. *La Pensée Sauvage*. Paris: Presses Pocket.

stylization as a victim, it can be assumed that foreign critique is often interpreted as an attack. In fact, this just mentioned self-stylization is very pronounced within the Polish discourse (cf. Oseka 2018). Due the partitions of Poland, the Second World War and the Communist Regime, the notion of 'foreign rule' is semantically highly loaded among the Polish people. It is assumed that these experiences supported the strong development of a national identity in Poland (Pieper 2006: 171). Put frame-semantically, one could speculate that in the Polish EU discourse the slots of the frame [Foreign Ruler] are mapped to other countries or supra-national institutions as the EU. The reference to the Second World War in the EU discourse can be thus analyzed as a tool for both self-stylization and accusation of potential 'foreign rulers'.

Crucially, this interpretation can be also applied to the occurrence of Frederick II. His active engagement in the partition of the Polish-Lithuanian Commonwealth and his disparaging opinion about the Polish national character led to generally unfavorable connotations among the Polish people. The Polish perception of Fredrick the Great can be described by quoting the Polish historian Władysław Konopczyński:

Die Geschichte kennt kein Beispiel, daß ein Mensch so viel Hass in die Beziehungen zu dem Nachbarvolk investierte, wie dies über ein halbes Jahrhundert hinweg Friedrich, genannt der Große, betrieb. [...] Friedrich stellt als Zerstörer Polens, das ihm niemals Schlechtes antat, ein einzigartiges Phänomen in der Geschichte dar. [...] Die unstrittige historische Größe Friedrichs beruht nicht darauf, dass er Maria Theresia besiegte [...]; sie beruht auf der Zugrunderichtung Polens. Indem er diese historische Mission erfüllte, impfte er dem deutschen Volk eine noch größere, eine weltweite Sendung ein, nämlich die Unterdrückung und Vernichtung aller benachbarten Völker. Und schwerlich kann man einen Menschen nicht groß nennen, der einen solchen Eroberungswillen bis auf seine Enkel und Urenkel ausstrahlte, daß diese grenzenlos von Sieg zu Sieg eilten, bis sie sich bei El Alamein, Stalingrad und in der Normandie das Genick brachen, bis zur letzten Vernichtung in Berlin (Konopczyński 1947: 7-8 qtd. in Bömelburg 2007) 34.

Having been written shortly after World War II, Knopczyński's statement is certainly influenced by personal experiences. However, this conceptualization of Frederick the Great as a rather traumatizing lieu de mémoire is not uncommon in the Polish society or perception<sup>35</sup>. Thus, Frederick II's occurrence in the EU discourse allows to assume a similar con-

<sup>&</sup>lt;sup>34</sup> For further discussion see Bömelburg, Hans-Jürgen. 2007. Friedrich II. als Erinnerungsort im deutschen und polnischen Bewusstsein: Preußische Geschichte und deutsch-polnische histoire-croisée.

<sup>&</sup>lt;sup>35</sup> For instance, Adam Krzemiński (2011) states that the image of Frederick II is, at least, an ambivalent one within the Polish society.

textualization as it is probably the case with World War II. Frederick II does hence also serve two functions, namely the self-stylization as a victim and the accusation of potential enemies. His appearance in the EU discourse can be thus read as a continuation of the 'foreign rule' discourse that entered the conceptualization of the EU. Nevertheless, for the sake of completeness, it is worth asking whether Frederick II's occurrence can also be traced back to certain commemorative dates. In fact, the popping up of Frederick II in the 2015-2016 corpus can be also due to his 230th death anniversary. However, again, it is important to note that when adopting a cognitive perspective, one commits to the moral that the reason for any occurrence is equally important as the occurrence itself. This means that no matter why Frederick II occurred in the discourse, his occurrence alone guides interpretative schemas and evokes frames that are collectively shared. To enhance clarity, it is necessary to analyze the textual context in a more detailed manner. In addition, to gain certainty about the evaluative contexts in which Frederick II is discussed in the Polish EU discourse it might be again fruitful to examine the slots which surround him. Reiterating from the paragraphs dealing with the preposition na, it could be also interesting to investigate if there is any relationship between the grammatical and the transtextual level. Expressing locality, na might play a significant role in the discourse on foreign rulers. It can, for instance, link entities in such a way that their relationship is a hierarchical one, as it is just typical for the relationship between rulers and those ruled. This, in turn, would lead to an emphasis on the notions of perspective and perspectivization.

The last noun phrase in which // frequently occurs is the 'Second Polish Republic'. In contrast to the above analyzed noun phrases, it can be assumed that the concept 'Second Polish Republic' contributes a slightly different narrative to the overall discourse. Whilst the Second World War and Frederick II serve the conceptualization of the enemy or perpetrator in discourse, the commemoration of the Second Polish Republic accentuates a collective pride relating to its founding act in 1918. The foundation of the Second Polish Republic brought an end to the 123-year long partition whereby Polish territory was acquired by Prussia, Russia, and the Habsburg Empire. The following twenty years are collectively memorized as the reinvigoration of the nation state and independence. However, in the recent years their commemoration became intensively characterized by a feeling of diremption (Templin 2018). The National Independence Day celebrations are frequently accompanied by events which are organized and promoted by nationalist groups advocating an entanglement of nation, religion and race. In their narrative, the

German and Soviet invasion of Poland are highlighted as the bloody end of what was previously laboriously rebuild. In can be assumed that this additional context allows an intensification of ideological enemy constructions. Occurring in the Polish EU discourse, it can be suspected that a similar argumentation is mapped to Poland's current position in the EU. In simple terms, this would implicate that the Polish sovereignty is endangered by EU policies.

In sum, it can be stated that the keyword lists allow to determine rough trends in the Polish EU discourse between the years 2013-2017. Indeed, they serve as an access point to further analysis. Although most findings can be subjected to a more profound examination and discussion, a selection must be made which is in accordance with the scope of this thesis. Thus, the selection will be limited to those findings which can be classified as the most prominent regarding either the degree of change or consistency. Those which can be categorized as such will be presented in the interim conclusion.

#### 4.2 N-Grams

As with the keywords, this chapter is subdivided into one section dealing with the results and one with their interpretation. However, in contrast to the keyword lists, the n-gram overviews are limited to ten n-grams. The interpretation will focus mainly on those n-grams which do not point primarily to the EU discourse. It is assumed that these n-grams can reveal information about more hidden discourse structures.

#### 4.2.1 Results

The following n-gram lists were detected in two steps. Since web corpora can boast a sheer amount of noise, the first extraction included n-grams which belonged to advertisements. Each of these n-grams contained at least one term which could be classified as untypical for the discourse at hand. A closer inspection of the concordances revealed that the most frequent n-grams containing the words *pdf*, *e-pub*, *plik* ('file'), *plikach* ('file', locative case), *premium*, *prenumerata* (subscription), and *zl* (zloty, short form) belonged to larger units which, in turn, referred to various types of subscriptions and their costs. Since these n-grams were unlikely to touch upon any political debate or news, they were eliminated using the advances settings provided by Sketch Engine. The aforementioned terms were thus excluded manually and led to the following tables representing the ten most frequent n-grams per corpus.

Ranking	N-Gram	Abs. Frequency
1	umowy storwaszyzeniowey z unia	30
2	w związku z tym	29
3	Wyborach do parlamentu europe- iskiego	27
4	podpisania umowy stowarzyszenio- wei z	26
5	stowarzyszeniowej z unią europejską	24
6	umowy stowarzyszeniowej z ue	22
7	do podpisania umowy stowarzyszen- iowei	22
8	nie jest w stanie	21
9	w tym samym czasie	20
10	w rozmowie z agencją	20

Table 10: Most Frequent N-Grams 2013-2014.

Ranking	N-Gram	Abs. Frequency
1	w rozmowie z agencją	38
2	w związku z tym	32
3	z agencją informacyjną newseria	31
4	rozmowie z agencją informacyjną	31
5	mówi agencji informacyjnej newseria	29
6	na szefa rady europejskiej	27
7	nie jest w stanie	21
8	w tym samym czasie	20
g agencji informacyjnej newseria biznes		20
10	polski do unii europejskiej	17

Table 11: Most Frequent N-Grams 2014-2015.

1	mamy do czynienia z	24
2	nie jest w stanie	22
3	nie są w stanie	21
4	w tym samym czasie	20
5	rady europejskiej donald tusk	15
6	w związku z tym	14
7	z dnia na dzień	13
8	po raz pierwszy od	13
9	9 co się dzieje w	
ustawy o trybunale konsty- tucyjnym		11

Table 12: Most Frequent N-Grams 2015-2016.

Ranking	N-Gram	Abs. Frequency
1	w związku z tym	29
2	wielkiej brytanii z unii	27
3	mamy do czynienia z	26
4	w tym samym czasie	23
5	z dnia na dzień	21
6	nie jest w stanie	20
7	wyjścia wielkiej brytanii z	17
8	traktatu o unii europejskiej	15
9	po raz pierwszy w	14
10	brytanii z unii europejskiej 14	

Table 13: Most Frequent N-Grams 2016-2017.

Finally, as with the keyword lists, a complete overview of all n-grams can best serve a comparative endeavor:

Rank	N-Grams 2013- 2014	N-Grams 2014- 2015	N-Grams 2015- 2016	N-Grams 2016- 2017
1	umowy stor- waszyzeniowey z unia	w rozmowie z agencją	mamy do czynienia z	w związku z tym
2	w związku z tym	w związku z tym	nie jest w sta- nie	wielkiej brytanii z unii
3	Wyborach do par- lamentu europe- jskiego	z agencją infor- macyjną newse- ria	nie są w stanie	mamy do czynienia z
4	podpisania umowy stowarzyszeniowej z	rozmowie z agencją informa- cyjną	w tym samym czasie	w tym samym czasie
5	stowarzyszeniowej z unią europejską	mówi agencji informacyjnej newseria	rady europe- jskiej donald tusk	z dnia na dzień
6	umowy stowarzyszeniowej z ue	na szefa rady europejskiej	w związku z tym	nie jest w sta- nie
7	do podpisania umowy stowarzyszeniowej	nie jest w stanie	z dnia na dzień	wyjścia wielkiej brytanii z
8	nie jest w stanie	w tym samym czasie	po raz pierwszy od	traktatu o unii europejskiej
9	w tym samym czasie	agencji informa- cyjnej newseria biznes	co się dzieje w	po raz pierwszy w
10	w rozmowie z agencją	polski do unii europejskiej	ustawy o try- bunale konsty- tucyjnym	brytanii z unii europejskiej

Table 14: Most Frequent N-Grams 2013-2017.

### 4.2.2 Description and Interpretation

N-grams may point to semantic or argumentative fixations in discourse (cf. chapter 2.2.2). The recurrences of units that go beyond the word level can be understood as realizations of larger conceptual structures. However, in contrast do keywords, n-grams are more difficult to classify since they can partially overlap. Before turning to these overlapping n-grams, the first interpretations will be dedicated to those units which reoccur as fixed n-grams in all corpora. As shown in table 10, only three 4-grams reoccur constantly. These are *w tym samym czasie* ("at the same time"), *nie jest w stanie* ("is not able to"), and *w związku z tym* ("in connection to this"/" with respect to this"/" with regard to this"). Crucially, these n-grams are used in language as fixed expressions serving concrete and evaluative (cf. *nie jest w stanie*) functions.

Considering Goldberg's refined and inclusive definition of constructions, w tym

samym czasie as well as the remaining n-grams can be subsumed under the notion of stored form-meaning pairings:

All levels of grammatical analysis involve constructions: learned pairings of form with semantic or discourse function, including morphemes or words, idioms, partially lexically filled and fully general phrasal patterns. Any linguistic pattern is recognized as a construction as long as some aspect of its form of function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency. (Goldberg 2006: 5).

In fact, the last sentence in this quote can be directly applied to "at the same time". Its components allow to assume that this construction inevitably refers to the simultaneity or the partial overlapping of events. Additionally, due to its frequency it qualifies as a construction in Goldberg's terms. However, its deep functional implications are a matter do be further investigated. The role of w tym samym czasie in the EU discourse can be only speculatively approached. For instance, it can be assumed that the expression of concurrency evokes more complex contexts than references to singular events. W tym samym czasie would then act as a mean of linkage connecting two different concepts. Basically, it can be supposed that the construction serves to reduce processing costs or complexity (cf. chapter 2.1.2, p. 12). Applying this interpretation to the EU discourse, one could hypothesize that the usage of this construction reflects, for instance, the overall complexity of the EU's system of multilevel governance (Eising et al. 2015: 214). In general, this would be congruent with a seemingly commonly shared perception. A first glance at various media (headlines) leads to the presumption that the frequent association of the EU and the term "complexity" is internationally widely spread: "(Atzler & Schneider 2019; Niezalezna.pl 2019; Castro & Rodríguez 2019; cf. Rowell et al. 2011: 25, 175). Reconsidering the two-directional cognitive model as promoted by Panter & Radden (2011: 4, cf. chapter 3.1, p. 32), this type of association can be viewed as a potentially forceful shaper of perception. Yet, be that as it may, although this line of interpretation can be backed only tentatively by empirical data, it remains to be further investigated in which contexts this construction occurs. Finally, the n-gram's increase in ranking could be interpreted in light of the Brexit which brought about a flurry of debates and uncertainties due to its precedence.

Tackling the second n-gram *nie jest w stanie*, a more clear-cut interpretation suggests itself. In expressing the "inability" of something or someone, one provides a commonly perceived unfavorable interpretative context. The attribute of inability can be mapped to various situations. In relation to the EU discourse, this could imply, for instance, the inability to act in legal terms. Of course, it is conceivable that the construction

nie jest w stanie is followed by a context which turns the overall interpretation into a positive one as in nie jest w stanie zabić ("is not able/unable to kill"). Moreover, such a positive context materializes in idiomatic expressions such as "unable to hurt a fly" in English or "keiner Fliege was zuleide tun können" in German. However, due to the prefixed negation nie, it can be assumed that nie jest w stanie is rather a prime for negative interpretations. Still, in order to turn this assumption into a more valid statement, a further analysis needs to be carried out. However, what is also crucial about this construction is its rising frequency over time. This may, for example, indicate a rising urgency of a particular topic. Additionally, in the 2015-2016 corpus, the construction pops up in the plural. The additional occurrence of nie są w stanie ("are not able to") can be thus read as an intensified association of the European Union and the inability to act. Although nie są w stanie may be also linked to another concept than the European Union, it can be assumed that the construction as such contextualizes the EU in an unfavorable way due to its negation prefix.

The last n-gram that occurs across all four corpora, w związku z tym, is usually used to introduce or reintroduce a topic by linking it to another one. Considered a compound prepositional phrase in traditional grammar, w związku z tym can be seen as a frequently used mean for the creation of coherence. Touching upon the notion of information structure, this construction is used to link new and given information. Its prominent occurrence in the EU discourse corpus can point to elaborative contexts into which the EU is embedded. This would be in line with the interpretation of w tym samym czasie. However, any further semantic interpretation of both constructions requires a deeper analysis. In addition, both n-gram's frequency should be tested against a second corpus to determine its degree of discourse specificity. The frequency of such (lexically fully realized) constructions could, for example, uncover hidden information in discourse as it might be the case for grammatical keywords as discussed above (cf. chapter 4.1.2).

Turning to the remaining n-grams, it can be observed that most of them are thematically classifiable. Beginning with the years 2013-2014, it can be seen from table 14 that the major part of n-grams can be subsumed under the notion of 'bureaucratic or legal action'<sup>36</sup>. In fact, four of the remaining seven n-grams contain the word *umowa* ("agreement") in the genitive case. These n-grams are *umowy storwaszyzeniowey z unia* ("Association Agreement with the Union") *podpisania umowy stowarzyszeniowej z* ("Signing

<sup>&</sup>lt;sup>36</sup> Note that both notions, 'bureaucratic' or 'legal' discourse can be also subsumed under the term "corporate communication". (Kuße 2012: 225). A future study might thus look more closely at the conflation of the EU discourse with the Business\_frame.

the Association Agreement with") *umowy stowarzyszeniowej z ue* ("Association Agreement with the EU") *do podpisania umowy stowarzyszeniowej* ("to sign [the] Association Agreement"). A fifth n-gram, namely *stowarzyszeniowej z unią europejską* ("[Agreement of] Association with the European Union"), can be also classified as belonging to the bureaucratic, respectively legal thematic field. Having popped up in the period 2013-2014 one is inclined to assume a relationship between these n-grams and the signing of the Ukraine-European Union Association Agreement in 2014. Although having been brought into existence as a mean of stabilizing the political and economic relations between Ukraine and the EU, the agreement was not without controversy. In a way, the Association Agreement (AA) was a hotly debated topic embedded into a rather turbulent discourse since 2013 the latest. For instance, Van der Loo writes that:

[...] the refusal of the Government of Ukraine in November 2013 to sign the EU-Ukraine AA [...] sparked a historic chain of events that had an impact not only on the domestic political scene in Ukraine but also on the security, stability and peace in Europe. The February 2014 (*Euro*) *Maidan* demonstrations in Kiev, during which hundreds of thousands Of Ukrainians went to the streets and demanded the signature of the AA and closer European integration, led to violent repression against the protestors to the dismissal of President Victor Yanukovych and the establishment of a new pro-European government and president. In addition, the Maidan revolution triggered a political and military conflict in Eastern Ukraine, including Russia's annexation of Crimea. Moreover, due to Russia's role in this conflict, EU-Russia relations have reached rock bottom and both parties adopted (economic) sanctions against each other (Van der Loo 2016: 1).

