

USING COGNITIVE AND USAGE-BASED LINGUISTIC PRINCIPLES IN AN APPROACH
TO TEACH GERMAN

by

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ABSTRACT

Cognitive and usage-based linguistics have been in focus for some decades and language acquisition and teaching scholars are starting to apply those principles to their domain. This thesis summarizes the most important events in the history of usage-based and cognitive approaches in general linguistics, second language acquisition and second language teaching up until nowadays' state of the art. It includes sample textbook pages focusing on teaching the German accusative case to American first-year college students and a three-step guide to teaching languages according to up-to-date usage-based and cognitive principles.

DEDICATION

This thesis is dedicated to everyone helping me in the process of creating it and to my family and friends back home in Germany, who let me go so that I could fulfil one of my dreams.

LIST OF ABBREVIATIONS

ACAD	Academic subcorpus of corpora
BNC	British National Corpus
COCA	Corpus of Contemporary American English
FOLK	Forschungs- und Lehrkorpus Gesprochenes Deutsch

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INTRODUCTION

The need for a change in foreign language teaching has become apparent observing numerous situations in language classrooms: When asked to write texts, students will usually want to express thoughts they do not know how to put into words yet. Thus, they will repeatedly ask for the translation of the word they think they will need. At that point, the teacher has a task that, contradictory to common belief, is difficult to fulfill. If the student does not provide the teacher with the context of the word, there often is no way the teacher can select the right translation, especially when the item in question is highly polysemous. During an internship at an American high school I observed that students asked their teacher for words like *get* and *been*. The teacher managed to choose a fitting translation after asking about the specific context. However, one major problem remains: The student will probably use the newly learned word in every other situation in which he or she would use the native language equivalent, which, in most cases, would bear mistakes due to translation error.

Another example, this time observed in a German class at the University of Alabama, shows exactly how this polysemy and translation problem affects the correctness of the sentences produced. The students were learning about prepositions causing the following noun to be in dative case. After the teacher had given them a list of all prepositions, he made them find the translations by giving example sentences in German. We can assume that he, rather naturally, tried to pick very prototypical examples rather than peripheral ones, which made the students write down *at* as the translation for *bei*. The next task for the students was to write down

example sentences for each of the prepositions. While one student came up with an acceptable example like *Ich kaufe Essen bei Chick-fil-A* 'I buy food at Chick-fil-A', another student wrote **Ich bin bei Zuhause* 'I'm at home'. However, the translation of "at" as *bei* is not the acceptable choice in this second sentence. The more fitting translation would have been *Ich bin zu Hause*. Interestingly enough, one of the example sentences said by the teacher was unacceptable, or at least highly non-idiomatic, as well. **Ich gehe zur Klasse* 'I go to class' is not considered standard German since *Klasse* usually only refers to the group of children sharing a classroom throughout two or three of their school years (in Germany, every student usually takes the same classes, which are all taught in the same room). I go to class would have to be translated as *Ich gehe zur Schule/Uni/Vorlesung* or *Ich gehe zum Unterricht/Seminar*, depending upon the context. In this example we can see that even foreign language teachers can be unaware of the fact that translations of words from different languages are not easily mapped onto each other. Teaching situations like these and the class and other scholarly work by Dr. Dilin Liu inspired me to write this thesis and explore cognitive and usage-based linguistics. The aim is to highlight principles which, when applied to classroom situations, reduce problems like those described previously. However, it should be noted that the mere application of linguistic principles does not promise successful learning.

Cognitive¹ linguistics was developed as a reaction to generativist, or Chomskyan, linguistics and has been gaining in popularity over the last several decades. However, it should not so much be regarded as a single approach or theory but rather as a grouping of several

¹ The approaches and theories mentioned in the following are not the only cognitive ones existing. There are several (second language learning) scholars whose research is not seen as competitive to, but complementary with, the approaches covered in this thesis. A prominent example is McLaughlin's (1990) Information Processing Model of second language learning.

specific theories sharing a common mindset. All theories within this cognitive field share the idea that language is psychological, functional (contradicting generativist ideas²), social, cultural and communicative. This thesis focusses on the second generation of cognitive linguistics³, also referred to as embodied linguistics (Johnson, 2017). *Embodied* refers to the fact that our experience is linked to and cannot exist without our bodily functions and behavior. The main founders of this theory are George Lakoff and Ronald Langacker. Langacker's assumptions about cognitive grammar published in his book *Foundations of Cognitive Grammar* (1987) and Lakoff's ideas about categorization published in *Women, Fire and Dangerous Things* (1987) are two of the most pioneering works and key influences in the rise of cognitive linguistics. With the increasing importance of corpora in linguistics (in general and especially in cognitive linguistics), these theories, and the other theories and approaches discussed in this thesis, can all be regarded as operating within a corpus or usage-based framework. Usage-based linguistics is concerned with the actual usage of language, using corpus data to describe a language (Tomasello, 2006). In doing so, the focus is not on speakers' real *performance* instead of idealized sentences, or *competence*, in Chomsky's terms. Some of the most important scholars in this field are Douglas Biber and John Sinclair, while Pawley and Syder (1983) is one of the most influential works regarding corpus linguistics and language acquisition, linking *native-like choice of words* and *native-like fluency* to the use of routinized chunks of language found in corpora. The third theory in focus of this thesis is construction grammar. It is part of the cognitive linguistic framework and based on the fact that embodiment, being the origin of language, is also the origin of grammar. Constructions are units of language in which the

² See Van Valin, 2001.

³ The first, or disembodied, generation being characterized by Johnson (2017, p. 16) as "a blend of generative linguistics, information-processing technology, analytic philosophy of language, and artificial intelligence".

meaning is buried in the abstract ordering of language phenomena instead of the words themselves. While there are several different construction grammar theories, my thesis focuses on Goldberg (1995, 2006), one of the most popular ones. It is her definition of constructions serving as one of the bases for the definition of the word *chunks*, treated as the building blocks of language in this thesis.

Based on this cognitive and usage-based research, a lot of linguists who are specialized in second language acquisition have used the assumptions of cognitive linguistics to establish theories about how we learn second and foreign languages. Among these, Holme (2009), Robinson and Ellis (2008), Tyler (2012), Liu (2014), and Ellis et al. (2016) are some of the most influential. In contrast, there has been very little research in the field of language teaching. The assumptions about language teaching are mostly made up of minor comments by second language acquisition scholars like Holme (2009), Langacker (2008), or Tyler (2008). Recently, also larger publications could be added to this list, including Littlemore (2009), Achard and Niemeyer (2004), Arnett and Jernigan (2014), and Arnett et al. (2015), the latter three particularly focusing on teaching German. Assumptions by authors like Lewis (1993, 1997) and Nattinger and DeCarrico (1992), who are specialized in language teaching but focus more on a purely usage-based rather than also a cognitive approach, add to the repertoire of language teaching research.

Based on Pawley and Syder's (1983) wording and based on the research presented above, this thesis develops several claims about teaching with the aim to establish a (near-)⁴ 1) *native-*

⁴ Second language scholars have reasonably abandoned the goal of "native-like" capacity because of the highly apparent differences between L1 and L2 speakers and because of the difficulty of defining 'native English' (e.g. Kachru, 1992). For that reason, in this thesis, the notion is mostly limited by the lexeme "near-". However, mentioning native-like capacity has two reasons: First, it elucidates that the approach builds on Pawley and Syder's original thoughts, and secondly, it makes aware of the fact that taking these three factors is supposed to engender a competency closer to the native level than previously common.

like cognitive representation of the target language, 2) the use of native-like choice of words, and 3) a native-like cognitive representation of grammar in the students' minds.

STATE OF THE ART

This chapter is subdivided into three main parts. The first part is going to concentrate on cognitive and usage-based linguistic research, the second part is about second language acquisition within cognitive and usage-based linguistic research, and the last part is going to take it one step further, presenting research about second language teaching methods based on cognitive and usage-based linguistics. Every section is going to cover both, general research and theoretic background specifically focusing on the German language.

COGNITIVE AND USAGE-BASED LINGUISTIC RESEARCH

Usage-based and cognitive linguistic research began in the 1980s as a counter-movement to Chomskyan Generativism. Rethinking old theories that were still popular in their early years, George Lakoff and Mark Johnson began establishing what they call *embodied cognitive science*, bringing importance to the human body in experiencing the world. For example, while traditional, generativist theories assume language rules to be innate, cognitivists see language structures as a result of individual organization of embodied encounters with language. Nowadays, several theories are subsumed under the term of embodied cognitive science, including conceptual metaphor (Lakoff & Johnson 1980, 1999) and blends (Fauconnier & Turner 2002), Goldberg's (1995, 2006) construction grammar and Rosch's (1999) theory of prototypicality.

Several of these theories are going to be addressed in this chapter consisting of three different sections. The first section is made up of theories about embodiment, as pioneered by George Lakoff and Ronald Langacker, the second area deals with usage-based or corpus-based

research findings in general and the nature of real-world language, mostly based on Sinclair (2001) and Pawley & Syder (1983), and the third and last one focuses on grammatically oriented theories like Goldberg's (1995, 2006) construction and Hunston & Francis' (2000) pattern grammar. These three main areas also build up the main structure for the chapter below *Cognitive and usage-based principles applied to second language teaching: A threefold approach*.

Embodiment theories.

As already mentioned, cognitive linguistics focuses on language being embodied, meaning that our experience is linked to and cannot exist without our bodily functions and behavior (Johnson, 2017). One of the most important and therefore superordinate implications of this statement is that there is no possibility to refer to a situation as it is, we can ever only refer to something as we perceive it (Taylor, 2018). It is essential to note that language use does not operate differently than or using any other cognitive procedures than any other non-linguistic cognitive activity (Ellis et al. 2018; Taylor, 2018; Tyler et al., 2018). Because our language and mind do not exist independently of our bodily experiences, they speak of the embodied mind (Johnson, 2017). This is why every speaker can have different rules. For example, young children can use the German contraction of three individual words *wosder* 'where'sthe' as one language unit with more versatile functions than the three words usually would have when used in standard adult speech such as in *wosder Mama?* 'where's the mom?' This is known as the conceptual view of cognition and stands in contrast to a perceptual view in which human cognition merely mirrors reality without being influenced by our individual bodily experience (Holme, 2009). Lakoff & Johnson (1999) claim that our understanding of the world, linguistic and experiential, is metaphorical, based on our bodily experiences with the world. Even though

we are unaware of this, we conceptualize abstract concepts metaphorically in order to understand them better, on the basis of what we experience living in our human bodies: When speakers of English say ‘The gas price is up’, they use ‘up’ to refer to an increase in amount because of their previous bodily experience they had with the concept of ‘up’ (Tyler, 2008). Other examples of these conceptual metaphors are understanding MOVEMENT as CHANGES like in the expression ‘He went crazy’ (Johnson, 2017, p. 166), LOCATIONS as STATES like when saying ‘I’m in love’ (ibid., p. 163) or PURPOSES as DESIRED OBJECTS as in ‘They just handed him the job’ (ibid., p. 178). Further, there are several basic, probably language and culture universal, so-called *kinesthetic image schemas* (Varela et al., 2016, p. 177) which are general cognitive structures like the nature of containers being able to fit objects in them so that objects are either in or out of them. They can be metaphorically projected onto more abstract structures, which is why we can say that things go in and out of sight or people get in or out of a relationship (ibid.). This process of projecting bodily entrenched concepts onto more abstract ones are major mechanisms of creating new language (ibid., p. 178), which gives us the opportunity to reconstruct the origins of expressions. These can then be used for language teaching, as a chapter below is going to demonstrate.

Another one of the most important concepts to embodied cognitive science is that every animate being unconsciously categorizes their environment. Even non-human beings categorize their environment, even if it is only regarding whether something can be considered food or not or a member of the same species or not (Lakoff & Johnson, 1999). We can even go so far as to say that, in addition to our symbols being meaningless without a relation to the world (Pecher & Zwaan, 2005), the world only exists in our categories of it: We cut our experiences of the world into meaningful categories, which is how we create meaning. The objects for which we have

meaning only exist because of our effort to categorize them and give them a name (Varela et al., 2016). Consequently, this also means that every aspect of a situation gets its meaning from the experience we have in it (Lakoff, 2017). Schema and frame theory, two more related theories and brought forward by Carrell and Eisterhold (1983) (based on Rumelhart, 1980) and Fillmore (1982), basically claim that humans organize their experiences in frames following certain schemata, constructed (and continuously redesigned) as they experience their world which eventually helps them interpret the language they encounter using their background knowledge of these frames. The famous example used to explain this phenomenon is that of a restaurant. As soon as someone who has lived in a Westernized culture for a substantial amount of time walks into an Italian restaurant, they know exactly which smells, which sounds, which type of food, and which common language topics and structures (welcoming, ordering, asking for a restroom, etc.) they can assume to experience because all of these experiences are stored within that one frame. In fact, they are even stored with information about their common order and connections: in form of schemata, and the knowledge of these schemata allows this person to understand and interpret what is happening and being said.

Interestingly, our understanding of categories themselves is a conceptual metaphor. We usually assume that something can either be part of or not part of a category, referring to categories as if they were containers. However, this metaphor simplifies the rather abstract concept of a category. Still speaking in metaphors but getting more to the core of the concept of a category, we can assume that categories have members that are more and less prototypical representatives of it. Since the most prototypical members are those that are higher in frequency of occurrence, they are typically the first ones learned to distinguish them from others. In fact, in most of the cases, the prototypical meaning of a word is the same among different languages and

cultures. The closer the cultures are, the closer are the members of categories, but even in very similar cultures, the more peripheral members of categories can differ widely from each other (Varela et al., 2016). This is a topic addressed in at a different point because of its implications for second language acquisition.

In language, when there are several concepts within one category, one lexeme, we often talk about polysemy. One way of looking at polysemy is treating the different senses just like other members of categories, according to Rosch's (1999) prototypicality theory, and evaluating their degree of prototypicality in use. In fact, especially when talking about lexemes, Rosch's theory has been developed further showing how related the individual senses are to each other. Brugman and Lakoff (1988), for example, came up with a radial network model to schematize the nature of relations between different senses of a polysemous word. Like Rosch, they disagree with traditional feature semantics based on evidence from empirical studies (also see Lakoff, 1987). The essence of their radial structure is that each member of the category is either linked to the most prototypical member or to any of the other members resulting in the fact that the members do not have to have shared features with the prototype. That way, we can establish network structures with radial links based on relationships from between general and specific items, based on shared information or based on metaphoric relationships (Brugman & Lakoff, 1988). Moreover, since we assume that grammatical structures bear meaning, which is going to be pointed out in more detail in a chapter below, we can assume that grammar can be polysemous, as well (Langacker, 2008). An example to prove this point are these two sentences which have the same grammatical form but do constitute a semantic difference: 'This road is winding through the mountains' and 'A snake is winding through the mountains' (Langacker, 2008, p. 69). The same grammatical structure (and word choice) still results in a different

construal of the situation. The first situation creates a static scenery while the second one depicts motion.

As can be seen here, polysemy is highly related to another major feature of our language use: construal. Even though there is a prototypical or default way of expressing things, humans always construe their experiences in a certain manner by making language choices. In Langacker's terms, they choose according to specificity, prominence and perspective (Langacker, 2008), if following Littlemore (2009), they choose according to perspective, attention and salience (on what we put our focus), constitution (how fine-grained or close-up we view something) and categorization. No matter which set of parameters, the concept of construal refers to the fact that with our language we express how we perceive the things in our environment, which features we pay attention to and which we overlook (Varela et al., 2016). Ellis refers to this process as "learned attention" (Robinson & Ellis, 2008, p. 17). Langacker (2013, p.43) explains the concept of construal with a simple example. When saying 'the glass with water in it', the speaker wants the focus to lie on the glass being a container. In 'the water in the glass', the focus is on the liquid the container holds. 'The glass is half-full' refers to the relationship between the liquid and the container with a focus on the fact that the liquid fills just half of the container's potential volume and 'the glass is half-empty' designates the same relationship but focusing on the fact that the void consumes half of the container's potential volume.

Two more claims about human experience are important for this thesis. First, the process of conceptualization is different from individual to individual since people's minds do not function by rule like a computer does, for example. Everyone has their own experiences from which they conceptualize the world (Lakoff & Johnson, 1999). Second, because of being

entrenched in our everyday experiences, cognition is linked to situation (Pecher & Zwaan, 2005). The patterns of perception we encounter in recurring situations are so-called *affordances*. These affordances are relative to every being's individual needs (Johnson, 2017).

At this point, it is important to mention that I have not been distinguishing between conceptualization processes and language use. This results from the fact that, to be shared with other people, our conceptualizations have to have symbolic equivalents. These, our linguistic symbols, are created by conventionalism, which makes them instantly recognizable (Holme, 2009). Consequently, all parts of our language have meaning, and every linguistic choice leads to a slightly different meaning. This claim reconnects to the very basic principles of functionalist linguistics. At the same time, it is the essence of lexicogrammatical language teaching as explained in an earlier chapter because syntax and meaning cannot be treated as something separate from each other like in the Chomskyan tradition (Lakoff & Johnson, 1999).

Corpus linguistics.

Corpus linguistics was pioneered by linguists like John Sinclair, who raised the importance of analyzing real world language and what Chomsky would refer to as *performance* rather than *competence* or Saussure would refer to as *parole* instead of *langue*. Over the past 40 years there have been a large number of corpus studies, studies observing and analyzing large real-world text databases in order to find out regularities in peoples' speech in different registers. One area of study is the search for recurrent multi-word sequences including idiomatic and non-idiomatic but salient phrases (Ellis 1996; Howarth 1996; Wray & Perkins 2000; and Wray 2002).