It can be undoubtedly supposed that that this topic was echoed in the Polish media. Also, Poland's geographical proximity to Ukraine may have led to the frequent occurrence of AA relevant n-grams. Thus, on the one hand, the n-grams which have been detected, reflect concrete political events (which can be further subdivided into legal actions), and may, on the other hand, convey or intensify the impression of a bureaucratic European Union. The n-gram *Wyborach do parlamentu europejskiego* ("Elections to the European Parliament") in the plural locative case, in turn, can be assumed to point with certainty to the 2014 elections. The last n-gram in the 2013-2014 corpus *w rozmowie z agencją* ("in the interview with the agency") can be viewed as marking the transition to the 2014-2015 corpus.

Crucially, w rozmowie z agencją reoccurs in the first position in the 2014-2015 corpus. After having looked at the concordances, it can be classified as belonging to a group of n-grams which point to the multimedia information agency Newseria, namely z agencją informacyjną newseria ("with the information agency newseria") rozmowiez agencją informacyjną ("[in the] interview with the information agency") mówi agencji informacyjnej newseria ("told [the] information agency newseria") agencji informacyjnej newseria biznes ("information agency newseria business"). Moreover, the concordances have re-

vealed that the context, respectively, the interviewees vary greatly. Hence, these n-grams require a broader contextual analysis to determine its concrete thematic belonging. The frequent occurrence of the information agency *Newseria*, does raise questions concerning media circulation which need to be tackled in a more comprehensive media investigation. Whilst these n-grams elude any further interpretation, *na szefa rady europejskej* ("the chef of the European Council") and *polski do unii europejskej* ("Poland to the European Union") can be classified unambiguously. Since Donald tusk was elected president of the European Council in 2014, it can be assumed that the frequency of the n-gram *na szefa rady europejskej* reflects this particular event. Turning to *polski do unii europejskej*, it can be hypothesized that this n-gram mirrors the tenth anniversary of Poland's EU accession in 2004. To sum up, the n-grams in the pre-election period can be easily traced back to political events affecting the EU and Poland (except for the sudden and frequent occurrence of *Newseria*). N-grams which do not indicate any thematic belonging -due to the lack of pertinent lexemes- are limited to the three n-grams discussed in the beginning.

In contrast, the post-election corpora contain mainly constructions which do not point directly to any particular discourse. The only n-grams which can be linked to a concrete event are rady europeiskej donald tusk ("European Council Donald Tusk") and ustawy o trybunale konstytucyjnym ("bills on the Constitutional Tribunal"). Whereas the first probably relates to a further thematization of Donald Tusk's electoral victory in the media, the second n-gram can be suspected to refer to the hotly and internationally debated Constitutional court crisis in 2015 (cf. chapter 3.1, p. 32). The remaining n-grams, namely mamy do czynienia z ("we are dealing with"), z dnia na dzień ("from day to day/overnight"), po raz pierwszy od ("for the first time since"), and co się dzieje w ("what is happening in") are closed idiomatic expressions and cannot be classified into any thematic fields. However, as discussed above, such constructions may point to hidden discursive elements which require a follow-up analysis. In general, it can be stated that the post-election Polish EU discourse seems to have become dominated by n-grams which express a kind of urgency or novelty. For instance, mamy do czynienia z and co się dzieje w can be interpreted as conveying a certain astonishment about a topic at hand. Both constructions can be used to introduce new information into discourse, however, the first expresses, due to the first-person plural, a degree of closeness which cannot be expressed using the third-person singular (co sie dzieje). Considering both constructions together with po raz pierwszy od, it can be assumed that the three n-grams relate to a

singular or rare phenomenon in discourse. It can be hypothesized that these n-grams are linked to the British EU referendum, respectively the Brexit. As could be seen from chapter 4.2.2, *Brytania* became a more and more relevant keyword from 2014-2015 on. Yet, whilst *Brytania* probably occurred in a less evaluative context in the pre-referendum corpus (2014-2015), it can be supposed that these n-grams relate to the first-time withdrawal of an EU member state from the European Union. In expressing a certain uniqueness these constructions can be read as the linguistic realizations of the, say, perplexity which was brought about by an unprecedent political event. Still, in order to gain clarity about the n-grams' functional potential the whole contexts would need to be envisaged in more detail. On the other hand, the n-gram *z dnia na dzień* may also correspond to the abovementioned political context. *Z dnia na dzień* may be used to express either a sudden (example 1 and 2) or a gradual (example 2 and 3) change, as can be demonstrated by a closer look at the concordances:

- Jasne, że to trudne I nie zdarzyło się z dnia na dzień.
   ("Sure, that was difficult and did not happen overnight").
- 2. Nie ma żadnych przepisów, które pozwalałyby z dnia na dzień Grecję wyrzucić z tego grona. ("There are no regulations which would allow to throw Greece out of this circle").
- 3. Według Tureckiej Fundacji Badań Polityki Gospodarczej z dnia na dzień przybywa syryjskich firm w Turcji.

  ("According to the Economic Policy Research Foundation of Turkey, Syrian companies are arriving
  - from day to day in Turkey").
- 4. Myślę jednak że jeżeli wystartuje w tych wyborach to szansę na sukces będzie miał nie duże ponieważ z dnia na dzień rośnie poparcie dla partii nowoczesna i jej lidera Petru. ("I think that if he runs in these elections, he will have only a slim chance of success since the support for the Nowoczesna party and its leader is increasing from day to day").

Overall, four of twelve instances were used to describe a gradual change, while eight were used to express sudden change. Surprisingly, no concordance allows to assume a direct link to the Brexit scenario. Since the examples suggest a variety of contexts, it can be assumed that a larger textual analysis could reject or confirm the above stated assumption. Moreover, a follow-up analysis is required to determine whether these n-grams are interrelated in any way.

Crucially, the n-grams in the 2016-2017 corpus largely overlap with those in previous corpora and in particular with those in the 2015-2016 corpus. Those which are new to the discourse are the following: wielkiej brytanii z unii ("Great Britain out of the Union/Great Britian from the Union"), wyjścia wielkiej brytanii z ("Great Britain's withdrawal from"), traktatu o unii europejskiej (genitive case of "Treaty on European Union"), brytanii z unii europejskiej ("Britain's from the European Union"). In contrast to the previous construc-

tions, these n-grams can be effortlessly and incontestably traced back to the 2016 United Kingdom European Union membership referendum and its consequences. Whilst wielkiei brytanii z unii, wyjścia wielkiej brytanii z, and brytanii z unii europejskiej point directly to Great Britain's EU exit, traktatu o unii europejskiej relates to the legal implications of Britain's withdrawal from the EU. More precisely, on March 29 in 2017 the UK notified the European Council of its intention to withdraw from the EU. This act equals formally the triggering of Article 50<sup>37</sup> of the Treaty on European Union. It is likely that the n-gram traktatu o unii europejskiej mirrors the just cited unprecedent legal action. The only ngram which is slightly new and not necessarily part of the Brexit discourse is po raz pierwszy w. Whereas it occurred in the 2015-2016 corpus with the preposition 'od', it found its way into the 2016-2017 corpus by ending with the preposition 'w'. Unsurprisingly, the construction po raz pierwszy w is often followed by vague time specifications as historii ("history") or życiu ("life") in the right context. Po raz pierwszy od, in contrast, is mainly followed by more concrete dates as 26 lat ("26 years") 1945, or by an anaphoric element as tamtych zdarzeń ("those events"). Hence, in the more recent corpus singular or unusual phenomenon became contextualized within rather loosely defined frames. It can be asked whether this finding corresponds to findings in broader databases. If this would be the case, this change would perhaps point to a general tendency of avoiding accuracy in discourse. If the data would support such an interpretation, a follow-up research could investigate whether there is any general link to the hotly debated notion of 'fake news'.

In fact, the calculation of n-grams reveals a lot about the language use at a given time. They can be read as reflections of political or cultural events and as fixations which can shape knowledge structures. In general, the n-grams which were detected in the Polish EU discourse can be classified into idiomatic expressions (or constructions) or constructions which point lexically directly to a particular topic. The analysis above allows to conclude that the idiomatic constructions which can be inserted into various contexts increased after the election. Yet, seminal and unprecedent phenomenon found their way into linguistic practice, nonetheless. A broader database could show if these observations can be embedded into any overall cultural tendency of language use. An increasing frequency of universally applicable constructions could be, for instance, in accordance with the economy principle in language. The cognitive implications which could be generated

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<sup>&</sup>lt;sup>37</sup> See the Euro-Lex webpage for a full overview of relevant legislations <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12016M050">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12016M050</a>.

thereof would then need to be examined separately. The same applies if this observation would be limited to the Polish EU discourse.

As becomes apparent, a corpus-driven analysis opens doors for various interpretations and follow-up questions and hypotheses. Both keyword and n-gram lists have demonstrated minor and major changes in the Polish EU discourse. The most evident and unexpected findings will be recapitulated in the following interim conclusion. This summary will then lay the foundation for the corpus-based analysis part.

## 4.3 Interim Conclusion and Follow-up Questions

As has been demonstrated, a corpus-driven analysis serves as an appropriate starting point for discourse studies. The calculation of keywords and n-grams allows to browse data sets in an unbiased way and to open up new perspectives on language. In doing so, the examination of the Polish EU discourse revealed partially unexpected results. Overall, the findings have shown that the Polish EU discourse contains a number of constantly occurring keywords and patterns. Lexical words such as *Polska*, *Europa*, or *Bruksela* are genuinely specific for the discourse under investigation and are thus hardly surprising. The recurrence of grammatical words, in contrast, raises questions, since grammatical words are not expected to be discourse specific. In fact, the calculated keyword lists entailed the preposition *na* which occurred across all corpora.

Concerning the n-grams, more homogenous results were obtained. That is, the invariables that have been identified can be described as closed constructions which are contextless by nature. More precisely, they were found to be idiomatic expressions which do not point to any particular discourse topic, as for instance w tym samym czasie or nie jest w stanie. However, it can be assumed that such expressions have a semantic (and thus changeable) content which requires a closer analysis in order to be fully assessed. In general, a broader database could put forward each of the above stated assumptions or hypotheses.

The same holds true for those keywords or n-grams which exhibit an inconsistent development. Although the majority of fluctuations in the keyword lists can be traced back to concrete political events, there are some elements which can only hardly be linked to any incident. The disappearance of *PO* and the sudden occurrence of *II*, for instance, point to more deep-seated discourse levels. The hidden aspects of discourse were supposed to be also reflected in the increase of constructions with holistic meaning. Idiomatic expressions were found to have risen after the election. Semantically, the constructions *nie jest w stanie* and *z dnia na dzień* can be described as being, more or

less, overtly evaluative. Whilst nie jest w stanie allows to make statements about the ability or inability of someone or something, z dnia na dzień conveys information on how someone or something changes, namely either gradually or suddenly. Bearing in mind Entman's definition of framing and notably the aspect of "moral evaluation" (Entman 1993: 52, cf. chapter 2.2), it can be assumed that such evaluative constructions can be embedded into larger evaluative contexts. If that is the case, these constructions can contribute to the guidance of specific interpretative schemas and shape the overall discourse. Returning to the cognitive origins of frame theory, it was demonstrated several times how changes in discourse can be described or explained by the works of Minsky or Barsalou. In particular the notion of slot and filler served as a fruitful tool for mapping linquistic changes onto cognitive structures. Yet, it can be concluded that the application of Barsalou frames (including also constraints and structural invariants) requires broader data sets and more fine-grained analytical steps. What can be, however, deduced as a guiding principle from both Barsalou and Minsky (and Lakoff 2005, cf. p.23) is the idea of complex frames. This implies that each filler is a frame itself and that each word contains a complex conceptual structure which is inextricably linked with other concepts. This central idea allows to elaborate on the entanglement of numerous sub-discourses. Taking into account the influential effect of entrenchment, the rising frequency of a word like Polak in the Polish EU discourse can hardly be overinterpreted. As the other words or constructions Polak, in a way, infiltrates the overall discourse and contributes solidified cognitive structures which, in turn, may provide a very specific perspective on the topic at hand. Importantly, these approaches to frames are not the only ones. As discussed in the theoretical part of this thesis, the linguistic origins of frames lay in valency grammar. In fact, verbs are at the heart of frame semantics as proclaimed by its founding father Charles Fillmore. In order to provide a comprehensive account of frames in discourse, the analysis of verbs requires a 'special treatment'. The corpus-driven analysis carried out above could not meet this requirement. For providing corpus analytic examinations which build on one another, it can be thus useful to link previous findings with the traditional (or original) account of frames as postulated by Fillmore.

In combining verbs and collocations, the corpus-based analysis will begin by determining the verb collocates of the keyword *UE*. Being the short form of *Unia Europejska*, it can be assumed that UE serves as an appropriate anchor for a follow-up analysis. The results will then be subjected to a closer frame semantic examination based on entries deduced from the FrameNet. The second corpus-based guery will be dedicated to the

preposition *na*. As has been already mentioned on several occasions, the occurrence of a grammatical word in keyword list is highly unusual. Its closer analysis can thus uncover deep-seated semantic fixations in discourse which have been largely unnoticed.

Admittedly, in light of the previous findings, this selection appears to be comparably small. The reader shall bear in mind that each of the previous findings is a potential candidate for further investigations. However, such a limitation is mandatory in order to not overshoot the mark. A corpus-based analysis is extensive by nature and the corpus queries which can be used for a data compilation are basically unlimited. Therefore, the following chapter will outline and limit the concrete analytical steps which are applied to both *UE* and *na*. The results for the verb collocations of *UE* and the context of *na* will be separately presented and interpreted.

# **5 CORPUS-BASED ANALYSIS**

In contrast to the corpus-driven analysis, the corpora in a corpus-based approach are tack-led along concrete questions. The corpus-based account can be thus understood as a fine-tuning of previous findings which were assessed in the data-driven part. As indicated above, the objects of further inquiry are *UE* and *na*. The questions which can be now envisaged in the next chapters are the following:

- 1. Which verbs collocate with *UE* in each corpus?
- 2. With which nouns does the preposition na cooccur?
- 3. In which clusters does the preposition *na* frequently occur?
- 4. Did the use of *na* change after the election?
- 5. Is *na* used in the corpus differently than in a reference corpus?

First, the verb collocates will be determined. The aim is to examine whether there are any changes in discourse which can be traced back to case frames, and thus the valency of verbs. Secondly, the context of *na* will be analyzed in more detail. It will be investigated if its use is in accordance with general tendencies that have been identified in the data-driven part.

## 5.1 Verb Collocations

A noun's verb collocations can be investigated from various perspectives. The herein presented analysis focus on those collocates which are calculated for the keyword *UE* in subject position. The assessment of verb collocates is carried out by using the word sketch provided by Sketch Engine. In examining the verbal surrounding of the EU in subject position it can be determined which case frames are frequently ascribed to the EU in discourse. The data base provided by FrameNet serves as an anchor point for a deeper analysis.

### 5.1.1 Results

The verb collocates for *UE* in subject position were calculated for each corpus. The results are presented in the following table.

2013-2014	2014-2015	2015-2016	2016-2017
mieć	nałożyć	mieć	podzielić
rozszerzyć	zamierzać		mieć

wspierać	
wprowadzić	
przyjąć	
zacząć	
mieć	

Table 15: Verb Collocation for UE in Subject Position 2013-2017.

The verbs can be translated as follows: mieć ("to have"), rozszerzyć ("to expand"), nałożyć ("to put on/to impose"), zamierzać ("to intend to do sth"), wspierać ("to support"), wprowadzić ("to show in/to insert/to introduce"), przyjąć ("to accept/to receive/ to admit/ to adopt"), zacząć ("to begin"), and podzielić ("to divide/ to share/ to break"). The problem of polysemy will be tackled in the interpretation. However, before embarking on the interpretation, it shall be noted that the focus on the EU in subject position imposes already a very specific metaphorical perspective on the EU (cf. 5.1.2). In concentrating on this type of verb collocations, it shall be beard in mind that only a small extract of discourse can be analyzed.

# 5.1.2 Description and Interpretation

As just alluded, the EU in subject position points to a metaphorical usage. Being, inter alia, personified, the EU in subject position can be read as an extension of ontological metaphors which "allow us to make sense of phenomena in the world in human terms – terms that we can understand on the basis of our own motivations, goals, actions, and characteristics" (Lakoff & Johnson 1980/2003: 34). An analysis of verb collocates can help to further specify the type of person that is mapped onto the EU.

As can be seen from table 15, the number of verb collocations is unevenly distributed. Especially the 2014-2015 corpus contains a relatively high number of verbs. It can be speculated that this is due to concrete political events in which the EU was at the heart of debate (for instance, the EU elections in 2014 or the annexation of Crimea and the EU's response to it). What is more difficult to handle is the problem of polysemy. Most verbs which have been detected can occur in different contexts and convey thus a different meaning. To gain certainty about a verb's usage it would be necessary to examine all concordances separately. However, this would go beyond the scope of this thesis, especially when considering the frequency of auxiliary verbs such as "to have". Hence, the analyses here will focus on the first meaning that is mentioned in the dictionary. Is can be supposed that the first definitions in a dictionary are those which refer to the most ac-

cepted and associated meanings. Each verb will be thus envisaged by using merely one FrameNet entry.

The first and recurrent verb in the four corpora is *mieć*. According to the online Słownik języka polskiego (SJP) (Polish Language Dictionary), the foremost definition of "to have" refers to the notion of possession. 'Having' in the sense of 'possessing' is described by FrameNet in the following way:

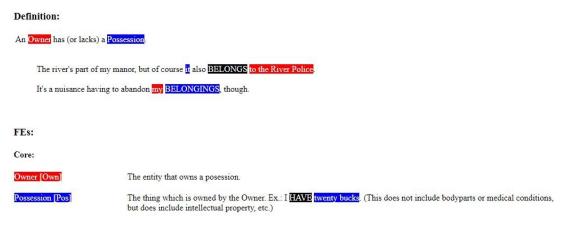


Figure 10: FrameNet Entry of "to have".

The frame can be further specified by non-core frame elements such as [Manr] (that is the manner or way that the owner possesses the Possession) or by [Dep] (depictive; describing the state of the owner possession). Admittedly, the verb "to have" does not allow any profound suggestions about the conceptualization of the EU in the Polish EU discourse. What can be tentatively assumed is only a potentially hierarchical relationship between the EU and the 'possessed'. However, in order to determine the possessed a further analysis is required.

The verb *rozszerzyć* ("to expand") allows more deep-seated interpretations. In contrast to "to have", the FrameNet entry of "to expand" contains more frame elements:

#### Definition:

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An Agent or non-human Cause causes an Item to change its physical size. The Size change of an Item may be explicitly indicated or characterized in terms of Initial size and/or Result size. In the default case, expansion is along all dimensions, but sometimes the Dimension of expansion is incorporated or made explicit.

If the design crashes too often, then try LENGTHENING the wings by a few centimeters, to perhaps 30cm total. (IN)

As the juice churned with natural process of changing into wine, the gas it created would EXPAND the balloon, and when the balloon eventually deflated, it was ready to drink.

FES:

Core:

Agent [Agt]

Semantic Type: Sentient

With some words in this frame, an Agent who causes the change in size of the Item may be present. The Agent typically occurs as the External Argument of a verb.

Management EXPANDED the company.

The Cause is a non-human entity which brings about the change in size.

Excludes: Agent

The Item is frequently the External Argument of verbs or the NP Object if an Agent is expressed.

The Item is frequently the External Argument of verbs or the NP Object if an Agent is expressed.
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Figure 11: FrameNet Entry of "to expand".

Linking this entry to the EU discourse, it can be hypothesized that the verb "to expand" relates to the sub-discourse of EU enlargement. This may imply, however, a rather abstract understanding of enlargement. That is, the agent, the EU, expands in terms of the number of EU member states and not in a physically measurable sense. It can be assumed that the verb *rozszerzyć* gained fresh prominence in light of the seventh EU enlargement in 2013. Additionally, it may be that its occurrence can be traced back to the tenth anniversary of Poland's EU accession (cf. p. 63). In sum, the linkage of the cause\_expansion frame with the EU may be read as a contribution to the stylization of the EU as a potent entity having the ability to initiate change.

The word *nalożyć* can be best translated in this context as "to impose". According to the SJP, *nalożyć* is primarily defined with "placing something on something else". Although this definition is better reflected in the verb "to put (on)", a closer look at the concordances suggests a different usage:

- Do tej pory UE nałożyła sankcje na 61 osób i dwie firmy.
   ("So far, the EU imposed sanctions on 61 persons and two companies").
- UE nałożyła na producentów obowiązek [...].
   ("The EU imposed an obligation on producers").

As these examples show, the verb *nalożyć* is used in reference to sanctions or duties. In order examine whether the verb "to impose" does best reflect this meaning of *nalożyć*, it is useful to investigate an English corpus by using the complex query syntaxes (1) [tag="V.\*"][word=" sanctions"] and (2) [lemma="impose"][word="sanctions"] to identify the distribution of the verb to impose" left to "sanctions". In general, the first query of the English Web Corpus (containing 18,389,070,604) resulted in 34,435 hits. The second query, in turn, resulted in 8,435 hits. This analysis reveals thus that "to impose" occurs with

a relative frequency of ~25% next to "sanctions". The verb "to impose" qualifies thus as candidate for the translation of *nalożyć*. Crucially, the FrameNet does not cover this verb. The thesaurus provided by word suggested the verb "to enforce" as a potential synonym. In fact, the verb "to enforce" does also occur in connection to "sanctions", as a corpus query using [lemma="enforce"] [word="sanctions"] revealed. Additionally, FrameNet covers the verb "to enforce" in the frame of [Enforcing]:

An Agent acts to ensure that a Rule (often a constraint on behavior) is being followed. The Agent acts to ensure that a Rule (often a constraint on behavior) is being followed. The Agent acts to ensure that a Rule is the affordance to certain entities to ensure that the Rule is followed. The Rule may be specified for the Duration for which it is in effect.

Figure 12: FrameNet Entry of "enforcing".

The core frame elements are said to be the Agent ("The Agent, often an institution, governmental organization, or arm thereof, puts into effect (i.e., enforces) a Rule"), the Medium ("This FE describes the medium through which the rule was enforced. It may occur in the same syntactic position as the Agent"), and the Rule ("The Rule is the set of constraints on behavior that the Agent implements (i.e., forces others to obey or face consequences)"). In addition, there is a vast array of non-core frame elements such as Explanation ("A cause, reason, or other explanation for the enforcing of the Rule") or Duration ("The length of time for which the Rule is or is not in effect"). In short, it can be assumed that the verb conveys an authoritative image which, again, expresses a certain power relation. Moreover, FrameNet states that there is a frame-frame relation between [Enforcing] and [Execute\_plan] in that [Enforicng] inherits from the latter one. The definition for the frame [Execute\_plan], namely the following:

An Agent acts according to a Plan, carrying it out (or taking steps to carry it out). In some cases, the Agent is a focal participant in the Plan, although a separate Focal participant may also be mentioned. The Plan may be specified for the Dutation for which it is in effect.

Health authorities say they have put measures into EFFECT in all ports of entry and in centers of provinces.

Figure 13: FrameNet Entry of "Execute\_plan".

is of particular interest when thinking about the frequent conflation of the EU and terms such as 'technocracy' or 'bureaucracy' (cf. Radaelli 2017) Taking all together, the fact that the EU acts intentionally in constraining behavior allows to assume that the verb confers a schoolmasterly and accusatory conceptualization of the EU. This interpretation would be in accordance with previous findings and in particular with the notion of "foreign ruler" (cf. 4.1.2). However, in order to solidify such an interpretation a broader data basis is required. Regarding the verb *zamierzać*, similar associations may pop up. "To intend", defined as "deciding to do something" (SJP), is relatively unambiguous in meaning. In FrameNet the meaning of "to intend" is discussed in the frame for "Purpose":

An Agent wants to achieve a Goal, or an object. A Means has been created or is used to allow the creator or a user to achieve a Goal. The Goal is a state of the world that does not currently hold but which the Agent wants to realize and is planning and/or working towards. In some cases, it is difficult to decide whether a noun phrase metonymically stands for the Agent or the Means (e.g. The goal [of this paper/seminar/project] is to determine ...). We mark these phrases as Agent on the first layer but also annotate them as Means on a second annotation layer. In some cases a Restrictor on the Goal state of affairs can be given prominence as a separate constituent. Talking about Goals frequently includes the mention of a Domain to which the Agent's Goal is relevant.

The modest American GOAL of a threefold increase in capacity recognises this fact.

Figure 14: FrameNet Entry for "purpose", respectively "to intend".

The phrase "planning and/or working towards" a goal can be neatly linked to the above hypothesized interpretations. However, when reconsidering that frames are highly relational, it needs to be mentioned that the verb "to intend" can have both positive or pejorative connotations. Its usage in the EU discourse thus requires a fully-fledged analysis. Bearing in mind, that the verb "to intend" is usually connected to people, it can be merely assumed that the uniquely human ability of looking at future goals is mapped onto the EU. In using this verb, the cognitive ability of sustainable planning is ascribed to an organization. The verb *wspierać* can also be doubtlessly translated as "to support". In Frame-Net one can find this verb under "Supporting":

A Supporter assists to strengthen the Supported by lending itself in material aid (or abstract assistance in the case of metaphorical uses). Figure 15: FrameNet Entry of "supporting".

This comparably scarce definition reveals a simple deep case containing two core elements, namely the Supporter and the Supported. The manner or the instrument which are used for helping are not classified as core elements. The fillers for "material aid" or "abstract assistance" are thus not necessarily explicated. The concordances (only two) which have been found do not point explicitly to any of the two types of support. However, the fact that the EU is conceptualized as a "Supporter" conveys a positive connotation. Yet, this verb shall not be overinterpreted. In anticipating the limitations of this work, it needs to be mentioned that the calculations of verb collocations were not predefined by any minimum frequency. Two concordances can thus hardly be classified as "shapers of discourse".

The same applies to the verb *wprowadzić*. Its low frequency does not allow any conclusions about major discourse practices influencing social cognition. Still, for the sake of completeness it shall be also tackled here. The concordances revealed that *wprowadzić* is used in juxtaposition to *zakaz* ("ban") and *procedura* ("procedure"). In this context, *wprowadzić* can be translated as "to implement". Interestingly, when searching for "to implement" in the FrameNet database, one will find out that it is subsumed under the frame of Execute\_Plan. It can be assumed that the unique semantics of "to implement" in a sentence is thus conferred by filling the slots for non-core frame elements such as

Explanation or Manner. Again, to grasp the full semantics of this verb and its usage in the Polish EU discourse a much broader data basis is needed.

Tackling the verb *przyjąć* one is again faced with an unrepresentative result. Additionally, its meaning is rather difficult to grasp. The concordances reveal that it is used in connection to *pakiet (klimatyczny)* ("Climate package") and *strategia* ("strategy"). Hence, possible translations are "to accept" and "to adopt". The verb "to accept" is found in FrameNet subsumed under Respond\_to\_Proposal:

A Speaker addresses a Proposal made by an Interlocutor, either agreeing to it or rejecting it. Agreeing entails a social responsibility on the Speaker to bring about some state of affairs encoded in the Proposal.

Figure 16: FrameNet Entry of "Respond to Proposal".

In using this frame, the EU is conceptualized as a person ("a Speaker") which is able to engage in contractual relationships. In further specifying the Speaker as "the person who communicates the reply or response" the human-like nature of this verb comes to the fore. To dare an interpretation, it can be speculated that aspects which are typically associated with a businessperson are mapped onto the EU. This would be in line with the previously mentioned linkage of the EU and "bureaucracy". "To adopt", on the other hand, is traceable in FrameNet by looking at the frame Adopt\_selection. Admittedly, this definition is rather abstract in nature and reminds one of Barsalou's terminology:

An Agent has an Attribute which can take different Values, and the Agent selects and then begins to use some Value for that Attribute. The Attribute both physical (shape, color) and abstract (belief, practice) types. For some LUs in this frame, it is common for only the Value to be expressed, with the Attribute implicit. (Often this implicit attribute can be given second-layer expression on the Value. Note that such second-layer annotation should be assumed in the first two examples below.)

Figure 17: FrameNet Entry of "Adopt\_Selection".

It requires a certain interpretative effort to link this definition to the phrase "adopt a strategy". Following this definition, the attribute contains necessarily a physical and abstract form. Whether this is true for the notion of "strategy" is questionable. However, when omitting this discrepancy (and when focusing on the notion of "strategy paper"), "strategy" can be undertsood as an attribute, whilst the further specification reflects the value. The strategy which the EU adopts can take, unsurprisingly, different values which, in turn, can be subjected to different evaluative statements in the media. Yet, this implies that the notion of "strategy" is a fixed and always accessible entity which can be concretized by the choice of specific values. In any case, such considerations go beyond the scope of this discipline since they require profound knowledge about work processes in the EU.

The FrameNet entry for the verb *zacząć* ("to begin") can be found in the frame Activity\_start:

An Agent initiates the beginning of an ongoing Activity in which he will be continuously involved.

Figure 18: FrameNet Entry of "Activity\_Start".

Interetsingly, both concordances which have been found reveal that the verb is followed by the infinitves "to think" and "to treat". Again, althoug two instances reveal a very limited data basis, the results can be read as evidence for the personification of the EU. In "thinking" and "treating" the EU becomes conceptually equipped with cognitive processes and human behavior. "Treating" is included in the phrase "began to treat the Ukranians" which, again, allows to assume a hierarchical relationship between those who "treat and the treated ones. However, it shall be noted that this usage is a singular example in the corpus. The verbs discussed above pop up in the 2014-2015 corpus. The number of verb-collocates in the following years is significantly lower. The 2015-2016 corpus, for instance contains only the verb "to have" which was discussed above. Finally, the unique novelty which occurs in the 2016-2017 corpus is the verb "to divide" which is classified as belonging to the Separating frame:

These words refer to separating a Whole into Parts, or separating one part from another. The separation is made by an Agent or Cause and may be made on the basis of some Criterion.

Figure 19: FrameNet Entry of "Separating".

The verb "to divide" occurs in two contexts. First, in the phrase "the EU divided the fate of Austria-Hungary and the Soviet Union" and second, used reflexively, in "the EU divided herself into groups". Being the agent that separates a whole into parts conveys repeatedly the image of a powerful decision-making authority. The EU is thus conceptualized as an entity which does carry out actions with potentially far-reaching consequences.

In sum, the number of verb collocations and its occurences with the EU in subject position is too low to allow a profound analysis or valid interpretations. However, the majority of those verbs which were detected suggests a deep-lying structure of hierarchical relations. Importantly, a broader data basis and a follow-up analysis should determine if these findings are due to chance or not. If there is a genereal tenedency of combining the EU with verbs like

"to impose" "to separate", for instance, it can be supposed that certain relational structures become entrechned. They, in turn, could trigger conceptualizations as discussed in previous chapters with the most prominent being "foreign ruler". Be that as it may, the advantages and disadvantages of using FrameNet and verb collocations for a cognitive oriented discourse analysis will be discussed in the interim conclusion. The

herein noticable limitations as well as potentially useful avenues for future research will be covered in the discussion section.

## 5.2 The Context of 'na'

The occurrence of the preposition *na* in the keyword lists was found to be striking. In general, *na* is a preposition governing the accusative and the locative case. In order to gain more information about its usage it is necessary to look closer at its context. For this reason, it was decided to look at the neighboring nouns, left and right clusters, and its usage in reference corpora. By using the complex query language provided by Sketch Engine, the concordances of *na* were examined in more detail.

Concretely, the results of this investigation will be presented along the following questions:

- 1. Which case does *na* govern more frequently in each corpus?
- 2. Which nouns occur in *na*'s left and right neighborhood?
- 3. Which clusters are the most frequent in the preposition's left and right neighborhood?
- 4. Did the use of *na* in the phrase [na] + [empty slot] + [Unia] change in terms of case government?

The results will be presented for each corpus. This allows for a diachronic comparison which will be at the heart of the interpretation section. The query syntaxes which were used will be explained separately to provide a transparent overview of the research path. As with the verb collocations, the limitations of this study and potential research gaps will be discussed in the interim conclusion and in the final discussion.

#### 5.2.1 Results

The first query syntax investigated the overall distribution of *na* in the locative and accusative case. The complex query syntax used was the following: [word="na" & tag="prep.\*"]. By looking at the POS (part of speech) frequencies it could be determined in which case the preposition tended to occur more frequently. The following illustrations, respectively figures show the accusative/locative distribution for each period:



Figure 20: Locative and Accusative 'na' Distribution 2013-2014. Total Number of Hits: 10,992.

Tag	↓ Frequency	equency per million	
1 prep:acc	6,187	8,710.44	7***
2 prep:loc	4,231	5,956.66	

Figure 21: Locative and Accusative 'na' Distribution 2014-2015. Total Number of Hits. 10,418.

Tag		Frequency per million	
1 prep:acc	5,696	7,964.14	
2 prep:loc	3,828	5,352.30	

Figure 22: Locative and Accusative 'na' Distribution 2016-2017. Total Number of Hits 9,524.