Defining words like *chunk*, *prefabricated unit*, or *construction* (only mentioning a few of the terms used by scholars of this field) is a difficult task, granted that each word and each author using any of the words can imply slightly different features of them. One of the most important

features for most authors, including Goldberg (1995, p. 5) is a chunk's non-compositionality. However, in 2006, Goldberg decides to also include entities occurring with sufficient frequency, even if compositionally transparent (Goldberg, 2006, p. 5). Interestingly, following Sinclair (1991), Hoey (2005), or Langacker (2009), these two definitions do not even differ from each other considering that they assume each and every collocation to have nuances of meaning which only get visible when used in company with each other. If that is true, all collocations would automatically be compositionally non-transparent to a certain degree. Pointing out the frequency of chunks as in Goldberg's definition from 2006 is still important for a different reason. Even if Goldberg (2006) and Hoey (2005) convincingly argue that all words in a language are part of at least one collocation, speakers can still choose to not use a typical collocation, for reasons of humor or in poetic writing, for example. If we still believe that every linguistic decision speakers make carries meaning, even deciding against a common collocation would carry meaning. Thus, if we did not take frequency into account in the definition of chunks, we would not arrive at a useful, distinct definition.

Still, there is one major problem with Goldberg's (2006) theory. Her definition assumes that all linguistic entities that occur with sufficient frequency are part of our mental storage of chunks. However, as is going to be pointed out at several points throughout this thesis, Schmitt et al. (2004b) find that it is not possible to correlate a chunk's frequency of occurrence in language with its psychological representation in a person's mind. Schmitt's finding is compatible with Hoey's (2005, p. 4) statement that linguistic items and their associations are different from individual to individual based on their personal experiences with the world. Next to Goldberg's definition, there is another one frequently used in applied linguistics. Wray (2002) avoids the

issues about compositionality and the mental representation of chunks. She writes that chunks are

a sequence, continuous or discontinuous, of words or other elements, which is, or appears to be, prefabricated: that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar. (Wray, 2002, p. 9)

Wray's word choice in "appears to be prefabricated" helps avoid the problem of the correlation of corpus linguistic results with psychological reality, which Goldberg faces. However, for the actual use of the definition in language teaching, it is still important to find out to which degree chunks usually are prefabricated and stored in native speakers' minds. While Wray's definition therefore still has to be updated as soon as empirical studies allow to make assumptions about this, it is going to be used as the definition of the word *chunk* for this thesis. Nevertheless, Wray's definition does not specify whether it includes abstract (generalized) versions of chunks. While *Pattern Grammar* only focuses on these abstract, generalized forms (Francis, 1993; Hunston, 2007), construction grammar includes chunks of every degree of abstraction from the individual instance ("he gave her a fish taco") to the most generalized form ("Subj V Obj1 Obj2") (Goldberg, 2006, p. 5). This is what this thesis does, as well. It is to note that neither Wray (2002) nor Goldberg (2006) use the word *chunk* themselves. Wray talks about "formulaic sequences" and Goldberg calls them "constructions". However, especially when working with students, the word *chunk*, together with the action of *chunking* (dividing texts into chunks) seems useful, mostly for reasons of shortness and lack of other linguistic associations with the term. The estimated proportion of chunks in our language differs greatly depending on the scholar estimating. However, there is agreement that a large amount of words in texts are part

of routinized or prefabricated language units. The most detailed estimation so far has been made by Erman & Warren (2000), having calculated that 58.6% of the spoken English language and 52.3% of the written English language consist of chunks.

The study of lexical collocation or collocational frameworks is one of the most extensive ones within this topic and also highly used in second language acquisition and teaching research, as discussed in a chapter below. It is mostly corpus-driven, meaning that it consists of inductive studies, in which linguistic constructs are derived from the study, and stands in contrast to corpus-based studies, in which the constructs are pre-defined and the corpus is being analyzed according to how they are used (Tognini-Bonelli 2001:84–87). One of the major advantages of this method is that it can identify linguistic categories and units that traditionally are not recognized as such but seem to be of importance in real-world language use. Examples of influential collocation studies are Renouf & Sinclair (1991), a study of pairings of function words with a variable lexical slot such as *a + ? + of*, *be + ? + to*, *many + ? + of*, Liu's (2013) corpus study of two sets of synonymous nouns (*authority*, *power*, and *right*, and *duty*, *obligation*, and *responsibility*), which finds out that while speakers mostly use conventionally established collocations, they do not all the time, or Douglas Biber's (2009) research on 3-word, 4-word and 5-word lexical bundles. Examples of Biber's findings are that most lexical bundles begin at a clause or phrase boundary, while the last words of the bundle already begin the second grammatical structure. Register-specifically, he found out that most of the bundles in speech connect two clauses, while bundles in writing usually connect two phrases. He also found that bundles usually have strong grammatical correlates, some being constructed from clause components, others from phrase components. In general, he found that in academic prose, lexical bundles are phrasal rather than clausal, while it is vice versa in conversational registers. Other

studies have tried to use frequency distributions to identify recurrent word sequences such as Altenberg & Eeg-Olofsson 1990 and Altenberg 1998. One major application of corpus-driven research is Hunston & Francis' (2000) *pattern grammar*. Their studies are only to a certain degree corpus-based because they are in part determined by pre-defined linguistic categories such as *noun* and *noun phrase*. However, for the largest part, their studies are corpus-driven in that they focus primarily on the construct of the grammatical pattern (“a phraseology frequently associated with (a sense of) a word...”, Hunston & Francis 2000, p. 3). They find out that real-world language has systematic regularities in the associations between meaning, grammar, and words. These patterns are not necessarily complete structures (phrases or clauses) and not recognized as such in traditional grammar.

Liu (2012) about the most frequently-used multi-word constructions in academic written English is another study examining the most frequent multiword constructions. He analyzed the academic writing register (ACAD) sub-corpora of the *Corpus of Contemporary American English* (COCA) and the *British National Corpus* (BNC). Examples of his results, beside a list of 228 most frequently-used academic written English multi-word constructions, is that multi-word hedging is perhaps not as common in these academic divisions as in humanities and social sciences and that filled constructions (idioms and others) are rarely used in academic writing. He also found that, in contrast to common perception, a number of phrasal verbs are used in academic writing, in some cases even more often than in others, generally phrasal-verb heavy registers. Being a second language acquisition scholar, Liu also made assumptions about which multi-word constructions should be acquired early by ESL writers of academic texts because of their high frequency.

One more important field of study within collocation research is the psycholinguistic status of recurrent word sequences as we cannot imply that corpus data and our psychological representation of language can be mapped onto each other. This has been investigated by Schmitt et al. (2004b) and Ellis et al. (2008) and is similarly important for the application to teaching. Furthermore, recent research has suggested that, in general, a processing advantage as observed for chunks over novel phrases should not be equated with holistic storage and processing (Siyanova-Chanturia, 2015). This finding would challenge some of the views depicted before. It becomes clear that at least regarding the psychological reality and processing of chunks, there is still a great amount of research to be done.

Cognitive and construction grammar.

As Langacker (2009) points out, there are three basic features of cognitive and construction grammar, which also highlight how connected the different topics of this thesis are. The basic features are 1) centrality of meaning, 2) meaningfulness of grammar and 3) its usage-based nature. For example, Radden and Dirven's (2007) *Cognitive English Grammar* is based on the fact that categories, the conceptual units of every community's culture, are not only the basic units of thought but also of language. In contrast to traditional grammars, construction grammars recognize that differences in surface forms usually are associated with semantic differences and therefore put emphasis on subtle differences in the way we construe our world. One of the most popular and important construction grammars is Goldberg's (2006). She defines constructions as "conventionalized pairings of form and function" (p. 5). She further suggests that

any linguistic pattern is recognized as a construction as long as some aspect of its form or 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. (ibid.)

Ziem and Lasch (2013) explain this phenomenon by referring to the fact that constructions are generally defined as patterns that, to varying extents, get entrenched in people's minds due to their conventionalization. Usually we can say that the more frequent the language units are, the more entrenched we can find them in our minds. However, as mentioned in the first earlier, the results of Schmitt et al.'s (2004b) study question this statement.

Constructions carry meaning to an extent to which they can even add non-prototypical meaning as in "Pat sneezed the foam off the cappuccino" (Goldberg, 2006, p. 73), in which a ditransitive meaning is added to the lexical meaning of the constituent lexical items. Other patterns like the passive voice, question formation, and relative clause structures are learned pairings of form and function and therefore also considered constructions. In fact, all our linguistic behavior can be explained in terms of constructions of different levels of abstraction, from broad generalizations to more limited patterns. Boas (2010) makes this clear by stating that the ordering of finite auxiliary verbs before their subject in English is to be regarded to stand on equal footing as the highly idiomatic pattern *kick the bucket*. In regard to the acquisition parameter of language, constructionist theories generally emphasize that constructions, and therefore the entirety of a language, is learned on the basis of the input together with general cognitive, pragmatic, and processing constraints (Goldberg, 2006).