Tag	↓ Frequency	Frequency per million	
1 prep:acc	6,282	7,952.30	
2 prep:loc	4,165	5,272.42	•••

Figure 23: Locative and Accusative 'na' Distribution 2016-2017. Total Number of Hits: 10,447.

In the second step it was aimed to gain information about the neighboring nouns of *na*. To determine the context on the right of *na* the following query syntax was used: [word="na" & tag="prep.\*"] [tag="subst.\*"]. Analogously, the left context was examined by using [tag="subst.\*"] [word="na" & tag="prep.\*"]. The tables will present the twenty most frequent nouns for each condition.

Ranking	Word Form	Frequency	Frequency per Mil-
nanking	VVOIG FOITI	rrequericy	lion
1	na Ukrainie	338	441.53
2	na to	214	279.55
3	na temat	119	155.45
4	na świecie	118	154.14
5	na tym	113	147.61
6	na rzecz	95	124.10
7	na Krymie	86	112.34
8	na rynku	84	109.73
9	na razie	84	109.73
10	na początku	80	104.50
11	na Majdanie	79	103.20
12	na przykład	77	100.59
13	na poziomie	73	95.36
14	na terenie	53	69.23

15	na Ukrainę	51	66.62
16	na antenie	49	64.01
17	na czele	48	62.70
18	na podstawie	45	58.78
19	na lata	44	57.48
20	na co	42	54.87

Table 16: The Right Context of 'na' 2013-2014. Total Number of Hits: 7,339.

Ranking	Word Form	Frequency	Frequency per Mil- lion
1	względu na	132	172.43
2	wpływ na	71	92.75
3	sytuacji na	53	69.23
4	uwagę na	34	44.41
5	pieniędzy na	28	36.58
6	odpowiedzi na	28	36.58
7	szanse na	26	33.96
8	pieniądze na	26	33.96
9	szansę na	25	32.66
10	roku na	25	32.66
11	czas na	25	32.66
12	wpływu na	22	28.74
13	szans na	21	27.43
14	to na	20	26.13
15	uwagi na	18	23.51
16	odpowiedzią na	18	23.51
17	UE na	18	23.51
18	Polski na	18	23.51
19	zgodę na	17	22.21
20	wydatki na	17	22.21

Table 17: The Left Context of 'na' in the 2013-2014. Total Number of Hits: 2,297.

Ranking	Word Form	Frequency	Frequency per Mil- lion
1	na Ukrainie	258	363.23

2	na to	211	297.06
3	na rynku	105	147.83
4	na świecie	101	142.19
5	na temat	99	139.38
6	na rzecz	83	116.85
7	na wschodzie	81	114.04
8	na tym	79	111.22
9	na razie	76	107.00
10	na poziomie	67	94.33
11	na przykład	66	92.92
12	na początku	66	92.92
13	na szefa	61	85.88
14	na terenie	60	84.47
15	na Rosję	56	78.84
16	na antenie	55	77.43
17	na czele	49	68.99
18	na prezydenta	46	64.76
19	na co	40	56.31
20	na Ukrainę	40	56.31

Table 18: The Right Context of 'na' 2014-2015. Total Number of Hits:7,012.

Ranking	Word Form	Frequency	Frequency per Mil- lion
1	względu na	338	163.31
2	wpływ na	214	95.73
3	Tuska na	119	76.02
4	szanse na	118	57.72
5	sytuacji na	113	45.05
6	uwagę na	95	43.64
7	to na	86	43.64
8	konfliktu na	84	42.24
9	szans na	84	40.83
10	roku na	80	36.60
11	odpowiedzi na	79	36.60
12	Rosji na	77	36.60
13	euro na	73	33.79

14	pieniędzy na	53	30.97
15	kandydatów na	51	29.57
16	wydatki na	49	28.16
17	czas na	48	28.16
18	szansę na	45	26.75
19	pieniądze na	44	26.75
20	zgodę na	42	25.34

Table 19: Left Context of 'na' 2014-2015. Total Number of Hits. 4,296.

Ranking	Word Form	Frequency	Frequency per Mil- lion
1	na to	221	309.00
2	na świecie	106	148.21
3	na razie	102	142.62
4	na tym	96	134.23
5	na temat	94	131.43
6	na przykład	81	113.25
7	na rzecz	78	109.06
8	na początku	74	103.47
9	na poziomie	58	81.10
10	na czele	56	78.30
11	na Ukrainie	55	76.90
12	na granicy	52	72.71
13	na Węgrzech	51	71.31
14	na Zachodzie	50	69.91
15	na terenie	49	68.51
16	na rynku	41	57.33
17	na podstawie	38	53.13
18	na pytanie	36	50.34
19	na co	36	50.34
20	na antenie	33	46.14

Table 20: Right Context of 'na' 2015-2016. Total Number of Hits: 6,211.

Ranking	Word Form	Frequency	Frequency per Mil- lion
1	względu na	102	142.62
2	wpływ na	37	51.73

3	uwagę na	28	39.15
4	roku na	28	39.15
5	odpowiedź na	25	34.95
6	raz na	24	33.56
7	pieniądze na	24	33.56
8	odpowiedzi na	24	33.56
9	PiS na	24	33.56
10	to na	23	32.16
11	czas na	22	30.76
12	szansę na	21	29.36
13	Polski na	18	25.17
14	zgody na	16	22.37
15	euro na	16	22.37
16	atak na	16	22.37
17	miejsce na	15	20.97
18	ludzi na	15	20.97
19	dnia na	15	20.97
20	wszystkim na	14	19.57

Table 21: Left Context of 'na' 2015-2016. Total Number of Hits: 3,611.

Ranking	Word Form	Frequency	Frequency per Mil- lion
1	na to	239	302.55
2	na rzecz	121	153.17
3	na świecie	115	145.58
4	na tym	110	139.25
5	na temat	109	137.98
6	na razie	94	118.99
7	na czele	88	111.40
8	na przykład	82	103.80
9	na początku	68	86.08
10	na poziomie	59	74.69
11	na Ukrainie	53	67.09
12	na Wyspach	52	65.83
13	na co	46	58.23
14	na rynku	44	55.70

15	na ulice	42	53.17
16	na terenie	41	51.90
17	na Zachodzie	40	50.64
18	na Węgrzech	40	50.64
19	na prezydenta	39	49.37
20	na podstawie	39	49.37

Table 22:Right Context of 'na' 2016-2017. Total Number of Hits: 6,884.

Ranking	Word Form	Frequency	Frequency per Mil- lion
1	względu na	102	129.12
2	wpływ na	56	70.89
3	odpowiedzi na	40	50.64
4	uwagę na	28	35.44
5	Tuska na	28	35.44
6	szanse na	24	30.38
7	dnia na	24	30.38
8	czas na	23	29.12
9	wpływu na	22	27.85
10	roku na	21	26.58
11	atak na	20	25.32
12	zgody na	19	24.05
13	uwagi na	19	24.05
14	pieniądze na	19	24.05
15	Polski na	19	24.05
16	odpowiedź na	18	22.79
17	to na	17	21.52
18	PiS na	17	21.52
19	raz na	16	20.25
20	miejsca na	15	18.99

Table 23: Left Context of 'na' 2016-2017. Total Number of Hits: 3,934.

Ranking	2013-2014	2014-2015	2015-2016	2016-2017
1	na Ukrainie	na Ukrainie	na to	na to
2	na to	na to	na świecie	na rzecz
3	na temat	na rynku	na razie	na świecie

4	na świecie	na świecie	na tym	na tym
5	na tym	na temat	na temat	na temat
6	na rzecz	na rzecz	na przykład	na razie
7	na Krymie	na wschodzie	na rzecz	na czele
8	na rynku	na tym	na początku	na przykład
9	na razie	na razie	na poziomie	na początku
10	na początku	na poziomie	na czele	na poziomie
11	na Majdanie	na przykład	na Ukrainie	na Ukrainie
12	na przykład	na początku	na granicy	na Wyspach
13	na poziomie	na szefa	na Węgrzech	na co
14	na terenie	na terenie	na Zachodzie	na rynku
15	na Ukrainę	na Rosję	na terenie	na ulice
16	na antenie	na antenie	na rynku	na terenie
17	na czele	na czele	na podstawie	na Zachodzie
18	na podstawie	na prezydenta	na pytanie	na Węgrzech
19	na lata	na co	na co	na prezydenta
20	na co	na Ukrainę	na antenie	na podstawie

Table 24. Right Contexts of 'na' 2013-2017.

Ranking	2013-2014	2014-2015	2015-2016	2016-2017
1	względu na	względu na	względu na	względu na
2	wpływ na	wpływ na	wpływ na	wpływ na
3	sytuacji na	Tuska na	uwagę na	odpowiedzi na
4	uwagę na	szanse na	roku na	uwagę na
5	pieniędzy na	sytuacji na	odpowiedź na	Tuska na
6	odpowiedzi na	uwagę na	raz na	szanse na
7	szanse na	to na	pieniądze na	dnia na
8	pieniądze na	konfliktu na	odpowiedzi na	czas na
9	szansę na	szans na	PiS na	wpływu na
10	roku na	roku na	to na	roku na
11	czas na	odpowiedzi na	czas na	atak na
12	wpływu na	Rosji na	szansę na	zgody na
13	szans na	euro na	Polski na	uwagi na
14	to na	pieniędzy na	zgody na	pieniądze na
15	uwagi na	kandydatów na	euro na	Polski na

16	odpowiedzią na	wydatki na	atak na	odpowiedź na
17	UE na	czas na	miejsce na	to na
18	Polski na	szansę na	ludzi na	PiS na
19	zgodę na	pieniądze na	dnia na	raz na
20	wydatki na	zgodę na	wszystkim na	miejsca na

Table 25: Left Contexts of 'na' 2013-2017.

The third analytical step examined two-word clusters in the right and left context of *na*. It was found that punctuation marks frequently occurred in the third position. In order to exclude these marks, the following query syntaxes were identified as useful: [word="na" & tag="prep.\*"] [] [word!="," & word] and [word!="." & word!=","] [] [word="na" & tag="prep.\*"]. These clusters thus contain the preposition *na* which is either followed or preceded by any word. The third word in both contexts is also any word except for the quotation marks "." and ",". The clusters to the right are the first ones to be presented.

Ranking	Cluster	Cluster Frequency	
1	na całym świecie	30	39.19
2	na pewno nie	26	33.96
3	na ten temat	21	27.43
4	na Bliskim Wscho- dzie	20	26.13
5	na rynku pracy	15	19.59
6	na lata 2014	15	19.59
7	na co dzień	15	19.59
8	na ten cel	14	18.29
9	na antenie TVP	14	18.29
10	na razie nie	12	15.68
11	na początku lat	11	14.37
12	na naszych oczach	10	13.06
13	na lata 2014-2020	10	13.06
14	na antenie TVN24	9	11.76
15	na Zachodnim Brzegu	9	11.76
16	na wschodzie kraju	8	10.45

17	na terenie Unii	8	10.45
18	na szczycie Part- nerstwa	8	10.45
19	na pierwszym miejscu	8	10.45
20	na kijowskim Maj- danie	8	10.45

Table 26: Right Cluster of 'na' 2013-2014. Total Number of Hits: 7,808.

Ranking	Cluster	Frequency	Frequency per Mil-
1	ze względu na	96	125.41
2	bez względu na	28	36.58
3	opiera się na	16	20.90
4	sobie pozwolić na	13	16.98
5	nie tylko na	12	15.68
6	znajduje się na	11	14.37
7	zdecydował się na	10	13.06
8	może liczyć na	10	13.06
9	zwrócić uwagę na	9	11.76
10	przede wszystkim na	9	11.76
11	dzieje się na	9	11.76
12	zgodził się na	8	10.45
13	się dzieje na	8	10.45
14	Unii Europejskiej na	8	10.45
15	opierała się na	7	9.14
16	nie ma na	7	9.14
17	zgodzi się na	6	7.84
18	się jednak na	6	7.84
19	realny wpływ na	6	7.84

20	powołując się na	6	7.84

Table 27: Left Clusters of 'na' 2013-2014. Total Number of Hits: 8,800.

Ranking	Cluster	Frequency	Frequency per Mil-
1	na wschodzie Ukrainy	37	52.09
2	na szefa Rady	28	39.42
3	na ten temat	19	26.75
4	na ten cel	19	26.75
5	na całym świecie	18	25.34
6	na stanowisko szefa	17	23.93
7	na co dzień	16	22.53
8	na antenie TVN24	15	21.12
9	na przewodniczące- go Rady	14	19.71
10	na Morzu Śródziemnym	14	19.71
11	na rynku pracy	12	16.89
12	na pewno nie	12	16.89
13	na antenie radiowej	12	16.89
14	na antenie TVP	12	16.89
15	na wysokim pozio- mie	11	15.49
16	na tym stanowisku	11	15.49
17	na początku lat	11	15.49
18	na szefa Komisji	10	14.08
19	na wschód od	9	12.67
20	na stanowisku premiera	9	12.67

Table 28: Right Clusters of 'na' 2014-2015. Total Number of Hits: 7,421.

Ponking	Panking Chuster	Fraguenes/	Frequency per Mil-
Ranking	Cluster	Frequency	lion

1	ze względu na	75	105.59
2	Donalda Tuska na	31	43.64
3	bez względu na	25	35.20
4	przede wszystkim na	15	21.12
5	powołując się na	13	18.30
6	nie tylko na	12	16.89
7	nie ma na	10	14.08
8	się zgodzić na	9	12.67
9	sankcje nałożone na	9	12.67
10	mln euro na	9	12.67
11	zdecyduje się na	8	11.26
12	się już na	8	11.26
13	przekłada się na	8	11.26
14	opiera się na	8	11.26
15	ma szans na	8	11.26
16	dzieje się na	8	11.26
17	Ze względu na	8	11.26
18	Radosława Sikor- skiego na	8	11.26
19	znajduje się na	7	9.86
20	zgodzi się na	7	9.86

Table 29: Left Clusters of 'na' 2014-2015. Total Number of Hits: 8,270.

Ranking	Cluster	Frequency	Frequency per Mil- lion
1	na Bliskim Wscho- dzie	29	40.55
2	na całym świecie	27	37.75
3	na pewno nie	26	36.35
4	na arenie	23	32.16

	międzynarodowej		
5	na co dzień	18	25.17
6	na ten temat	15	20.97
7	na własną rękę	14	19.57
8	na razie nie	13	18.18
9	na drodze do	13	18.18
10	na terenie Unii	10	13.98
11	na " nie	10	13.98
12	na to stanowisko	9	12.58
13	na antenie TVN24	9	12.58
14	na to nie	8	11.19
15	na początku lat	7	9.79
16	na naszych oczach	7	9.79
17	na głowę mieszkańca	7	9.79
18	na europejskim rynku	7	9.79
19	na dłuższą metę	7	9.79
20	na 12 listopada	7	9.79

Table 30: Right Clusters of 'na' 2015-2016. Total Number of Hits: 6,808.

Ranking	Cluster	Frequency	Frequency per Mil- lion
1	ze względu na	67	93.68
2	bez względu na	21	29.36
3	opiera się na	14	19.57
4	500 zł na	14	19.57
5	powołując się na	12	16.78
6	nie tylko na	12	16.78
7	przede wszystkim na	11	15.38
8	zdecydował się na	9	12.58
9	Unii Europejskiej	9	12.58

	na		
10	zgodził się na	8	11.19
11	nie ma na	8	11.19
12	zwraca uwagę na	7	9.79
13	zgodzi się na	7	9.79
14	sobie pozwolić na	7	9.79
15	przekłada się na	7	9.79
16	nie stać na	7	9.79
17	ma zgody na	7	9.79
18	Ze względu na	7	9.79
19	to odpowiedź na	6	8.39
20	mln euro na	6	8.39

Table 31:Left Clusters of 'na' 2016-2017. Total Number of Hits: 7,497.

Ranking	Cluster	Frequency	Frequency per Mil- lion
1	na całym świecie	34	43.04
2	na Bliskim Wscho- dzie	26	32.91
3	na ten temat	24	30.38
4	na pewno nie	22	27.85
5	na drugą kadencję	20	25.32
6	na co dzień	18	22.79
7	na to nie	16	20.25
8	na rynku pracy	14	17.72
9	na początku lat	13	16.46
10	na tym stanowisku	11	13.92
11	na arenie międzynarodowej	11	13.92
12	na razie nie	10	12.66
13	na antenie Radia	10	12.66

14	na konferencji pra- sowej	9	11.39
15	na wszelki wypad- ek	8	10.13
16	na terenie Unii	8	10.13
17	na szefa Rady	8	10.13
18	na stanowisko szefa	8	10.13
19	na jakiś czas	8	10.13
20	na " nie	8	10.13

Table 32: Right Clusters of 'na' 2016-2017. Total Number of Hits: 7,426.