Another type of grammar in which constructions receive a meaning-bearing role is Hunston and Francis' (2000) *pattern grammar*. Similar to Goldberg, they claim that all words have patterns in which they occur and that these patterns are meaning-bearing with the meaning not being inferable from the lexical units used in these patterns. In their theory, patterns are

abstract versions of real-world language chunks (p. 9f). Examples are the constructions *BITE n* and *BITE into n*. Even though being so similar, the first one is associated with the process of eating, while the second one evokes the image of the creation of a hole in something by using teeth (Hunston 2007, p. 260).

One special topic within the area of construction grammar is the status of idioms. Traditionally being the only form of construction being treated as a formularized unit, idioms usually are non-compositional, i.e. their meaning cannot be inferred from the individual lexical items. However, they can still be productive, like other constructions, a feature investigated by Taylor (2003) in detail. Even though frequently interacting with the study of chunks in general, the study of idioms is its own strand of linguistic research, commonly referred to as *phraseology*. Important scholars in this area are Hallsteinsdóttir (e.g. 2011) and Piirainen (e.g. 2008).

While there is a great number of constructionist theories and applications for the English language, applications of the same concepts to the German language are much rarer. There is no comprehensive cognitive or construction grammar of German. However, researchers like Hans Boas, Alexander Ziem and Alexander Lasch have strong intentions to do so. One project, led by Boas, is the collection of corpus data to build an electronic database about the construction grammar of the German language (Boas, 2013). Furthermore, there is a number of small-scale corpus studies and other applications of it to the German language. Research began in the 1990s after Fillmore & Kay (1993) point out how insights about constructions could be applied to other languages. A considerable amount of research has been done in the field of contrastive construction grammar, an example being Oya (1999) on the so-called *way-construction* in German and English or Boas (2003) on the resultative active construction in German and English. Boas' approach is a comparison of the two languages, explicitly without coming up with

universals. In contrast to Croft's (2001) proposal, he prefers the bottom-up approach in which he does not generalize and make assumptions about universals before having analyzed all languages.

Another theory which has been employed for contrastive analysis is the so-called Frame Semantics project. Frequently used for teaching methods and therefore discussed at a different point, the Berkeley Frame Net project and applications like G-FOL are contrastive research projects focusing on semantic complements of constructional theories.

COGNITIVE AND USAGE-BASED PRINCIPLES APPLIED TO SECOND LANGUAGE TEACHING

“Language is learned as a type of categorization”, (Goldberg, 2006, p. 15)

Applied cognitive linguistics and second language acquisition based on cognitive linguistic principles is an area which has become fairly popular within the last decades. This is not surprising, considering that even Goldberg and others whose main focus is not on language acquisition have come up with statements about it because the theory itself seems to have natural connections to acquisition theories. Some of the most important scholars in this field are Jeanette Littlemore, Andrea Tyler, Michel Achard and Susanne Niemeier. One of the main aspects addressed by almost all scholars is construal, the conventionality behind it and, related to that, categorization acquisition.

For example, Littlemore (2009), while applying all of the cognitive linguistic key concepts to second language acquisition in her monograph, points out the four main aspects that influence our construal of language units, as mentioned above. When we acquire a language, we automatically also acquire the construal patterns of that language, which all speakers share. As already mentioned, Ellis refers to this process as “learned attention” (Robinson & Ellis, 2008, p. 17). Even though we are consciously unaware of it, when learning our first language, we learn to view things from a certain perspective, pay attention to certain things rather than others, view them in a certain level of detail and categorize them in a certain way. The challenge in learning a second language is that there are differences in construal among different languages. One example that Littlemore uses is the difference in categorization of *plate* and *bowl* in English and French. In French, you can, if literally translated, *pour soup into a plate*. If learning a second language, the acquisition can be assumed to happen similarly, but be significantly complicated

by the fact that that our cognitive systems are already primed by our first language's construal habits, even if not consciously aware of it (Littlemore, 2009).

The same is true for expressions which are linked to other expressions by metaphor or metonymy. Diachronically speaking, more abstract items within radial networks often were logically extended from very basic vocabulary in terms of metaphor or metonymy, which made their meaning easily accessible to native speakers. An example would be using the verb *see* in terms of UNDERSTANDING. The metaphor helps to grasp a more complex concept and is related to the basic notion of SEE in terms of network relations. This theory does not only hold true for lexical items but also for morphemes and other categories. Littlemore (2009) found that these senses, the less basic and more peripheral ones within this network, often differ between languages, even if the basic ones do not. In addition, the most figurative uses often are marked phraseologies and not productive (anymore). She found that, generally, non-native speakers tend to avoid using these extended, metaphorical senses. However, people acquire them better in natural communicative contexts than decontextualized ones. Especially for the potential application to second language teaching, the most important and still not fully answered issue is the question to which degree the different senses of each expression are also psychologically linked to each other in native speakers.

One more very important collection of studies in usage-based language acquisition is Ellis et al. (2016). The purpose of the studies was to test native speakers' association of verb-argument constructions with particular verbs. Testing the mechanisms of unconscious acquisition of knowledge about the frequency of language units on all levels of language (from phonetics to large constructions), Ellis et al. investigated pairs of recurring semantic structure with schematic meanings, i.e. the mapping of language form to categories of recurring experiences in the world.

The results of one of the studies show that grammatical categories emerge from social interaction. An analysis of adult interactions showed that conversation partners negotiate, scaffold and co-construct meaning. They tend to repeat chunks of language of each other, including verb-argument constructions. Furthermore, one study found that the semantic network theory can be assumed to be true for verb-argument constructions, the same way they are true for lexical units. Frequency, contingency and semantic prototypicality, all major factors assumed to influence the learning of individual items, seem to influence verb-argument constructions the same way. The study further tested whether this can be attributed to implicit automatic processing rather than on-line, ad-hoc and conscious mechanisms and found that verb-argument constructions seem to be part of long-term conceptual structures. Other studies found that verbs are primary cues for verb-argument constructions and that humans are sensitive to the occurrence frequency of linguistic units and their context, for example. A very similar volume is Tyler et al. (2018) which focuses on frequency-driven learning and its implications. One of these is the implicit learning processes of categorization (which is referred to in this thesis as a link between step 2 and 3). However, the volume also mentions more embodied and more cognitively oriented principles including how learning a second language means reorganizing the categories you formed when learning how to categorize experiences (as in making meaning) in your first language.

Related to frequency-driven learning Tyler et al. (2018) and contingency learning, Ellis et al. (2016) refer to, one more important observation was made: The acquisition of patterns seems to work for predictable and regular constructions as well as for non-predictable and non-regular ones, as long as encountered in sufficient frequency (Barlow & Kemmer, 2000; Bybee & Hopper, 2001; Tomasello, 2003). In fact, children's early construction learning process was

found to be consisting of generalizations emerging gradually (Tomasello, 2000, 2003), including word and phrasal boundaries, making no distinction between predictable and non-predictable constructions. Moreover, Goldberg (2006) and others found that phrasal constructions can indeed be learned and that children are exposed to constant indirect negative evidence that helps them with overgeneralizations.

In conclusion, the acquisition theories are very similar to the assumptions about acquisition made in the communicative approach, a more established framework so far. This is true especially for principles like the focus on meaning and putting language learning into authentic contexts. However, what sets the theories of this thesis and the communicative based ones apart is the importance of embodiment and its role as the origin of grammar (Tyler & Ortega, 2018) as well as frequency being one of the major forces of learning (see Ellis, 2016, about contingency learning).

COGNITIVE AND USAGE-BASED PRINCIPLES APPLIED TO SECOND LANGUAGE TEACHING: A THREEFOLD APPROACH

In general, putting it into Langacker's words,

the advice of linguists on language pedagogy is likely to be of no more practical value than the advice of a theoretical physicist on how to teach pole vaulting (Langacker, 2008, p. 7).

However, taking into account the extent of literature that could be referred to in the previous two chapters and the fact that cognitive linguistics is more comprehensive, revealing, and descriptively adequate than traditional SLA approaches, it does not surprise that Tyler et al. (2018) call it a “particularly exciting time for second language (L2) research and pedagogy” (p. 1). Still, cognitive linguistics is going to be most helpful for those who develop teaching materials rather than students or instructors. Obviously, educating teachers in cognitive

linguistics would be time-consuming and not worth the effort considering that the theoretical background knowledge of a language and language learning is only a small proportion of what is needed to actually instruct students. Effective materials, however, can help teachers exploit cognitive linguistic principles without having to understand the background theories in detail (Langacker, 2008). If we want second language students to learn a language in a way true to natural language acquisition and use, if we want second language students to be equipped with language units stored in their minds just like native speakers are, and if we want second language students to link the language with their bodily actions just like native speakers would, it seems only logical to apply the cognitive and usage-based principles to language teaching methodology. This is especially true considering that even though conceptual and embodied, some language phenomena are not straightforward to everyone because each language can be slightly different in highlighting aspects of conceptualization, which then leads to the use of different words and different semantic prosody (Tyler & Evans, 2003). Several scholars have already brought forward useful articles, guidelines, activities, and methodologies. This chapter is going to gather these, combine them with other implications for teaching from cognitive and usage-based theories, and combine all of them in a three-step approach, referred to as the *threefold approach to lexicogrammatical language teaching*⁵.