Ranking	Cluster	Frequency	Frequency per Mil- lion
1	ze względu na	72	91.14
2	bez względu na	21	26.58
3	Donalda Tuska na	19	24.05
4	opiera się na	16	20.25
5	przede wszystkim na	11	13.92
6	nie tylko na	11	13.92
7	zgodził się na	10	12.66
8	przekłada się na	10	12.66
9	nie ma na	10	12.66
10	może liczyć na	9	11.39
11	sobie pozwolić na	8	10.13
12	powołując się na	8	10.13
13	zdecydował się na	7	8.86
14	się też na	7	8.86
15	Ze względu na	7	8.86
16	znalazł się na	6	7.60
17	zgodzić się na	6	7.60
18	skupia się na	6	7.60

19	się zgodzić na	6	7.60
20	się nawet na	6	7.60

Table 33: Left Clusters of 'na' 2016-2017. Total Number of Hits: 8,265.

Ranking	2013-2014	2014-2015	2015-2016	2016-2017
1	na całym świecie	na wschodzie Ukrainy	na Bliskim Wschodzie	na całym świecie
2	na pewno nie	na szefa Rady	na całym świecie	na Bliskim Wschodzie
3	na ten temat	na ten temat	na pewno nie	na ten temat
4	na Bliskim Wschodzie	na ten cel	na arenie międzynarodowej	na pewno nie
5	na rynku pracy	na całym świecie	na co dzień	na drugą kadencję
6	na lata 2014	na stanowisko szefa	na ten temat	na co dzień
7	na co dzień	na co dzień	na własną rękę	na to nie
8	na ten cel	na antenie TVN24	na razie nie	na rynku pracy
9	na antenie TVP	na prze- wodniczącego Rady	na drodze do	na początku lat
10	na razie nie	na Morzu Śródziemnym	na terenie Unii	na tym stan- owisku
11	na początku lat	na rynku pracy	na " nie	na arenie międzynarodowej
12	na naszych oczach	na pewno nie	na to stanowisko	na razie nie
13	na lata 2014- 2020	na antenie radio- wej	na antenie TVN24	na antenie Radia
14	na antenie TVN24	na antenie TVP	na to nie	na konferencji prasowej
15	na Zachodnim Brzegu	na wysokim pozi- omie	na początku lat	na wszelki wypadek
16	na wschodzie kraju	na tym stan- owisku	na naszych oczach	na terenie Unii
17	na terenie Unii	na początku lat	na głowę mieszkańca	na szefa Rady
18	na szczycie Partnerstwa	na szefa Komisji	na europejskim rynku	na stanowisko szefa
19	na pierwszym miejscu	na wschód od	na dłuższą metę	na jakiś czas
20	na kijowskim Majdanie	na stanowisku premiera	na 12 listopada	na " nie

Table 34: Right Clusters of 'na' 2013-2017.

Ranking	2013-2014	2014-2015	2015-2016	2016-2017
1	ze względu na	ze względu na	ze względu na	ze względu na
2	bez względu na	Donalda Tuska na	bez względu na	bez względu na
3	opiera się na	bez względu na	opiera się na	Donalda Tuska na
4	sobie pozwolić na	przede wszystkim na	500 zł na	opiera się na
5	nie tylko na	powołując się na	powołując się na	przede wszystkim na
6	znajduje się na	nie tylko na	nie tylko na	nie tylko na
7	zdecydował się na	nie ma na	przede wszystkim na	zgodził się na
8	może liczyć na	się zgodzić na	zdecydował się na	przekłada się na
9	zwrócić uwagę na	sankcje nałożone na	Unii Europe- jskiej na	nie ma na
10	przede wszystkim na	mln euro na	zgodził się na	może liczyć na
11	dzieje się na	zdecyduje się na	nie ma na	sobie pozwolić na
12	zgodził się na	się już na	zwraca uwagę na	powołując się na
13	się dzieje na	przekłada się na	zgodzi się na	zdecydował się na
14	Unii Europe- jskiej na	opiera się na	sobie pozwolić na	się też na
15	opierała się na	ma szans na	przekłada się na	Ze względu na
16	nie ma na	dzieje się na	nie stać na	znalazł się na
17	zgodzi się na	Ze względu na	ma zgody na	zgodzić się na
18	się jednak na	Radosława Sikorskiego na	Ze względu na	skupia się na
19	realny wpływ na	znajduje się na	to odpowiedź na	się zgodzić na
20	powołując się na	zgodzi się na	mln euro na	się nawet na

Table 35: Left Clusters of 'na' 2013-2017.

The last query examined the context between *na* and *UE*. For doing so, the following query syntax was used: [word="na" & tag="prep.\*"] [] [lemma="UE"]. In order to grasp all word forms of *UE* it was decided to focus in the query on the lemmata. Reiterating from chapter 2.2.2 and 2.2.3, the query syntax is understood as a frame with an empty slot

which can be variably filled. In addition, it was looked at the distribution of the locative and accusative case in such "*UE*-constructions". Since the number of [na\_UE] constructions varied between the corpora, it was decided to limit the overview to the first 15 results.

Ranking	Frame	Frequency	Frequency per Mil-
nanking	Traine   Traine		lion
1	na terenie UE	3	3.92
2	na teren UE	2	2.61
3	na wzór UE	1	1.31
4	na temat UE	1	1.31
5	na szczycie UE	1	1.31
6	na szczeblu UE	1	1.31
7	na realia UE	1	1.31
8	na obywateli UE	1	1.31
9	na negocjacje UE	1	1.31
10	na misji UE	1	1.31
11	na forum UE	1	1.31
12	na determinacji UE	1	1.31
13	na czele UE	1	1.31
14	na bezpieczeństwo UE	1	1.31
15	na arenie UE	1	1.31
16	na Majdanie UE	1	1.31

Table 36: "Synta1x-Frames" 2013-2014. Total Number of Hits: 19.

The POS frequency revealed the following accusative/locative distribution in the 2013-2014 corpus:



Figure 24: POS Frequency for 'na' 2013.2014.

Ranking	Frame	Frequency	Frequency per Mil-
1	na terenie UE	7	9.86
2	na forum UE	4	5.63
3	na szczycie UE	3	4.22
4	na terytorium UE	2	2.82
5	na rynkach UE	2	2.82
6	na tle UE	1	1.41
7	na teren UE	1	1.41
8	na szczyt UE	1	1.41
9	na salonach UE	1	1.41
10	na rzecz UE	1	1.41
11	na rynki UE	1	1.41
12	na poziomie UE	1	1.41
13	na politykę UE	1	1.41
14	na obszarze UE	1	1.41
15	na nerwach UE	1	1.41
16	na linii UE	1	1.41
17	na komisarza UE	1	1.41
18	na komisarz UE	1	1.41
19	na czele UE	1	1.41

Table 37: "Syntax-Frames" 2014-2015. Total Number of Hits: 32.

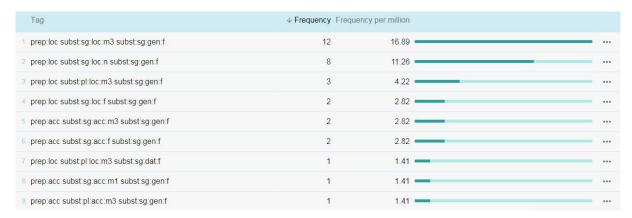


Figure 25: POS Frequency for 'na' 2014-2015.

Ranking	Frame	Frequency	Frequency per Mil- lion
	na forum UE	5	6.99
	na polityce UE	2	2.80
	na terytorium UE	1	1.40
	na teren UE	1	1.40
	na obrzeżach UE	1	1.40
	na kraje UE	1	1.40
	na korzyść UE	1	1.40

Table 38: "Syntax-Frames" 2015-2016. Total Number of Hits: 12.

Tag	↓ Frequency	Frequency per million	
1 prep:loc substsg:loc:n substsg:gen:f	6	8.39	
2 prep:loc subst:sg:loc:f subst:sg:gen:f	2	2.80	
3 prep:loc subst:pl:loc:n subst:sg:gen:f	1	1.40	
4 prep:acc subst:sg:acc:m3 subst:sg:gen:f	1	1.40	
5 prep:acc subst:sg:acc:f subst:sg:gen:f	1	1.40	
6 prep:acc subst:pl:acc:m3 subst:sg:gen:f	1	1.40	

Figure 26: POS Frequency for 'na' 2015-2016.

Ranking	Frame	Frequency	Frequency per Mil- lion
1	na szczycie UE	2	2.53
2	na poziomie UE	2	2.53
3	na terytorium UE	1	1.27
4	na terenie UE	1	1.27

5	na temat UE	1	1.27
6	na rzecz UE	1	1.27
7	na rynek UE	1	1.27
8	na przebudowę UE	1	1.27
9	na pasku UE	1	1.27
10	na opuszczenie UE	1	1.27
11	na nową UE	1	1.27
12	na negocjacje UE	1	1.27
13	na komisarza UE	1	1.27
14	na ingerencję UE	1	1.27
15	na forum UE	1	1.27

Table 39: "Syntax-Frames" 2016-2017. Total Number of Hits: 17.

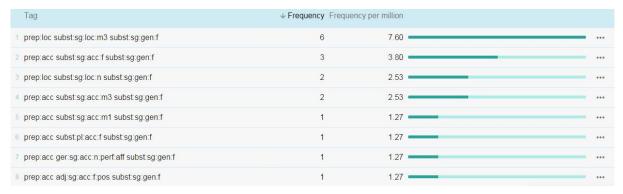


Figure 27: POS Frequency for 'na' 2016-2017.

Ranking	2013-2014	2014-2015	2015-2016	2016-2017
1	na terenie UE	na terenie UE	na forum UE	na szczycie UE
2	na teren UE	na forum UE	na polityce UE	na poziomie UE
3	na wzór UE	na szczycie UE	na terytorium UE	na terytorium UE
4	na temat UE	na terytorium UE	na teren UE	na terenie UE
5	na szczycie UE	na rynkach UE	na obrzeżach UE	na temat UE
6	na szczeblu UE	na tle UE	na kraje UE	na rzecz UE
7	na realia UE	na teren UE	na korzyść UE	na rynek UE
8	na obywateli UE	na szczyt UE		na przebudowę UE
9	na negocjacje UE	na salonach UE		na pasku UE

10	na misji UE	na rzecz UE	na opuszczenie UE
11	na forum UE	na rynki UE	na nową UE
12	na determinacji UE	na poziomie UE	na negocjacje UE
13	na czele UE	na politykę UE	na komisarza UE
14	na bezpieczeństwo UE	na obszarze UE	na ingerencję UE
15	na arenie UE	na nerwach UE	na forum UE
16	na Majdanie UE	na linii UE	
17		na komisarza UE	
		na komisarz UE	
		na czele UE	

Table 40: [Na] [] [UE] constructions 2013-2017.

# 5.2.2 Description and Interpretation

Moving systematically along the results, the first finding which is made apparent is that the preposition *na* governs more frequently the accusative case than the locative case. By way of illustration, the usage of *na* in the accusative case was found to occur with a relative frequency of ~60% across all corpora. When faced with such a finding in a cognitive oriented discourse study, its is worth looking and the semantic contribution of each of both cases. This approach is just in line with the core premise of cognitive grammar, namely that each grammatical form carries meaning (Bacz 1997 :22). The commonly accepted meaning of the accusative is outlined by Dąbrowska in the following way:

Prototypically, the accusative case is used to mark the patient of the action, i.e. a participant that is manipulated by the agent in the course of the action and undergoes a physical change of state as a result [...]. This basic sense is extended to cover a very wide range of situations. For example, the accusative case can be used to designate an entity that is acted on by the agent, but does not undergo a change of state [...], a participant that is affected -non-physically [...], or any person or object that is the passive target of the agent's action [...] (Dabrowska: 1997: 98).

This deep case interpretation of the accusative and the relative frequency of the accusative *na* can be tentatively described as being in line with previous findings suggesting an overall preference for hierarchical structures. However, it requires a reference corpus to determine if the relative dominance of the accusative *na* is discourse specific or not.

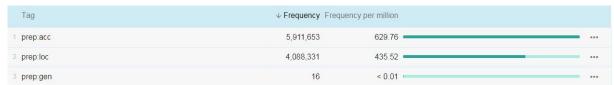


Figure 28: Overall Distribution of Locative and Accusative 'na' in a Reference Corpus.

Importantly, the above illustration shows that the accusative na and the locative na are similarly distributed as in the Polish EU discourse corpus. The dominance of the accusative na can thus not be interpreted as unfolding any specific meaning in the discourse under investigation. The same applies hence to the usage of the locative na. The less frequent occurrence of the spatial deep case can be explained with the occurrence of the preposition po ("on"). As na it can be translated with "on". Yet both propositions differ in respect to the state of the object which they govern. Whilst na refers to unmoving objects, po refers to moving objects. Interestingly, it can be seen from figure 28 that na occurs also in the genitive case. Despite its low frequency, a follow-up analysis could reveal if this finding points to any peculiarities which might be of interest for cognitive linguists. Otherwise, it can be, for instance, speculated that the genitive na reflects a particular dialectological feature. A close investigation of the concordances could shed light on this assumption. Be that as it may, the findings do not suggest any noticeable discrepancies. The 40%:60% ratio appears to be a recurrent and stable rate of distribution regarding na. Still, it should be considered that a different data basis covering different discourse topics could reveal other ratios.

Now, turning to the neighboring nouns of *na* it is recommendable to focus on the tables 24 and 25. Beginning with the right context nouns, it can be seen from table 24 that most nouns occur across the four corpora. Concretely, 15 of 20 nouns can be found in each corpus. As with the keywords, they differ mainly with respect to the ranking. Asking the same question as few chapters ago, namely, "What changed in terms of ranking" one can hence easily grasp major and minor changes. However, in order to be in accordance with the scope of this thesis, the major changes need to be defined more precisely. Thus, it will be looked at those phrases which exhibit a difference of at least ten points between the lowest and the highest rank. Those nouns to which this applies are highlighted in bold.

As the table suggests, it can be stated that *na* in connection to *Ukrainie* ('Ukraine') decreased in the post-election period. This finding is in accordance with the results obtained in the corpus-driven keyword extraction. This evidence is particularly striking since this phrase seems to exhibit a certain stability prior to the elections as well as afterwards. It can be hypothesized that the decline of the 'Ukraine-discourse' is also reflected in the

use of the prepositional phrase with *na*. The second finding to which the above-stated definition applies is *na rynku* ('on market'). This combination has increased in ranking prior to the election and decreased afterwards. 'Market', understood both metaphorically and literally, conveys economic connotations. A follow-up question could examine if there was a general tendency of economic terms in the (EU) discourse to decrease after the election. A possible interpretation of the herein presented development could be that the decrease of this prepositional phrase reflects its superimposition with other prepositional phrases which are more in line with concrete political events in this period. Again, this assumption could be put forward with a broader database.

The same applies to the prepositional phrase *na czele* ('at the spearhead'). It can be supposed that this phrase conveys also certain hierarchical connotations. This assumption is backed by idiomatic expressions such as *stać na czele stawki* ('to lead the field'). It inevitably points to someone or something that leads and someone or something that is led. The question whether this prepositional phrase may be an indicator of a collective yearning for authority is a question best to be further analyzed socio-psychologically or within the cultural studies. Otherwise, occurring within this limited database this assumption remains speculative. Within the Polish EU discourse, however, this prepositional phrase can also point to (presidential) elections. When elected the elected is certainly expected to 'lead the field'. Thus, it can be assumed that this phrase correlates with certain elections in Poland or across the EU. However, to gain certainty about the usage of *na czele* the context needs to be further analyzed.

Turning to those prepositional phrases that vanished, one will again find evidence for the slow but steady thinning of the discourse on Ukraine, respectively the annexation of Crimea. The disappearance of *na Krymie* ('on Crimea'), *na Majdanie* ('on Maidan'), and the accusative prepositional phrase *na Ukraine* ('at/on Ukraine') point to such a discursive shift. Another finding in the 2013-2014 corpus that disappeared is the phrase *na lata* ('for years'). This allows to assume that the combination of duration and *na* vanished from discourse. In danger of overinterpretation it can be supposed that what lies behind such a development is a decline of sustainable and long-running commitments. Additionally, it conveys the assumption that a certain kind of 'Looking forward' diminished. However, such an interpretation can only become valid within a broader and multidisciplinary investigation. Remarkably, the above-stated decline of the 'Ukraine-discourse' becomes further specified when considering the prepositional phrases *na wschodzie* ('in the East'). When looking closely, one will see that this phrase disappears after its occurrence in the 2014-

2015 corpus. The same applies to the phrase na Rosję ('at/on Russia'). On the other hand, it can be seen from the 2015-2016 and 2016-2017 corpus that the prepositional phrase na Zachodzie ('in the West') pops up. This provides again evidence for the hypotheses of a discursive shift. In this case, it becomes also evident in the usage of geographical relations expressed with na. In short, it can be speculated that the 'discursive view' moves from the 'East' to the 'West'. Crucially, this consideration is contradictory to the occurrence of the prepositional phrase na Wegrzech ('in Hungary'). Instead of assuming a sheer shift from the East to the West, it can be hypothesized that the focus shifted towards events that effected various 'participants'. Additionally, the popping up of na granicy ('on the border') allow to assume that the media coverage dealt with the 'refugee crisis' and the opening of the Hungarian border in 2015. The co-appearance of 'the West', 'on the border', and 'Hungary' recalls the vibrant debates about the political discrepancies between the EU and the Visegrád Group regarding the 'influx of refugees'. The same discursive topic can be applied to the prepositional phrases na Wyspach ('on the islands') and na ulice ('on the street'). Whilst 'on the islands' can be supposed to relate to the islands in the Mediterranean Sea on which numerous refugees arrived. As applicable to the vast majority of the herein presented assumptions, a broader database could solidify or reject this consideration. Na ulice, in turn, may reflect, for instance the media coverage of anti-refugee protests as they crystallized in the form PEGIDA, or point to the protests which took place in Poland in order to protect the constitution and the independence of Polish courts. Of course, a deeper (cluster) analysis could demonstrate the concrete usage of 'on the street'.