Just like the first subchapter, this one consists of three different parts. In reference to the results of the other two subchapters, this is going to be the direct basis of the sample lessons and textbook pages presented in the following chapters. The first step can be explained by the first topic discussed in the subchapter *Cognitive and usage-based linguistic research*, the theories of

⁵ It should be noted that especially the first and third step draw on very similar principles as other functional linguistic theories. Scholars who applied these theories to language teaching have come up with similar results. One example would be the application of Systemic Functional Linguistics to language teaching (e.g. Troyan et al., 2019).

embodied experiencing and language use. This step should be accompanied by a second, mostly simultaneous stage, usage-based linguistic principles, and encompasses the teaching of specific instances of common word sequences, as proposed by several scholars like Lewis (1993, 1997), Nattinger & DeCarrico (1992) and Wray (2002), who draw on corpus observations by Sinclair (1991) and Pawley & Syder (1983). The third step only affects those units of language which are not assumed to be naturally autonomous in our minds, i.e., not encountered often enough by native speakers in each situation to be stored as a whole (see Bybee, 2008, on the process of automatization and Wray, 2002, on the nature of word sequences stored as a whole). The third step requires a generalization of the specific instances taught, arriving at a highly schematized version of the input from the first two stages. It draws highly on Goldberg's (1995, 2006) *Construction Grammar* and similar projects like Hunston and Francis' (2000) *Pattern Grammar*.

As Tyler et al. (2010) mentioned, respective teaching materials should maintain the precision of cognitive linguistic theoretical models while also being suitable for classroom use by teachers and several empirical studies like Kanaplianik (2016) show that a cognitive linguistic approach can be better than a modern typical textbook approach. One attempt at a cognitively inspired textbook for English is Dirven & Verspoor (2004). Roche & Suñer (2015, 2017) is a collection of data and information written in German (and therefore directed towards a European audience and curriculum), showing instructors how to prepare cognitively inspired and usage-based materials for their language classroom. It includes the theoretical rationale for the pedagogical choices, and the modules introduced have been tested and evaluated in previous studies.

Step 1: present embodied situation and language.

As has become clear before, the way we categorize our experiences and our environment influences how we express ourselves. The fact that people from different cultures, speaking different languages, categorize differently, leads to the problem that non-native speakers use words in different contexts than native speakers would and different words for the same contexts. One effect of this are the differences in collocation that we can observe among languages. The problem of collocation is going to be addressed in the second step.

However, not only collocation is affected. Choosing the right words in the right situation is another difficult process if not coming naturally. Experiences and language use typically are embodied (Johnson, 2017). For that reason, as teachers, we should create situations in which the students feel and experience with as many of their bodily senses as possible. There is a need to establish links between the words and the situation in which each language unit is used: as soon as being in a specific situation, you should be able to directly think of the words needed. This is even true for rather peripheral senses of words. Those peripheral senses usually do not directly come to your mind when thinking about the word itself. However, as soon as you are in the situation in which you might need it, the link established through previous use makes the specific sense directly available. An example of this would be the word *bird*, as in figure 1, an adaptation of the model used in Aitchison (2012, p. 69) shows. One of the most peripheral uses of bird (so peripheral that it is usually not mentioned at all) would be the acrobatic figure called bird, a lift where one person is held up horizontally by another. The position probably reminded of flying like a bird when the term came into existence. Being an acrobat, I learned this term a long time ago. Still, when being asked (in a non-acrobatic context) what a bird is or whether I can come up with all the different birds I know, it would take me a long time until I realize that there also is an

acrobatic figure with the same name. Even though the terms definitely are related, there is no strong link between them in my mind. The strong link is rather between the situations I use the word in and the word itself.

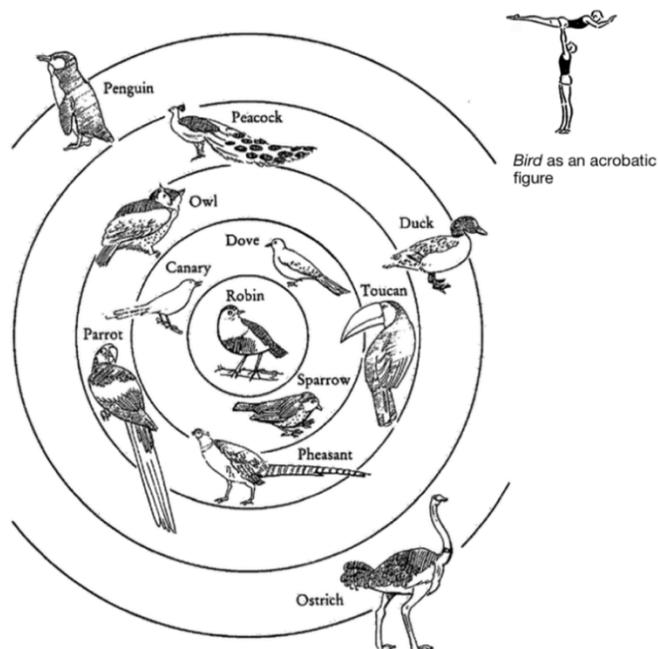


Figure 1. An adaptation of Aitchison's (2012, p. 69) model of the prototypicality of birds

Jeannette Littlemore (2009), who discusses the process of acquiring construal techniques and mentions the difference in construal between *bowl* and *plate* in English and French, mentions another point, highly interesting for second language teaching. Because of the process described earlier called “learned (in)attention”, native speakers of English, who try to express this concept in French, would automatically use the word *bol*, the literal translation of *bowl*, instead of *assiette*, which translates to *plate*, but is the word speakers of French might use in this

case. The fact that humans are not consciously aware of their conceptual habits makes language learning even more difficult. First, noticing the difference in construal might only happen after a large number of encounters and negative evidence. For that reason, comparing the construal patterns of two languages might predict the types of problems arising from interference, and, because of its focus on meaning rather than syntax, probably even more so than Wardaugh's contrastive analysis hypothesis from the 1970s (Littlemore, 2009). Second, even if aware of the differences, actively changing the construal system is likely to demand much effort due to usually being an unconscious process. The *bowl* example, in which soup can be associated with a plate in French and a bowl in English, also already suggests how categorization systems can influence common collocations, another highly researched field within language teaching theory. A lot of methods working towards the acquisition of common collocations might also help with this second problem. This issue is going to be discussed in the following section focusing on step 2.

Methods suggested by scholars to establish a link between embodied situation and language units, next to the use of realia, videos, and pictures, typically are the physical enactment of vocabulary or role plays in which movements are being linked to meaning (Holme, 2009). Since the imagination of situations always requires some cognitive effort, a high amount of cues to that situation (the teacher's register of speaking, classroom setup and decoration, pictures in the students' materials) and creating a coherent situation for a rather long amount of time rather than continuously changing the situation to be imagined can be assumed to help sustaining the imagined situation.

Mostly, scholars who conduct empirical research regarding the application of cognitive linguistics to the language classroom include cognitive grammar phenomena. For that reason, the discussion of empirical evidence is to be found in the description of step 3.

As important as it is to experience language in context as part of embodied experiences, due to the extreme shortage of time in the classroom, this step cannot involve a lot of repetition. For that reason, there is a second step, which is dedicated towards the repetition of authentic language chunks, so that they can still get entrenched in the students' minds.

Step 2: chunk repetition for memorization.

Considering results from usage-based corpus studies is a rather old concept in language teaching compared to the other steps. Pawley & Syder's (1983) and Sinclair's (2001) revolutionary foundations saying that 1) native-like fluency and native-like choice of words can be traced back to the use of certain phrases and combinations of words which are only known to native speakers who converse in their language regularly and are missed by second language learners who do not have access to abundant natural and authentic language (Pawley and Syder, 1983) and 2) native speakers, even though having the choice of any grammatically correct combination of words, exclusively choose among a much more limited set of options, which are, in consequence, frequently used (Sinclair, 2001).

The fact that the ideas have been tried to apply to language teaching for a long time now gets even clearer when considering that Michael Lewis (1993, 1997), with his *Lexical Approach*, developed a whole teaching concept based on Sinclair's and Pawley and Syder's findings (and an earlier similar approach by Nattinger and DeCarrico, 1992). These approaches were revised and expanded by scholars like Wray (2002) and Boers and Lindstromberg (2009). Lewis and others suggest teaching languages in form of chunks, different forms of prefabricated units, the ones

corpus research has found of which languages consist. According to them, in order to teach those, several teaching principles are to be followed. Input should be made of authentic language, no matter the proficiency and level of the students, repetition is key, and translations into a student's native language are highly important, while only translations of chunks with functional equivalents of the native language are allowed, and word-by-word translations are strictly advised against. For this reason, traditional vocabulary studying would become void. Differences between the approaches by Lewis, Nattinger and DeCarrico, Wray, and Boers and Lindstromberg are mostly related to the categorization and definition of chunks and the treatment of grammar rules within the approach. Since it has already been established that this thesis follows Wray's (2002) definition when referring to chunks of language, the differences among their definitions and categorizations within their definitions are rather insignificant. Further, since the teaching of grammar is a step on its own in this proposed threefold approach, the discussions about grammar by the scholars mentioned above are not going to be specified at this point.