The remaining phrases are to a large part idiomatic or not noticeably semantically 'loaded'. For instance, *na* occurs frequently with a demonstrative pronoun as *to* or *tym*. Other phrases are geographical in nature as *na terenie* ('on the terrain') or *na świecie* ('in the world'). Such connections are relatively unsurprising due to *na'* slocative function. Phrases like *na początku* ('in the beginning') or *na przykład* ('for instance') are fixed discursive constructions which do not unfold any semantic peculiarities in the Polish EU discourse.

Tackling the left context, one will notice that most nouns on the left recur in each corpus. Yet, surprisingly, it can be deduced from table 25 that numerous nouns were subjected to a different case marking or exhibit a decrease of the number of case markings after the election or in the course of time. This observation holds true for the following nouns which are colored:

Ranking	2013-2014	2014-2015	2015-2016	2016-2017
1	względu na	względu na	względu na	względu na
2	wpływ na	wpływ na	wpływ na	wpływ na
3	sytuacji na	Tuska na	uwagę na	odpowiedzi na
4	uwagę na	szanse na	roku na	uwagę na
5	pieniędzy na	sytuacji na	odpowiedź na	Tuska na
6	odpowiedzi na	uwagę na	raz na	szanse na
7	szanse na	to na	pieniądze na	dnia na
8	pieniądze na	konfliktu na	odpowiedzi na	czas na
9	szansę na	szans na	PiS na	wpływu na
10	roku na	roku na	to na	roku na
11	czas na	odpowiedzi na	czas na	atak na
12	wpływu na	Rosji na	szansę na	zgody na
13	szans na	euro na	Polski na	uwagi na
14	to na	pieniędzy na	zgody na	pieniądze na
15	uwagi na	kandydatów na	euro na	Polski na
16	odpowiedzią na	wydatki na	atak na	odpowiedź na
17	UE na	czas na	miejsce na	to na
18	Polski na	szansę na	ludzi na	PiS na
19	zgodę na	pieniądze na	dnia na	raz na
20	wydatki na	zgodę na	wszystkim na	miejsca na

Table 41: Nouns with Differences in Case Marking 2013-2017.

Uwageluwagi ('attention'), pieniądze/pieniędzy ('money'), szanse/szansę/szans ('opportunity/opportunities'), and zgode/ zgody ('agreement') allow to identify a cesura between the pre-election and post-election corpora. The most striking developments can be seen when looking at 'money' and 'opportunity'. Whilst 'money' occurred in the pre-election corpora in both the nominative plural and the genitive plural, the post-election corpora entail only the nominative case. Without a deeper and broader analysis, one is limited to speculative hypotheses. Such a hypothesis might be that 'money' became in a way disassociated from the deep roles of the 'possessor' or 'giver'. In EU discourse, money is often related to EU subsidies, for instance. The shift towards the sheer nominative can, frame-semantically, reflect the EU's movement towards becoming a default value which does not require and further explication. The EU's role as being a potential donor would hence be seen as a naturalness. However, this interpretation would need to be checked by further quantitative and qualitative research and by closer look at the grammatical relations in Polish. A sober interpretation could be also that the decrease of different case markings for the noun 'money' reflects generally decreasing importance of the concept as such. This is also applicable to the case of 'opportunity'. Having occurred in the preelection corpora in the nominative plural, the genitive plural, the accusative singular and the accusative plural, respectively the nominative plural (both take the surface form *szanse*), 'opportunities' seem to have decreased to the accusative singular in the 2015-2016 corpus and to its plural form (or to the nominative plural) in the 2016-2017 corpus. What can be deduced from the herein presented data is a decline of references to 'opportunities' next to *na*. A follow-up question could be if this finding is paralleled in other contexts since the semantics of 'opportunity' conveys an explicitly positive touch as the FrameNet entry suggests:

An Agent has a choice of whether or not to participate in some Desirable\_event because of an Opportunity, a situation not completely under the Agent's control and usually of a limited duration.

Figure 29: FrameNet Entry of "Opportunity".

The most crucial element in this definition is 'desirable'. Reiterating from the chapter on keywords, in can be assumed that such a decline contradicts, or rather, weakens cognitive routines. In short, at least in this particular discourse and this particular naconstruction, the conflations of 'desirable' and the EU can be assumed to have decreased. Again, this interpretation demands a quantitative and qualitative follow-up study, in order to be approved or rejected. Further, 'attention' turned from being marked in both the accusative singular and the nominative, respectively genitive plural to being marked only in the accusative. However, this reduction did already take place in the 2014-2015 corpus. Hence, to assume a correlation or a causal relationship with the election lacks any rationale. The case is different with 'agreement'. When looking at table 42, one will notice that 'agreement' used to be marked in the accusative singular prior to the election. In the time afterwards it was used in the form of zgody which reflects potentially four different case marking (nominative plural, genitive singular, accusative plural, or vocative plural). Since this finding requires a more profound identification of the case marking after the election, it cannot be subjected to any deeper interpretation. A cluster analysis, for instance, could shed light on the type of change which is visible in the table.

Turning the questions "What vanished" and "What surfaced" it is also possible to draw a line between the pre-election and post-election corpora. For instance, *sytuacji na* ('situation on/in') suddenly disappeared after election from the overview. Of course, 'situation' can refer to a number of situations. However, when looking at previous findings, it can be speculated that 'situation' referred often to the situation in Crimea or Maidan. This would be also in line with the alleged East to West shift of foci. Yet, the concrete context of 'situation' needs to be investigated in order to allow more valid assumptions. *Wydatki* ('expenses'), in turn, provide a clearer ground for interpretations. Its evaporation in the

post-election corpora leads, repeatedly, to the speculation that terms conveying economic connotations declined after the election (cf. p. 101). A follow-up question could investigate in which argumentative contexts the notion of 'expense' occurred prior to the election. Knowledge about this context is essential since this may allow to analyze its disappearance more profoundly. In addition, one could assume that the linkage of the EU with a major representative of economic terminology decreased in na constructions. A followup research would need to examine whether this points to a general tendency of 'deeconomizing' discourse, at least linguistically. To conclude the paragraph on those nouns that vanished prior to the election, the reader shall be referred to the nouns UE, Rosji ('Russia'), konfliktu ('conflict'), and kandydatów ('candidates'). These pre-election nouns popped up only once in the whole discourse corpus. They can be read as reflections of 'discourse booms' that were expressed in the left context of na. For instance, kandydatów may either mirror the reflections on the 2014 EU parliament elections, or the Polish presidential elections that lay ahead in 2015. The former could be also used to explain the occurrence and evaporation of UE. 'Russia' and 'conflict', in turn, can be tentatively linked to the 'Ukrainian-crisis'. It is noteworthy, that the Polish media referred, similar to the German media, to the annexation of Crimea by using the notion 'Ukrainianconflict' (konflikt na Ukrainie). The disappearance of 'Russia' and 'conflict' could indicate the decreasing importance of this topic or its superimposition with another one.

Regarding now those terms that surface after the election one comes across *PiS*, *atak* ('attack'), and *miejsce/miejsca* ('space' or 'place' in the nominative singular/plural, accusative singular/plural, vocative singular/plural). The appearance of PiS can be likely related to the electoral victory of the PiS party. However, it is surprising that in preelection corpora *na* did not appear in connection to any party. This allows to assume that the PiS' electoral victory entered this linguistic structure more forcefully than previous parties did on the long run. Importantly, though, it can be seen that PiS declined again in the 2016-2017 corpus. A follow-up study could determine whether other parties exhibited a similar movement directly after an electoral victory. Put differently, the question is whether this phenomenon is singular or not. Concerning 'attack', on the other hand, one is tempted to associate its appearance with the number of terroristic attacks in Europe in 2015 (cf. p. 48). For instance, the strong medialization of these attacks can account for its appearance in this structure. Yet, again, this hypothesis requires a broader database. Depending on the contexts, it is, for example, also conceivable that 'attack' was used as criticism of the PiS and the constitutional court reform. To concretize the usage of 'attack'

one inevitably needs to look closer at the corpus concordances. The last noun in this array, 'place', is more difficult to link to any political event or problem. One can thus only speculate that the popping up of 'place' mirrors an intensification of spatial references. In any case, *miejsce* requires to be envisaged contextually, since it is polysemous by nature.

Other nouns in the corpora demonstrate an irregular movement. For instance, *Polski* ('Poland') appears in the 2013-2014 corpus, vanishes in the next period and surfaces again after the election. A follow-up investigation could examine whether this finding in linked to the alleged rise of national aspirations as speculated previously (cf. chapter 4.1.2). The occurrence of *euro* ('Euro'), on the other hand, can point to the notification or realization of the EU financial perspective in 2014. In any case, the data situation is certainly insufficient for grasping the contexts in which 'Euro' occurred. In general, each of the here stated hypotheses can gain a different touch when envisaged in reference to a broader database and additional analytical foci.

The same holds true for the cluster analyses. Yet, since clusters are understood herein as two-word units, they provide a broader basis for semantic reflections. The first observation when looking at table 34 is that only 5 of 20 clusters recurred. This is not particularly surprising since an increasing number of potential slots goes hand in hand with an increasing number of fillers. Those clusters which recur are mainly fixed expressions such as *na pewno nie* ('surely not') or *na co dzień* ('day to day'). The reader shall bear in mind that such expressions can be subjected to cognitive linguistic considerations and more profound discussions. However, in order to be in accordance with the requirements of this thesis their examination will not constitute any focal point. Rather the focus is on clusters which directly refer to particular sub-discourses.

In general, three major observations can be made. First, the rising prominence of *na Bliskim Wsychodzie* ('in Middel-East') in combination with a decrease or evaporation of clusters such as *na wschodzie Ukrainy* ('in the East of Ukraine') or *na kijowskim Majdanie* ('on the Kiev Maidan') tempts to assume a shift of foci. When looking at the data one can see that the discourse on the 'Middle-East' reached the first or second positions in the ranking after the election. It is likely that the notion of 'Middle-East' entered discourse in light of the 'refugee crisis' in 2015. Frame-semantically, one can speculate that the 'Middle-East' was, inter alia, used as a filler in the slots [Origin] (hence: the refugee's geographic origin) or [Cause] (hence: 'war in the Middle-East'] of an overall [Refugee\_Crisis] frame. It should be left to further investigation if the increase of 'Middle-East' shows any connection to the electoral victory and government of the PiS party. The fact that it is

widely known that the PiS party advocates an anti-refugee policy (Jaskułowski 2019: 48), does not allow any concrete conclusions about the relationship between the PiS and the occurrence of potential frame elements of the [refugee\_crisisi] frame. This requires a broader textual analysis. However, when adopting a cognitive approach to discourse, the occurrence and the disappearance of entities allow assumptions about the (changing) semantic content of concepts. Occurring in the EU discourse, one can thus hypothesize that the EU became more and more associated with frames surrounding the 'Middle-East' than with concepts relating to the annexation of Crimea. Returning to the two-directional concept of cognition, this shift (if scientifically approved) shapes the overall perception of the EU. This perceptual shift can only be sketched when investigating the related concepts and its evaluative aspects.

The whole political debate on the 'Middle-East' appears in a different light when noticing the popping up of na arenie międzynarodowej ('in the international arena'). This finding is striking due to multiple reasons. According to the Mirriam-Webster online dictionary, 'arena' has, inter alia, the following meaning: a) an enclosed area used for public entertainment, b) a sphere of interest, activity, or competition, and c) a place or situation for controversy. Of course, there is no evidence that the 'Middle-East' and the 'international arena' have been conflated. However, it can be supposed that both concepts might have occurred in neighborhood to each other. The occurrence of 'international arena' in the EU discourse allows to assume a kind of theatricalization of political events. Interestingly, the notion of dramatization or theatricalization is by far no novelty in the field of frame semantic discourse analysis. For instance, Mollica and Wilke (2017) identified the [Perfoming\_arts] frame as a main pattern of conceptualization in the Italian and German discourse on migration. Their research demonstrated that the EU was often conceptualized as a passive spectator watching the arrival and drowning of 'Middle-East' refugees in the Mediterranean Sea<sup>38</sup>. A follow-up research might thus check if the Polish discourse on migration contains similar frames. Additionally, it could be examined if the cluster na naczych oczach ('before our eyes') (2013-2014 and 2015-2016) was also connected in any way to the discourse on 'Middle-East', respectively on the 'refugee crisis'. 'Before our eyes' conveys a meaning which can be also linked to the Performing\_arts frame, since it points to the role of the viewer/spectator, or, put differently, to the core frame-element 'audience. Hence, it is conceivable that its oc-

<sup>&</sup>lt;sup>38</sup> Note that the cluster *na Morzu Śródziemnym* ('on the Mediterranean Sea') does also pop up in the herein presented corpus. Namely, in the years 2014-2015.

currence was interrelated via the Performing\_arts frame to the other clusters or frames just mentioned. The other definitions found for 'arena', notably those linked to 'competition' and 'controversy', convey rather a (politically) tense context. Again, linked to the discourse on the 'Middle-East' and those which are interrelated one in tempted to think on the proxy war in Syria. Due to the battles between Iran and Israel, Turkey and the Kurds, U.S. and Turkey, and Russia and the U.S. (Bremmer 2018) Syria has become indeed an 'international arena' for the military defense of interests. In the Polish EU discourse, this topic may have popped up in relation to the EU' stance towards this conflict. However, a broader database and a follow-up contextual analysis could determine if this interpretation is justified or whether it lacks any rationale.

The third major finding relates to concrete media references. As can be seen from table 34, the corpora covering the period 2013-2015 contain the clusters na antenie TVP ('antenna TVP'), na antenie TVN24 ('antenna TVN24'), and na antenie radiowej ('on radio antenna'). Whilst TVP is a public channel, TVN24 is a private television station. What can be noticed is that TVP disappeared from the list in the post-election corpus. TVN24, on the other hand, occurred in the 2015-2016 but vanished afterwards. The same applies to the cluster na antenie radiowej. Crucially, the single media reference which can be identified in the 2016-2017 corpus is the reference to na antenie Radia ('antenna Radio'). It can be assumed that the next entity following 'Radio' is the station's name. However, although the data does not point to the whole name, its appearance in connection to the just-mentioned disappearances is remarkable. The vanishing of tv channels from the Polish EU discourse tempts to assume that the overall media coverage on EU-related topics decreased. This interpretation requires in any case a broader media analysis. It is also imaginable that the results reveal subtle ties to the Polish media laws in 2016<sup>39</sup>. These laws enabled the PiS government to appoint both civil service directors and heads of public TV and radio. In addition, the PiS party's attempt to 'repolonize' the media (Chapman 2017: 8) affected private channels as TVN24. Originally founded by two Polish citizens, the U.S. broadcaster Scripps bought a majority stake in TVN. Since PiS' electoral victory such internationalized channels are faced frequently with high back taxes, penalty fees, or withdrawals of license (Hassel 2017). These political changes can provide a potential explanation to the disappearance of the above-mentioned clusters. It can be supposed that by putting "own people in to

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<sup>&</sup>lt;sup>39</sup> For further discussion see Stegherr's *Der Neue Kalte Krieg der Medien. Die Medien Osteuropas und der neue Ost-West-Konflikt* (2018).

run large state companies, institutions, and the public media" (BBC 2016), the PiS party effected a qualitative disqualification of several media. This, in turn, might have caused a decrease of references or quotations leading to a potential 'dis-entrenchment' of the EU and certain media.

Last but not least, it shall be noted that the reference to the medium 'radio' in the 2016-2017 corpus could provide a good access for a follow-up analysis. It is widely known that the PiS has found a kindred spirit in the ultraconservative radio station Radio Maryja (Chapman 2017: 5). Hence, it would be interesting to examine whether the cluster *na antentia Radia* is followed by 'Maryja'. If this would be the case, one could gain evidence for a certain politization of the Polish media landscape. This limited amount of data as well as the necessarily limited number of analytical steps can only point to eventualities. A solid and tangible analysis requires a large-scale and interdisciplinary research.

Before embarking on the research results dealing with the left context of the preposition na a few words on the remaining clusters. As already mentioned, this thesis cannot provide a comprehensive interpretation of each cluster. Some will thus unavoidably fall behind. However, two final observations shall be noted: first, the right context does also reflect references to the EU Parliament election in 2014. Clusters such as na szefa Rady ('as chef of the Council'), na szefa Komisij ('as chef of the commission'), and na stanowisko szefa ('to the chef-position') allow to assume that the debates on the election and Donald Tusk's electoral victory entered also the right context of na. Second, the cluster na terenie Unii ('on EU terrain') occurs seemingly consistent in the whole corpus. Except for the 2014-2015 results it can be detected in each corpus. Interestingly, after having disappeared from the list in 2013-2014, 'on EU terrain' reached its highest mark in the 2015-2015 corpus. In light of the PiS victory and the 'refugee crisis', it can be speculated that the spatial conceptualization of the EU experienced a discursive boom. This interpretation calls for a profound cognitive linguistic analysis which, in turn, requires a broader database. Undoubtedly, such an investigation could shed light on a current overall conceptualization of the EU.

The left clusters contain the greatest number of expressions which do not point directly to any external or sub-discourse. These are, inter alia, the following: *ze względu na* ('due to'), *nie tylko na* ('not only on'), *opiera się na* ('is based on'), *nie ma na* ('is not on'/is not enough for'), *przede wszystkim na* ('especially for/on'), and *dzieje się na* ('happens on').

Due to their flexible usability in discourse and the herein presented limited context they shall not be discussed any further. Instead, the focus shall be on those clusters which allow interpretative approaches without the requirement of further analytic steps.

Basically, the results obtained for the left context refer to four relatively unambiguous contexts and one which calls for a more pronounced interpretative effort. Beginning with the clusters that contain easily classifiable entities it shall be stated that not all can be categorized as occurring simply in either the pre-election or the post-election corpus. This holds true for the cluster *Donalda Tuska na* ('Donald Tusk for') and *mln euro na* ('million euro for'). Donald Tusk enters the discourse (precisely, the left context of *na*) in the 2014-2015 corpus. As claimed in previous interpretations this can be due to his electoral victory in the presidential elections of the European Council in 2014. Interestingly, his name reoccurs only in the 2016-2017 corpus. The reasons for this development require a deeper analysis. It can be cautiously hypothesized that his reappearance may be linked to his reelection in March 2017. In fact, this re-election caused a flurry of debates since Poland stance towards Donald Tusk led to unprecedent confrontations. Poland, voting against Tusk, was the single country which opposed his re-election. His recurrence in the 2016-2017 corpus can be a linguistic reflection of this political event.

The second cluster which cannot be described as only pre or post-electoral is monetary in nature. 'Million euro for' occurs in the transition phase between 2014-2016. This can have multiple reasons of which the probably most prominent points to the Multiannual Financial Framework for 2014-2020 (cf. p 106). It can be assumed that this construction was used to reflect on the concrete expenditures which were intended in the framework. In any case, this interpretation should be also envisaged more closely and checked against a larger database. This construction, in turn, could be contrasted against other constructions.

Turning now to the clusters that can be read as marking a cesura between the pre and post-election period, one cluster stands out. References to names are rather seldom, except for the noun phrase 'Donald Tusk'. Hence, the popping up of *Radosława Sikorskiego na* is remarkable. Admittedly, it is difficult to assume in which concrete context the personage of Radosław Sikorski in combination with *na* occurred. However, his appearance may indicate a certain discursive prosperity. In fact, Sikorski, the former Marshal of the Sejm (2014-2015) and Minister of Foreign Affairs (2007-2014), was a hotly debated topic within a Polish bugging scandal in 2014. Published transcripts which were illegally taped claimed to reveal a conversation between Sikorski and former Polish finance minis-

ter Rostowski. Sikorski was said to have commented on David Cameron and Polish-American relations in a drastic and vulgar manner (Oltermann, Traynor & Watts 2016; Feeney 2014). Having thus created a flurry of debates it is imaginable that his personage also affected constructions with *na*.

Regarding the cluster which occurred in the post-election corpus, one can also derive a topic of major relevance. 500 zl na ('500 zloty for/on') can hardly be interpreted as an arbitrary number. In fact, the number '500' was catapulted into public consciousness in connection to the PiS government's "Family 500+" program. This program stipulates a tax-free benefit of 500 zloty per month for each family's second or any consecutive child until they reach the age of 18 (European Commission 2018). The implementation of child benefit was indeed a novelty brought about the PiS government. However, this initiative was interpreted as a populist mean to guarantee electoral success (Pospieszna 2018; cf. Stanley & Cześnik 2019: 80-81). In any case, the ranking of 500 zl na suggests that it entered the discourse quite forcefully. Notably, no other herein presented analysis contained explicit references to the 500+ program. Therefore, it should be investigated if this interpretation can be put forward with a broader database.

The last result which was selected for further considerations is the cluster *sankcje nalozone na* ('impose sanctions on'). Again, it cannot be clearly stated who imposes sanctions on whom. Yet, taking into account previous results it can be speculated that this cluster refers to the EU sanctions imposed on Russia in light of the annexation of Crimea (cf. pp. 62; 71-72). Interestingly, this would be the single reference to the Ukrainian crisis in the left context. This allows further investigations into the potential semantic constraints of *na* constructions. In sum, the cluster analysis of both contexts revealed partially overlapping results. Both contexts contained a huge number of clusters which cannot be directly identified as belonging to a particular political discourse. Of course, looking through the cognitive linguistic lens, it can be assumed that they unfold a particular deep semantic function in discourse. However, such an analysis constitutes a scientific endeavor which requires to be tackled separately.

The last interpretation is dedicated to the results obtained for the following query syntax: [word="na" & tag="prep.\*"] [] [lemma="UE"]. Broadly speaking, the information provided in table 40 allow for four major observations. First, it can be noted that the number of total hits declined drastically between the 2014-2015 and 2015-2016 corpora. This finding requires a broader discourse analysis since it should be investigated whether the decrease of EU reference was characteristic for this particular construction or whether it

rather paralleled an overall tendency after the election. In any case, this difference in numbers provides certainly an access point to further analyses.

The second observation which can be deduced from the data is the frequent occurrence of spatial references. Crucially, this seems to be a consistent finding across all corpora. Spatial reference materializes in the following clusters: *na teren UE/na terenie UE* ('on EU terrain', may refer to the nominative/accusative case and to the locative/vocative case), *na terytorium UE* ('on EU's territory'), *na obrzeżach Unii* ('at Europe's margin's). The ranking allows to assume that a great importance is paid to the geographical conceptualization of the EU. Moreover, the latter cluster ('at Europe's margins') emphasizes the geographical limitations of EU territory. One can speculate that such constructions reinforce a differentiation between the 'us' and the 'other'. Importantly, such an interpretation should be envisaged, approved or rejected in a cognitive linguistic follow-up study. A further follow-up analyses could investigate whether the conceptualization of the EU as a geographic entity takes priority to its conceptualization as a rather abstract community.

Speaking of the notion of community, one can also identify two clusters pointing to a metaphorical extension of the EU. One is *na nerwach UE* ('on EU's nerves') which maps a neuronal system onto the EU. The second is *na opuszczenie UE* ('on leaving the EU') which conceptualizes the EU as an entity which can be left. It can be assumed that this cluster refers to UK's withdrawal from the EU. This interpretation would be also in line with the period in which it popped up, namely 2016-2017. A concordance analysis could determine the context in which this cluster appeared.

The fourth observation is particularly interesting since it points to meta-reflections concerning the EU. Crucially, such clusters popped up in the 2016-2017 corpus. *Na prze-budowę UE* ('for the reconstruction of the EU') and *na nową UE* ('for a new EU') allow to suppose a discourse thread which conveys an overall dissatisfaction with the then current state of the EU. The desire for change is usually preceded by a state of discontent. Yet, this desire and this discontent can pave the way for two major options of action, namely resignation or a future-oriented confidence. The herein detected clusters indicate the latter one. Thus, both results can be read as a hopeful and reformative approach to the EU despite a negative origin. Interestingly, the *na* context is the single context which reflects considerations about the condition and structure of the EU. A broader database could, however, put forward the herein stated interpretation.

Finally, there is a number of clusters which point to concrete events or contexts such as, for instance, *na Majdanie UE* ('on Maidan EU') or *na szczycie UE* ('at the EU summit').

Interestingly, there is one such cluster, *na polityce UE* ('on EU politics') which allows to assume a high frequency due to its generality and the strong semantic ties between the EU and politics. Interestingly, this notion occurred only in the post-election year 2015-2016. A follow-up question could relate to the evaluative contexts in which this construction was issued. It is, for instance, imaginable that this cluster popped up in light of the 'migration crisis'. When thinking of an EU frame, it is likely that 'politics' was a filler frequently used. Having been unmentioned (or no explicated) in previous corpora one can speculate that 'politics' became a default value which needed any further explication. The fact that it suddenly popped up in the 2015-2016 corpus can go hand in hand with a revitalization of the relation between the EU and politics. This can be due to seminal events (such as the 'migration crisis') which need political response. However, a follow-up research should investigate if this is a sound interpretation. First and foremost, a broader database should determine if 'politics' exhibited a similar discursive boom in other linguistic contexts.

Now, having read that spatial references seem to play a significant role in the na + EU Frame, it can be interesting to see if the usage of the locative and the accusative *na* changed in the course of time. The following table provides an overview of the relative frequency of the accusative and the locative na:

	Locative <i>na</i>	Accusative <i>na</i>
2013-2014	47,37%	52,63%
2014-2015	81,25%	18,75%
2015-2016	75,00%	25,00%
2016-2017	47,06	52,94%

Table 42: Relative Frequency of the Locative and Accusative 'na' 2013-2017.

These results are striking for two reasons: first, the high frequency of the locative *na* is contrary to the high frequency of the accusative *na* in the herein presented discourse corpus and in a larger reference corpus (cf. pp.99). Second, it can be seen from the table that the use of the locative *na* experienced a usage boom in the transition phase between 2014 and 2016. This implies that a cesura between the pre and the post-election corpora can hardly be assumed. Instead, a multidisciplinary follow-up analysis could shed light on the reasons for the 2014 to 2016 boom of the locative *na*. Speculations about the concrete discourse actors which might have impacted the use of the locative *na* lack any rationale. Principally, it can be only tentatively pointed to the subtle meaning which is

brought about by the locative *na* to discourse. Highlighting the spatial aspects of the EU it can be assumed that the conceptualization of the EU as a community is replaced by geographical associations, at least when it comes to the just investigated construction. If other EU contexts would reveal a similar finding, manifold studies could connect to this alleged pattern and ask, for instance, if this development can be potentially traced back to a lack of historical knowledge or if it reflects a general cultural shift in the evaluation of such unities.

## 5.3 Interim Conclusion

The corpus-based analysis can be paraphrased as an in-depth analysis of selected previous findings. However, it has been shown on numerous occasions that the interpretations provide rather access points for future research than final judgements. The limited amount of data and of analytical categories did only allow for speculations about discursive tendencies. Moreover, it can be stated that the analytical steps carried out were not equally productive.

Beginning with the verb collocations, it is worth looking at the difficulties that have arisen in the analytical and interpretative process. Due to the lack of a Polish FrameNet, the interpretation of verb collocations required certain interpretative efforts. Additionally, not all translated verbs are covered by FrameNet. Hence, it was necessary to search for appropriate synonyms. This points to a severe limitation of this analytical step. Even when examining a synonym, it can be assumed that a different world knowledge is associated with this synonymous term. Thus, the semantic definition provided by FrameNet cannot be transferred one to one to the Polish word. The entries can be thus only read as pointing to the Polish source. This, in turn, allows to scrutinize a great part of the overall interpretation. The results therefore need to be interpreted with caution. However, this circumstance shall be interpreted as evidence for the necessity to work on the development of a Polish FrameNet in order to provide more reliable definitions.

The observations that could be gained from the FrameNet entries shall be thus understood as tentative references to the Polish verb's role in discourse. Furthermore, it needs to be mentioned that the synonymous concepts provided by FrameNet are often subsumed under a different word class. Paradoxically, a number of verbs can be only semantically approached by using a devious route along nominal concepts. An example for such a case is the Polish verb *zamierzać* which is covered by the FrameNet entry for 'Purpose'. Taking into account that FrameNet is said to be deeply rooted in valency grammar, respectively Fillmore's case grammar (cf. chapter 2.1.1), the high amount of

nominally expressed frames is surprising. Nevertheless, when the FrameNet entry can be expected to match the particular verb to a high degree, the information provided may help to get to the bottom of an expressions meaning. The findings which were gathered from the herein presented FrameNet entries point to the EU as being on a top hierarchical level or as a decision-making high-authority. This is at least what could be deduced from the very limited number of verb-collocates. It has been already mentioned that this interpretation can be probably linked to the conceptualization of the EU as a foreign ruler. With a broader database and more directly related research questions it could be examined if there is a quantitative reason to assume such a relation. In general, a verb collocation analysis with FrameNet can be very fruitful if a translational intermediate step can be avoided. Verbs may open up a whole scene of interrelations and their analysis can reveal information about deep lying cognitive structures. Thus, when looking at the verbs which are linked to the EU as subject, one can gain subtle information about its major functions within a matrix of semantic roles.

The further analysis of the preposition *na* was legitimated by its surprisingly consistent occurrence in the keyword lists. For this reason, 'na' was subjected to a corpusbased analysis moving along four questions. First, it was looked at the overall distribution of the accusative and the locative use of *na* in the Polish EU discourse corpus and in a larger reference corpus. According to the results obtained, it could be stated that there is a general preference for the accusative use of *na*. Interestingly, the analysis of the accusative and locative distribution of *na* had an opposite effect when looking at the construction na + [empty slot] + UE. In contrast, this analysis revealed that the locative usage of *na* was dominant in the EU corpus in the period from 2014 to 2016. This was in accordance with the frequent use of spatial fillers in the position in-between. One possible explanation for this is that there is general tendency within the Polish EU debates to conceptualize the EU as a geographically defined entity rather than an abstract community. In any case, the discourse specific distribution of the locative and the accusative *na* can be a possible area for future research.

In general, the data obtained for the context of *na* suggests that major discourse topics were also reflected in *na* constructions. This may explain its consistent occurrence in the keyword lists. The cluster analysis, for instance, allowed to assume direct link to the discourse on the personage of *Radoslaw Sikorski* or the debate on the 500+ program initiated by the PiS government. Other references could only be cautiously issued and provide for this reason a potential ground for follow-up researches. One of them is the

development of media referencing in *na* clusters. It was speculated that the decrease of *TVN24* and *TVP* is linked to the Polish media laws that were brought into being by the PiS party. This finding may just indicate that not everything that is relevant to the discourse is explicated in the media. The sudden decline of the occurrence of *TVN24* and *TVP* and the decreasing number of different case markings does, in any case, constitute a solid point of access for further in-depth analyses.

Turning to the nouns, it was observed that they evoked frequently interpretative schemas which allowed for a broader contextualization. However, this shall not detract one from the fact that these considerations are based on a limited amount of data lacking also an extensive concordance analysis. Yet, the results allowed to infer that topics of political brisance, such as the annexations of Crimea, were reflected through *na* in discourse. Also, the point of case marking was found to be an interesting research focus. With the help of *szansa* or *pieniądze* it could be demonstrated that the number of different case marking decreased in the post-election corpora. Crucially, it was found that FrameNet served as a fruitful anchor point for the deep analysis of *szansa*. In line with the above-mentioned remarks on the relationship between FrameNet and valency grammar, FrameNet was estimated a good mean for tracing the nominal concept 'opportunity'.

Taking all together, one can see that the context-analysis of *na* resulted in more productive findings than the analysis of verb-collocations. However, when adopting a cognitive perspective on discourse each finding can lead to potentially useful follow-up questions and interrelations. Some of them have been already introduced and briefly discussed. Others will be put in context and reflected in the following discussion section.

## 6 Discussion

In an effort to investigate the conceptualization of the EU in Polish discourse before and after the presidential election in 2015, I conducted a corpus-linguistic research based on roughly 2,9 million tokens. These tokens are distributed on four corpora covering the periods 2013-2014, 2014-2015, 2015-2016, and 2016-2017. This corpus-linguistic approach set out to explore whether (a) automatically derived information from news articles can be used to reject or approve the alleged changes in the Polish EU discourse since the electoral victory of the PiS party (Buras 2017, 2018; Vetter 2017, Balcer et al. 2016, 2017), and whether (b) the works by Minsky, Barsalou, and Fillmore can serve as means for the analysis and interpretation of the obtained data.