Even though the question of how authentic or how intended language for students should be is a never-ending debate with convincing arguments on each side (Meunier, 2008), the motivations and principles of *The Lexical Approach* are still highly relevant. A high amount of repetition, especially to the extent where entrenchment happens, can seriously shorten processing time leading to a more native-like fluency (Pawley and Syder, 1983). Having chunks of words memorized takes the burden of choosing the right combinations of words (the ones frequently used by native speakers according to Sinclair's, 2001, idiom principle) and therefore helps with native-like choice of words (Pawley and Syder, 1983). However, at this point it should be noted that this approach does not assume memorization leads to procedural skills and acquisition. Just

like the other two steps, memorization alone does not lead to language acquisition. It rather contributes to it when in combination with other activities, as stated at the end of this step 2 subsection.

In general, what this threefold approach is using from the scholars promoting Lewis' *Lexical Approach* or related concepts, is the importance of a highly repeated exposition to authentic language chunks, a factor which is also foregrounded by later publications like Reppen (2007) and Wood (2010). In fact, Lewis even states that, with the right instruction, there is no text which would be too difficult or complex, even for beginning learners (p. 39). For similar reasons, Reppen (2007, p. 14) suggests teaching irregular verbs from the beginning on instead of starting with seemingly less complex but also less frequent regular verbs.

In addition to frequent repetition, other strategies proposed by scholars in this field can also help memorization. One method which has been found to increase memorization effects is tracing word sequences back along their conceptual history (Liu, 2014). For example, some prepositions begin as body parts (*be* and *hand* became behind) (Holme, 2009). Even if you cannot trace examples like these back in natural language contexts, it might help memorization (Liu, 2014). Furthermore, focusing on alliteration and assonance can enhance the same effects, as shown in several studies by Boers & Lindstromberg (2008b) and Boers et al. (2012). One more type of activity which is frequently mentioned, most importantly by Lewis (1997), Still, it is that it is important to mention that these methods are to be used in addition to repetition.

There are three important arguments for all of this to happen before the third step. The first one is that, even in natural language acquisition, chunks of words are acquired in an unanalyzed condition before taken apart and before noticing slots which can be filled by other words. Second, syntactic and semantic priming are effects which can be observed when only

memorizing chunks of words, meaning that having them entrenched can already lead to an unconscious understanding of syntax and frequent semantic co-text, and third, even though the mere repetition of chunks of words does not give information about the context they usually are used in (which is one of the reasons why there is a need for a combination with the first step), the memorization of the links between the single words proves especially useful when looking at the fact that the links between words, once established, get further strengthened in every other encounter. This would also happen when focusing on grammatical regularities in step 3 because once the links are strong enough, even encountering only one entity suffices to evoke all of the others usually associated with it (Elsen, 2009). Ellis et al. (2016) mentions a similar point, which adds that the more often humans experience co-occurring features, the more they become associated in our minds and the more they also affect perception and categorization.

On a side note, that also is the reason why we should not teach similar units of language together (Nation, 2000): Similarities usually are highly apparent. If we teach language units with apparent similarities, our minds will focus on these and connect the items mentally. If these links are established before we learn how to use the language in situations, we might confuse the words or units that are similar because we learned them as something that belongs together. The link between them is stronger than the link to the embodied situation. Even if we are aware of the differences, we would have to perform demanding mental operations to break the link we established.

The importance of this second step has already been indicated in the description of the first step. But this also works the other way around. If only applying the second step, any language use would only be an imitation of actual language use. Even if chunks of words are memorized and native-like, they are not entrenched to be used in actual situations. For that

reason, a combination of both steps seems to be the most fruitful choice. Both are essential to language teaching, making students able to choose the right combination of words and making students choose them in the right context.

Empirical evidence for the usage of chunks instead of single words in the classroom is limited but notable. Studies assessing usage- and chunk-based, teaching methodology can be divided into three groups. The first group consists of studies testing the usefulness of mere consciousness-raising strategies, meaning teaching strategies which make students aware of the existence of chunks and their role in language. There are three important and fairly recent studies in this group: Basil and Quader (2016) investigate essays written by students who have received consciousness-raising focused instruction according to the principles from Lewis (1993, 1997) and compared them to essays from a control group. The study shows clearly positive effects in the experimental group. One of the outcomes was a highly reduced number of syntactic mistakes in the essays of the experimental group both in contrast to their pre-experimental essays and in contrast to the control group. Boers et al. (2006) found similar results. Just like Basil and Quader (2016), Boers et al. (2006) tested experimental and control groups. They investigated the oral competency looking at the participants' speech fluency and the perceived language competency judged by a variety of native speakers. Boers et al. (2006) found that usage- and chunk-based consciousness-raising strategies have a positive effect on these two areas of language acquisition. The last important study in this group is Stengers et al. (2010). They investigated the productive and receptive knowledge of chunks in an experimental group receiving instruction focused on chunk-based consciousness-raising strategies and a control group. While Basil and Quader (2016) tested 40 and Boers et al. (2006) tested only 32 participants, Stengers et al. (2010) tested 60 people. However, in contrast to the other two studies, they could not find significant evidence

for the usefulness of consciousness-raising strategies for acquiring productive language skills. In a literature review, Boers und Lindstromberg (2012) come to a similar conclusion:

Consciousness-raising strategies, even if they often seem to have a positive influence, can be considered as less beneficial than other usage- and chunk-based instruction formats.

Group 2 of empirical research regarding usage- and chunk-based language teaching consists of those studies which encourage student led corpus use. For example, Daskalovka (2015) investigates the usefulness of online concordance tools in her language classes. In her study, the method seems promising since the experimental group improved significantly more in their posttest than the control group.

The biggest group within usage- and chunk-based language teaching methodology research is the third one, in which consciousness-raising strategies are supplemented by cognition activating processes like memorization and application activities. Henry (1996) investigated the effect of pictograms and ideograms depicting chunks in combination with oral input and found this method to be successful in his study. After the turn of the century, empirical studies become more and more frequent establishing a significant research landscape. Schmitt et al. (2004a) teach frequent chunks from an academic writing register. They make use of the students' textbook, Nattinger and DeCarrico's (1992) principle of chunk teaching, and different corpora. The result of the study shows that teaching the usage of chunks leads to a more proficient usage of native-like utterances. Another study from the same collection (Jones & Haywood, 2004) investigated how activities encouraging cognitive processing effect the knowledge of and ability to use native-like chunks. They found out that the knowledge of chunks, even though in general it improves significantly, does not improve gradually. Instead, forgetting as well as acquiring new chunks are both part of the process. However, contradicting

their hypothesis, the tested personal and motivational factors were not found to correlate with the results. While all these studies worked with intermediate or advanced college students, Scott (2014) investigates the effects of corpus-oriented and chunk-based instruction including memorization and application techniques on a group of beginner adult learners. He collected data throughout a whole year. His results show that his control group kept the status of being beginners for significantly longer than his experimental group did. AlHassan und Wood (2015) and Pellicer-Sánchez (2015) teach students of differing competency levels and receive a positive outcome for lesson plans using collocations from the COCA and aiming at the active production of these. They could find significantly more chunks in the students' posttests than in their pretests. Ördem und Paker (2016) investigate the effects of chunk-oriented teaching methodologies on the students' written language productivity of native-like chunks. In contrast to these rather general studies, Shin and Kim (2017) focus specifically on native-like use and omission of articles in English. Their study also shows that a three-week phase of teaching chunks improves proficiency. In addition, Boers und Lindstromberg (2005, 2008b) and Boers et al. (2012) investigate the effectiveness of certain activities that can help the memorization and production of chunks: They find that chunks which exhibit assonance or even alliteration are easier to remember and reproduce than others, especially when raising awareness of these features.

Boers und Lindstromberg (2012) come to a similar conclusion in their literature review. However, they underline the dependency of the results on the actual activities used and especially the meaningfulness and level of cognitive processing needed to solve them. In general, even though there is a significant number of studies, there still is a need for further empirical research, especially because the existing studies do not always test for a long enough period of

time or a large enough group of participants to be considered representative. Certainly, the effect of usage- and chunk-based activities in combination with the other two steps of this threefold approach needs empirical testing, as well.

Step 3: underlying constructions or: grammar.