Pursuing a frame-theoretical understanding of the notion of 'conceptualization', this study sought to search for word-world interrelations in the Polish EU discourse. In relying on the two-directional nature of cognition (cf. Panter & Radden 2011: 4), I conjectured that concrete political or social events leave marks in language which, in turn, affect the overall discourse. Understood as a system of knowledge structures (cf. chapter 2.2), discourse provides thus a fruitful area of frame investigation. Crucially, a frame in-itself has been defined as a structure of knowledge (cf. pp.5-6, Busse 2012: 252, Barsalou 1992a). Hence, when adopting a frame approach to discourse one inevitably looks at knowledge 'packages' within the overall epistemic system associated with a particular concept. However, this constitutes only one aspect of frames. The process of framing (cf. Entman 1993), for instance, can be understood as a selective perspectivation of, inter alia, events, situations, or concepts. Thus, frames also provide interpretative schemas which determine not only what but also how information is understood. Taking this constructionist aspect and the mental representation model together, the environment, discourse, and cognition emerge out and form a relationship of circular dependencies. The possibility to entangle this relation analytically gave the core impetus for this thesis.

From the vast array of corpus linguistic methods, I chose to structure the study along both corpus-driven and corpus-based approaches. The corpus to be exploited was built using URLs from two magazines that contained either 'Unia Europejska' or 'UE' in the headline. It is vital to mention that this manner of corpus building may potentially constitute a limitation not to be underestimated. First, it can be asked whether the very limited number of magazines poses a constraint to the overall study. In limiting the selection, it can be assumed that the data retrieved mirrors only very selectively ongoing discourses. Of course, when adopting a cognitive perspective each word, each sentence, each text,

and thus each magazine can unfold a great potential in the above-mentioned field of circular dependencies. However, looking through the lens of an empirically working linguist one is inclined to adhere to the principle that the larger and the more diverse the database, the more generality can be deduced from it. Hence, future research on this topic could cover a bigger part of the media landscape by using the databases as provided, for instance, by LexisNexis (cf. Kalwa 2013: 51-52). Such tools allow to download thematically specified articles across numerous magazines or newspapers. If covering also Polish media, such an approach would correspond even more to the desideratum of 'maximally inclusive research' (cf. p. 3). Second, the focus on URLs in the corpus building process could be also refined in future research. Applying Sketch Engine to corpus building, one has also the possibility to create a web-corpus using seed words. This would allow to collect a highly diverse database. The focus on headlines (and the article's URL), on the other hand, can lead to an insufficient basis, since the occurrence of a word in the headline does not directly imply the word's recurrence and thematic centrality in the article. Hence, a more watertight database could be collected in combining the import of URLs and the data gained from a seed word search. Last but not least, a major and quite natural limitation of empirical studies is the amount of data. Being practically always insufficient, this work does also not purport to perfectly reflect or grasp reality. As alluded on numerous occasions, the data collected in this study can only be read as a very limited part of the whole. The results are thus seen cautiously as not more than pointers. In order to avoid redundancies this remark shall be prefixed the discussion of the results.

Beginning with the corpus-driven keyword extraction, I found that most keywords occurred across all corpora. Differing solely in terms of ranking, I named them "shapers of discourse". However, since all concepts may affect the overall discourse, these recurrent units could be better termed as "cornerstones" of discourse. These cornerstones allowed to hypothesize that the keywords *Rosja*, *PiS*, and *Niemcy* were the ones which exhibited the major changes in the course of time. *Rosja*, decreasing in the course of time, was found to demonstrate an unexpected movement. Assumed to be a core element in the Ukraine\_crisis frame, *Rosja*'s decrease was interpreted as having become 'dis-entrenched' due to the emergence of other explosive topics. In particular, its decline was conflated with the rise of *Niemcy* and the refugee 'crisis'. I was tempted to assume a shift of foci moving from the Ukraine and Russia westward to Germany. But this assumption leaves one with the question of the underlying cognitive processes. If the alleged shift were the case, would this really reflect a kind of 'dis-entrenchment', respec-

tively the disappearance from the collective consciousness, or would it rather point to a new default value in the Polish EU frame? Future research could tackle this question by testing the just mentioned assumption, and, if applicable, the underlying motivations for the general decrease of the concepts 'Russia' and 'Ukraine'. On the other hand, the increase of *PiS* was classified as an unexpected development which was traced back to the PiS' electoral victory in 2015. Follow-up research might investigate whether the electoral victory was the single reason for this development. In light of the fact that *Polska* and *Polak* were identified as prominent cornerstones, it could be also examined if there is any conceptual interrelation between these keywords. The potential interrelations between the rise of *PiS* and *Niemcy* were already outlined and proposed as a potential avenue for future research. Admittedly, the overall classification into "minor" and "major" changes, as carried out (cf. Table 8), lacks any statistical foundation. Future research might hence attach statistical data to the classification that I undertook.

The keyword extraction provided virtually for each keyword potential access points for future investigations. This following paragraph shall briefly discuss three 'eye-catching' findings. As postulated in 4.1.2, what vanished is just as relevant as what emerged. What vanished was, inter alia, the keyword PO, hence the main opposition party. This finding was, on the one hand, interpreted frame-semantically as a 'filler-decline' and politically as the limitation of the political spectrum. Both speculations should be double-checked with a broader database and envisaged more extensively along the 'dis-entrenchment'-default axis. The second striking finding was the emergence of the number //. A concordance analysis revealed three major contexts in which // occurred. John Paul II., World War II, and Frederick II (Frederick the Great), were identified as the main anchor points for //. In short, revanchist tendencies, references to strong (national-)catholic convictions, and to the notion of 'foreign rule' were the guiding interpretative schemas. However, ideally, these interpretations could be conflated and put into context in future studies. The last finding worth mentioning was the constant appearance of the preposition na. Its occurrence in the keyword list was considered unusual due to the assumed even distribution of grammatical words across texts. Therefore, na was chosen to be a useful 'bridgingelement' between the corpus-driven and the corpus-based approach. Returning to the founding fathers of frame theory, the keyword analysis has shown that the notion of slots, fillers and defaults (as proposed by Minsky) serves as a beneficial tool for tracking and explaining changes in discourse. The fact that Barsalou's attribute-value theory has not been applied to the interpretation can be seen as either a methodological deficit or as

evidence for the sufficiency of Minsky's slots/filler theory. However, due to the more fine-grained frame concept that was promoted by Barsalou, it can be speculated that its application to cognitive discourse could reveal more fine-grained results and interpretations. For instance, in determining constraints in concepts one could expand the horizon regarding the aspect of frame-frame relations.

In contrast to the keywords, the results obtained for the n-gram analysis were described as more homogenous. From the data, it could be seen that the n-gram overview contained a number of fixed expressions which did not point directly to the EU discourse or any other potentially related discourse. One of them I discussed was w tym samym czasie ('at the same time'). This construction seems to be rather unremarkable and one which can be also paraphrased as a mean for the creation of coherence. I speculated that its function to express concurrency could point to a certain complexity which might be associated with the concept EU. This interpretation would necessarily need to be tested with a concrete research aim. Additionally, another adventurous claim was made. The construction 'at the same time' was linked in the form of a research suggestion to the notion of conceptual blending. This consideration certainly calls for a more advanced theoretical ground. When assuming that 'at the same time' links situations, events, concepts or similar, one may ask to which degree those elements are become blended. In general, it would be also conceivable to approach such findings from the perspective of construction grammar. A second n-gram which was classified as a fixed expression was nie jest w stanie ('is not able') and its plural form nie są w stanie. Importantly, these n-grams were described as conveying a negative evaluation to the EU discourse. The fact that the plural form popped up in the post-election corpus led me to assume a certain intensification of the construction's relation to the EU. This interpretation could have been put forward (or rejected) by examining the concordances. In fact, the lack of extensive concordance analyses constitutes a further limitation of this work. Having known the context in more depth, seminal findings might have been argumentatively solidified. However, considering the page limitation, the quantitative data was analyzed at the expense of in-depth qualitative investigations. A recommendation might hence be to tackle the obtained data from a more qualitative perspective in a follow-up investigation.

The same applies to n-grams which contain concrete references to actions, events, or concepts. For instance, I could identify a number of n-grams which included the term 'agreement'. Most of these constructions referred to the signing of agreements. However, it can be questioned in how this construction conveys a bureaucratic image of the EU.

In light of the detected emphasis on spatiality within the Polish EU discourse (cf. 5.2), bureaucracy may be seen as constituting an abstract counterpart to the concretely geographical conceptualization of the EU. Yet, a follow-up investigation could reveal in which contexts the notion of 'agreement' occurred and whether it was conflated with evaluative considerations.

In general, the analysis of n-grams was not that productive as the analysis of keywords. Of course, this can be due to the lack of a broader concordance analysis. On the other hand, n-grams might be better approached from a construction grammar perspective. The analysis allowed to identify certain idiomatic expression (as *z dnia na dzień*) which qualify for being revisited by construction grammarians. Moreover, the n-gram analysis has shown that the traditional frame conceptions are difficult to apply. Neither Minsky's, nor Barsalou's, or Fillmore's considerations entered the overall interpretation. In retrospect, however, several n-grams might have been approached with the help of FrameNet (as the verb 'to sign'). Perhaps this would have provided more deep lying insight to the interpretation. Yet, this cannot be safely assumed, as the following paragraph will demonstrate.

The decision to make verbs a focal point of the corpus-based analysis stemmed from the valency-based frame concept as promoted originally by the linguist Charles Fillmore. The initially expressed advocacy for 'maximal inclusiveness' gave the impetus for this decision, rather than practical considerations. Therefore, the analysis of verb-collocates led to multiple difficulties which I have previously pointed out.

Collocations have been assessed as an appropriate tool for the detection of frames in 2.2.3. The combination of verbs and collocations was thus expected to be maximally beneficial for sketching the EU concept in the Polish EU discourse. Importantly, the aspect of translation was underestimated and points thus to a major limitation. I reflected upon this problem in 5.3. Having faced either subtle semantic differences between the English and Polish terms, or the lack of FrameNet entries, it can be assumed that this deficiency would be best tackled by launching a Polish FrameNet.

In any case, the information that could be deduced from the verb analysis shall not be ignored. It can be, for instance, hypothesized that a lack of such an analysis would have left the aspect of hierarchy unnoticed. I have alluded to the point of 'foreign rule' in the section of keywords. However, the interpretation deduced from FrameNet and the consideration of Frederick II can be viewed as mutually supporting. In short, the verbs obtained from Sketch Engine showed a tendency to reflect hierarchical relation. With the

EU in the subject position, the EU was often automatically the entity which was situated at the top of a hierarchical ladder. Future research might hence include the EU in other syntactical positions as well.

Another striking finding which was derived from the verb collocation was the drastic increase of verb-collocates in the 2014-2015 corpus. A more profound interpretation of this observation calls certainly for a follow-up analysis. Otherwise, statements on this result can hardly go beyond highly speculative conclusions. It can be only tentatively assumed that the period 2014-2015 was a period in which the EU was a hotly debated topic due to, for instance, the Parliament elections.

In sum, the usage of verb collocations to sketch the EU concept has proven to reveal subtle information. However, such an analysis shall be preferably applied without translational efforts. Although a verb may have the same valency in both the source and target language, they may still differ with respect to their semantics. This conclusion can be as well read as a plea for the combination of valency-based frame models and models that rely mainly on cognitive science.

By way of a second corpus-based analysis, it could be seen how particular cultural discourses affected and were reflected in a grammatical unit. As indicated previously, the preposition *na* was subjected to this follow-up analysis. Strikingly, the context-analysis of *na* detected sub-discourses which could be not identified in the remaining analyses. These are, for instance, the debate on the Polish media laws, the 500+ program, and the bugging scandal concerning Sikorski. This observation allows to ask whether these important references are due to an extensive context-analysis of whether they point to a discursive permeability of the preposition *na*. An idea for future research could thus be to determine whether *na* has a general tendency to mirror sub-discourses which other constructions or units fail to reflect. Although this question seems to stem rather from imagination than from concrete evidence, it can be supposed that, at least as far as my data suggests, that there is something singular about this preposition. Otherwise its occurrence in the keyword lists can be hardly explained. In any case, this finding requires to be tested in both similar discourses, other discourses, or general by using large corpora.

Linking *na* to the EU discourse, it could be demonstrated that in the corpus query frame [na] [empty slot] [ ] [UE], *na* tended to occur more often in the locative than in the accusative case, at least when regarding the years 2014-2016. This finding contrasted with the preference for the accusative *na* in a larger reference corpus. It was not inappropriate to speak of a 'usage boom' of the locative in those years. This finding leaves one

wondering what the reasons might be rather than suggesting possible explanations. Of course, one can assume that the locative implies spatial references. This, in turn, can be linked to a spatial understanding or conceptualization of the EU. However, if that were the case, it would still lack an explanation for the increase of the locative *na* in this construction in the above-mentioned period. Was its usage specific to any concrete sub-discourse within the EU discourse? This is a question to be answered in follow-up research. In general, there are several studies which concentrated on particular prepositions or constructions in discourse (Kalwa 2013; Spieß 2018; Lasch 2015). Perhaps, the preposition *na* calls for a similar extensive 'treatment'. Put forward with a broader database, applying different perspectives, and considering different explanations, *na* may provide a fruitful ground for future research.

Finally, it is worth mentioning that in the analysis and interpretation of *na* I did only rely on few occasions on the slot/filler model to explain particular findings. However, I could make use of FrameNet to examine the deep meaning of 'opportunity'. This (as well as the findings in 5.1.2) leads one to assume that FrameNet qualifies rather as a tool for the analysis of nominal concepts than verbs. Note that this can be due to the database I collected. Other collections might reveal the opposite. Be that as it may, despite severe limitations, it can be concluded that each step uncovered information which have been unnoticed by the other. The results' reliability and the interpretations' validity are aspects to be revisited and tested in future works.

## 7 CONCLUSIONS

If it is legitimate to think of language, mind, and culture, as I believe it is, as being embedded into a network of reciprocal influence, we can draw on frames to describe and unravel these interrelations. In making extensive use of the notion of frame, this thesis has sought to trace changes in the conceptualization of the EU within the Polish EU discourse. Numerous researchers from the humanities (Buras 2017; Balcer et al. 2017; Bucholc 2018) attested a worsening of the Polish-EU relations since the PiS' party's electoral victory in 2015. In addition, this topic has been also hotly debated in the media, both national and international, and was thence catapulted into public consciousness. Vibrant debates are shaped by discourse and it is likely that hot topics spawn preformed mind-sets.

However, in order to study this debate with the highest degree of objectivity, this thesis has argued for an approach which lets the data 'speak'. In applying a corpus-driven account to the Polish EU discourse, keywords and n-grams were assessed inductively. They have paved and shown the way for interpretations and follow-up questions. Thereafter, a corpus-based in-depth analysis widened the interpretative horizon. In working with this hybrid method, it could be pointed to phenomenon which would have been otherwise hardly identified. Without neglecting findings from other disciplines, the results have been subjected to further contextualization.

In searching for EU frames, I found numerous sub-discourses which reflected often essentially Polish debates rather than genuinely EU relevant topics. For instance, the disappearance of the Polish opposition party *PO*, the case *Sikorski*, or the *500+* program are debates which were also discussed in the EU corpus. Yet, adopting the cognitive perspective, even such findings can be considered as interwoven with the EU concept. This holistic and highly interrelational consideration is characteristic of frames. Pointing to the complexity of knowledge structures, frames have been put forward by Minsky, Fillmore and Barsalou. This work has introduced their theories and envisaged their practical applicability to discourse studies. Crucially, it could be shown that the slot/filler/default model, as promoted by Minsky, qualified as the most appropriate model to trace cognitive processes in discourse shifts.

Despite its exploratory nature, this study offers some insights into the tendencies of Polish EU conceptualization. The decrease of the term 'opportunity' and its declining grammatical versatility may be interpreted as a loss of EU euphoria. Other findings recall to mind both hierarchy and spatiality. The keyword as well as the verb collocation anal-

yses have suggested that the conflation of the EU and the notion of 'foreign rule' are not that far-fetched. Spatiality, in turn, emerged out of the closer analysis of the preposition na. In referring often to the concept of 'territory' it can be asked whether this may reflect an overall tendency of geographical EU conceptualizations. Strikingly, this spatial conceptualization was supported by a closer investigation of case government in na constructions. In the construction [na] [ ] [EU], I could trace a preference for the locative use of na contrasting with its general tendency to govern the accusative. A natural progression of this work is thus to analyze whether this preposition exhibits any discourse-specific role.

In any case, such findings may point to the complex interplay between cognition and other peripheral systems, in particular language and culture. External influences may creep into our language system and shape our perception and idea of the world. To better understand ongoing debates -as the current tensions between Poland and the EU- a cognitive account of discourse may provide a basis for a comprehensive and inclusive consideration.

I do not claim that the examination of frames can explain each and every discursive aspect. Not everything that is collectively salient can be assessed corpus-analytically and be further analyzed using the concept of frames. But it can account for a large part of human thinking and, if well operationalized, it may serve to uncover hidden connections and understandings of the world. For instance, the conceptualization of the EU along vertical (or spatial) and horizontal (or hierarchical) coordinate axis differs substantially from a circular conceptualization. The need for statistical evidence as well as explorations into the origins of such differences leave one with an abundance of ideas to stimulate future research in this field.

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