Looking at corpus studies and theories of embodied experience, the first two steps seem to suffice in order to teach a second language. However, scholars including Bybee (2008) articulate that only a certain number of chunks are actually automatized in a speaker's mind. Just like Goldberg (2006, e.g. p. 126) suggests, it can be assumed that (even though we do not know how much exactly because mechanisms of entrenchment are not opaque and immune to observation, Achard, 2018) a lot of meanings are produced online, based on the meaning of the construction used. In fact, it can be said that every part of language is part of some construction carrying meaning. For that reason, this third step is supposed to teach students the essences of cognitive and construction grammar. This seems especially fruitful considering that one of the most common points of criticism in the *Lexical Approach* is that there are too many different important combinations of words which would have to be taught until fully entrenched. If not even native speakers seem to have a fully entrenched cognitive representation of every chunk (Schmitt et al. 2004b), there is no need for non-native speakers to have it. In addition, rules make languages productive and productivity is another important competence of speaking a language proficiently. However, we have to be aware of the fact that this, in turn, increases processing time again.

In addition to all the reasons mentioned earlier, there is another one for not using traditional grammar approaches in teaching foreign languages. As frequently observed, the common ELT grammar typologies do not reflect actual language use. For example, in a corpus

search, Gabrielatos (2003) found that 55% of the authentic corpus examples of conditionals did not fit into the core ELT typology of having three different types of conditionals, each having different motivations.

Moreover, a cognitive theory of grammar seems more accessible to students than traditional accounts of grammar, for several reasons. For example, when treating grammar as having meaning, just like lexis, even though more abstract, the access to it is easier because an inherent goal of talking is communicating meaning. Syntax is usually secondary to us. If students understand that some meaning only comes from the construction that is used, they might understand the importance of grammar. Grammar in this case is not defined as a set of rules defining all and only grammatical sentences but as “conventionalized pairings of form and function” (Goldberg, 2006, p.3). Similarly, grammatical errors are not to be seen as a violation of an arbitrary rule but rather just as oddness and incongruity (Taylor, 2008).

In addition, teacher-induced “focus on form(s)⁶” can have positive effects on the learning process. In fact, as opposed to not teaching grammar at all and rote learning of grammar rules, it has already been tested to have a more positive effect (Taylor, 2008). For example, grammar rules can serve as an overview of the individual instances learned. Since humans always strive for some kind of closure (Webster & Kruglanski, 1997), it can be assumed that knowing a rule subsuming all instances learned before is satisfactory to students and might therefore help long-term memorization.

Littlemore (2008) addresses several cognitive and construction grammar principles and their importance for second language teaching, including radial networks (whether and how

⁶ “Focus on forms” implies that the class focuses on one structure throughout the class period. In a “focus on form” approach, the grammatical phenomenon in question is not predetermined. Attention is given to the forms needed in the specific situations during class time (Ellis, 2006).

flexible categories have to be presented to students and how transparent the connections between single instances are supposed to be), encyclopedic knowledge (the amount of background knowledge needed to grasp the concept of each word and expression, especially for more advanced students), embodied cognition and construction grammar.

In order to actually work with Construction Grammar, students need pedagogical reference grammars of the language they are learning. However, since it is a relatively new field, there are not many yet. While works of reference for students in lexicography are more available, thanks to COBUILD and other dictionaries, comprehensive corpus-based works of reference for grammar are still rare. There is one concrete attempt to an English pedagogical Construction Grammar: *Exploring grammar in context* by Carter, Hughes and McCarthy (2000). It is based entirely on real-life spoken and written language with most frequent and simplest patterns being introduced first. It also anticipates errors and displays use in context. However, there are no explicit cognitive explanations except pointing out why speakers choose one linguistic unit over the other. This is, even if not literally said so, what we call construal in Cognitive Linguistics. Other suitable reference grammars are Römer (2004, 2006) with authentic material exclusively, Widdowson (2003) with prototypical, didactic and learner-centered examples and Valdman (2003) with authentic but modified examples so that it takes into account processing and learning factors.

However, one of the problems of pedagogical construction-based grammars is that learners' expectations might diverge from what these grammars have to offer. In a recent study, Meunier found that students had the impression that a variationist approach (telling students that certain structures can be used in one context but not in another one) makes it unnecessarily difficult to remember things. Apparently, the students also like decontextualized general rules

more than the cognitive construction approach (Meunier, 2008). One explanation might be that this is related to the previously mentioned human urge for finding closure by having some rule which explains the entirety of a concept and subsumes different instances. However, decontextualized general rules have an important disadvantage. It is unlikely to be able to infer individual instances from generalized rules when we do not have the instances memorized to check if the rule we have is correct. According to Meunier (2008), students also want teacher induced classes rather than ones in which they have to discover regularities themselves, a phenomenon which might be attributed to the fact that having to discover regularities is cognitively more demanding.

In cognitive linguistic grammars, more so than in others, there is the problem of a desire to do justice to the richness of the data as well as the need for generalization. In general, Meunier's (2008) study showed that the learners did not like the tested cognitive linguistic textbook because they found it too complex and difficult. This study can help developing cognitive grammars as it shows which difficulties there are to face. However, there are several more studies needed if we wanted to develop a useful and effective pedagogical grammar of any language.

What also has not been empirically tested yet is which rules we should teach, and which ones would complicate the learning process, for example because not enough instances that are being taught are affected by it. In some cases of collocation, other regular instances used to be regular but are not part of the language anymore. Germans use the adjective *hoch* 'high(ly)' in combination with *gelobt* 'praised', for example, and also used to say phrases like *hohes Lob* 'high praise', but the latter is starting to decrease in usage while *viel gelobt* 'much praised' or *sehr gelobt* 'very praised' are more modern options. In other cases, conventionalization can add

irregularity. In general, at least until there is more empirical evidence, it seems helpful to teach construction grammar rules when there is a large number of tokens of one type to be learned and less helpful in cases in which there only are few instances.

Tyler et al. (2010) conducted a study applying cognitive linguistic principles to the teaching of modals. Traditionally often introduced as homophones, in the experiment, the different senses of modals were taught as having a root and an epistemic sense, both connected to each other. The study showed that the students learning modals with the cognitive treatment improved more than the ones receiving the traditional treatment. While the key goals for their study and paper, apart from offering experimental evidence, were to provide an analysis of English modals so that they are cognitively accessible to students, the authors also suggested that the approach used can provide helpful explanations for the teaching of prepositions, phrasal verbs, conditionals, and articles. Some related interesting publications are Radden and Dirven (2007) and Tyler and Evans (2003) regarding prepositions.

More specifically interesting publication in the field of cognitive linguistic language teaching in classrooms are Tyler et al. (2018) and Tyler et al. (2018). Based on basic cognitive linguistic principles like pointed out earlier, Tyler et al. conclude principles for language teaching. For example, the fact that language is a social phenomenon grounded in communicative interaction is the reason for the need of contextualized language in classrooms. Furthermore, cognitive linguists agree that categories are formed by bottom-up and top-down processes while interacting with people, which makes the use of a combination of inductive and deductive rule instruction important to consider. The fact that there are at least two forms of categories (hierarchically organized schemas and prototype schemas), which are expected to play a role in our mental representation of the world, make it seem possible to assume that students

would benefit from building up similar categories while learning a language. Lastly, since language is gradually built up from smaller chunks to fully-formed entrenched categories and constructions, form-meaning mappings in second language teaching can be expected to be more fruitful when not taking the form of single word translations like in traditional approaches (Tyler et al., 2018).

Especially for inductive grammar teaching phases, this third step can make use of several corpus strategies such as students using corpora in order to generate and test hypotheses (Reppen, 2007). Reppen's (2007) *Using Corpora in the Language Classroom* and Aston's (2001) *Learning with Corpora* are valuable resources for the use of corpora in the classroom.

The threefold approach presented here combines inductive and deductive, explicit and implicit grammar instruction and noticing with memorization and application strategies. In detail, the first and second step require the students to notice chunk boundaries and then aims for memorization. Even though this step is not focusing on grammar, syntactic priming effects already occur, starting deductive and implicit grammar understanding processes. The language units learned are being linked to embodied situations. They also have to apply what they have learned to real-world situations. In a best case, these application processes become routinized. The type of knowledge gained is procedural rather than only declarative. However, if following Nattinger & DeCarrico's (1992) suggestion to add the explicit function of each form (p. 157), teachers would also deductively convey declarative knowledge. All knowledge should be made explicit, as studies like Norris & Ortega (2000), Ellis (2001), Robinson (2001), and Ellis (2006) have found. Priming effects still account for inductive, implicit learning. The third step of this threefold approach still requires students to notice, in this case regularities and constructions. The other cognitive technique they need to use is the application of learned knowledge, the rules

in this case, in order to be productive. The process of conveying these rules is supposed to be both, deductive and inductive. Deductively taught rules help deciding on which instances are ‘correct’ and which are not, without having to have each individual instance entrenched. However, if the students do not have any instances memorized and automatized, they cannot be sure that the rule is ‘correct’ in the first place because they do not have any point of reference, especially for testing the rule using a few examples. If they are aware of both processes, generating the rule from the instances and generating instances from the rule, the chances of producing ‘correct’ instances is highest. All rules should eventually be made explicit. It does not only draw the students’ attention to the function of the respective grammatical phenomenon and metalinguistic explanations are assumed to further humanistic education (Arnett & Jernigan, 2014), according to Littlemore (2009), explicit instruction is also a “prime for noticing”, especially for rules and regularities which cannot easily be deduced without instruction. The type of knowledge is declarative at first. In case the application starts to come more natural to the students, especially because combined with embodied situations (step 2) and already entrenched chunks of words (step 1), the declarative knowledge might become procedural (more about this process can be found in Ellis, 2006).

Elsen (2009, p. 261) also points out a similar argument. While generative linguists differentiate between two forms of learning, learning instances by heart or learning of rules, constructionists suggest that an entrenching of both, generalized and automatized examples is possible. However, it would still be highly beneficial for second language teaching if we found out to which extent native speakers use generalization and which extent units are automatized. Studies like Schmitt et al. (2004b) have already found that corpus analyses do not reflect psychological reality. After gaining more insight into this, there still is the possibility to teach

students more or less generalization or entrenchment strategies than native speakers use because of different needs of native speaker and language learner.

Furthermore, the question of whether we should teach grammar inductively or deductively might not be as important as sometimes assumed. When considering that the formulation and entrenchment of grammar hypotheses in authentic language acquisition is a long lasting process with several trial and error situations and a lot of repetition, the focus should not only be on the first introduction of the grammar phenomenon but rather on all the several instances in which the students deal with grammar hypothesis formation. This is going to be explained in greater detail in the discussion part of this thesis, where it is applied to the sample unit developed for students of German.

As already mentioned, even though the amount of research in second language teaching using cognitive linguistic principles is scarce, there are some studies that even focus on German. Arnett and Jernigan (2014), for example, developed and tested a lesson plan for teaching the German case system to first-year students, a similar scenario as in this thesis. Their results point to positive learning and language acquisition outcomes for cognitively inspired teaching methodology. Arnett and Jernigan (2014) favor explicit grammar instruction. Still, they stress the closeness of a cognitive approach to a communicative one saying that teachers should “talk about grammar [in a way] that is dialogic in character and fosters the co-construction of knowledge” (p. 69). Following cognitive principles, they state that case semantics are individual to each language and best represented as senses organized around prototypical values (p. 76). For example, the subject of a sentence is viewed as an entity acting of its own volition while the accusative object is viewed as something affected by the subject and prototypically undergoes some kind of change. A prototypical example of a transitive sentence they provide is *die*

Krankenschwester hat den Physiker ermordet ‘the nurse murdered the physicist’ (p. 77), in which you can clearly see that the object is undergoing change caused by the subject. As Arnett and Jernigan (2014, p. 78) point out, cognitive linguists regard transitivity as something concerning the whole clause rather than merely being governed by the verb of the clause. It is also seen as gradual rather than binary and the degree of transitivity can also be a matter of construal of the speaker. In their lesson plan, Arnett and Jernigan (2014, e.g. p. 79) use symbols to introduce the concepts of subject and object. These symbols are: an unfilled circle for a nominative and two unfilled circles connected by an equal sign for the abstract representation of a sentence like *sie heißt X* ‘her name is’, a filled circle for an accusative, and an unfilled circle and a filled circle connected by an arrow pointing towards the filled one for sentences like *X hat Y* ‘X has Y’. In contrast to rather complex grammatical vocabulary, these symbols are assumed to be more accessible to students and allow a focus on meaning rather than grammatical accuracy (Arnett & Jernigan, 2014). It should also be noted that they clearly say that they do not start teaching grammar from the beginning of the class. In fact, they regard the recognition and production of typical patterns like *Ich heiße* ‘My name is’ over explanations of grammar. This is especially interesting because it appears to be very close to the approach proposed in this thesis. However, it does not define “typical patterns” (p. 81) in enough detail to make assumptions about that.

Research on the classroom application for other foreign languages are Jacobsen (2015) and Hill (2015) for English and Lysinger (2015) for Russian, for example, which are not going to be described further. Another study about the application of cognitive principles to the teaching of German is Arnett and Deifel (2015). It deals with the teaching of two-way prepositions, which is why it is not discussed in great detail in this thesis. In the study, an experimental group of

second-year German students was introduced to two-way prepositions using cognitive linguistic explanations. The teacher used written and oral, inductive and deductive activities as reinforcement. The control group, in contrast, was only confronted with the textbook explanation. In order to test the efficiency, students had to describe pictures using two-way prepositions and completed a fill-in-the-blank exercise in which they had to fill in the correct article. The results of these tests show that the approach used in the experimental group was more effective than textbook explanations.

In general, we can say that the few studies there are, seem to have promising results. However, further empirical research is needed. What is important is that using cognitive principles to teach common German grammatical phenomena seems feasible. The following chapter presents a similar application of cognitive principles to the grammatical phenomenon of the German direct object.

METHOD

This chapter describes the process and underlying thoughts of the creation of a 10-page sample unit, which is intended to be part of a textbook for first-year college students of German. The unit can be situated in the middle of the school year. There are no strict prerequisites for the students, although, an introduction to basic sentence structure and high frequency vocabulary like personal pronouns and the verbs *haben* and *sein* ‘to have’ and ‘to be’ should have been introduced already. In general, a class of fewer students allows more concentrated class and partner discussions, which are essential for every teaching situation but especially in a language class using a cognitive and usage-based approach. In order to develop the lesson material for the German first-year college level class, I applied the threefold approach I developed based on state-of-the-art research to one of the most common topics in American first-year German textbooks⁷. I selected the topic of *shopping* and *clothing* and combined it with the grammar topic of the accusative case and narrowed it down to the use of the accusative case for direct objects. With *kaufen* ‘buy’, *tragen* ‘wear’ and other concepts being transitive and therefore often associated with direct objects, I decided that combining both topics would lead to an authentic introduction of phrases with direct objects. However, even if the accusative case is the only grammar topic to be discussed during this unit, the students are confronted with other grammar phenomena like a high number of adjective-noun collocations in regard to clothing (*schöne Hose, kurzes Kleid*) and, due to the language used in Instagram advertising for clothing, frequent

⁷ Examples are *Welten* (Augustyn & Euba, 2015), *Kontakte* (Tschirner et al., 2017), and *Sag Mal* (Anton et al., 2017).

uses of the imperative (*Probier die mal an!*). The approach used here builds on the fact that language should be entrenched in speakers' minds (in form of actual instances or constructions) and linked to embodied situations so that the language can be retrieved without effort in similar situations. Therefore, the entrenchment of language is one of the basic pillars in this approach. In the textbook pages created for this thesis, the entrenchment of adjective-noun collocations and imperatives aids and, according to the recent research, enormously simplifies the discussion of the respective grammar topics, which are supposed to be covered in one of the following units. At the same time, the students should have already entrenched instances of accusative uses from earlier units, which can help them building up the accusative construction in this unit. The underlying mechanisms for this process are explained in a different chapter.

The planned sample lessons underlying the textbook pages follow three distinct steps to be further explained below and other chronological guidelines by the scholars associated with the research this thesis builds on. For example, activities introducing new language require the students to *notice*, a keyword in language teaching literature, and following activities help memorization by practice, using drills, and other exercises. The more the students get towards the end of the unit, the freer and less guided the activities become. The last activities are designed to assess whether the students can use the language learned (the non-abstract chunks and the constructions behind them) in contexts in which they are free to choose any language they want.

It should be noted that the word *drill* has developed a sincere negative connotation in the last few years. This is due to the nature of traditional approaches (mostly those nowadays subsumed under the term *Atlas Complex*⁸, Lee & VanPatten, 2003) exclusively making use of

⁸ Audiolingualism, a mid-twentieth century approach based on Skinner's (1957) Behaviorism the most prominent example of this.

drills. These drills, so-called “mechanical drills” (Paulston, 1970, p. 11) focused on filling in fitting grammatical forms using made-up sentences instead of authentic language. Students did not encounter these same sentences at any other point during class in embodied or authentic (or near-authentic) situations and filling in the right letters did not require any focus on or understanding of the sentence meaning. These are few but major differences to the drills used in this thesis: The eventual aim of using repetition and word matching drills here is *entrenchment*, a phenomenon discussed in the previous chapters. The drills are used as a substitute for the frequent encounter of language native speakers have. The students do not have to find the correct grammar form according to rules and without focusing on meaning. In fact, while continuously working on the drills using the same sentences over and over, they read and repeat grammar forms in context, which, when entrenched, contributes to the implicit learning of these grammar forms. Thus, whenever the word *drill* is used, it should not be implied that the drills are similar to the ones used in traditional approaches which, justifiably, received heavy criticism over the last decades.

In general, not only the principles described in this thesis have been used to develop the material. As becomes clear in several other paragraphs, even if not always specifically mentioned, principles like communication, meaning being negotiated in dialogue, project learning, scaffolding, and several lesson planning principles have been applied, as well. However, the goal of this thesis is to test the applicability of the approaches to first-year college level German language classes. It also raises awareness that there is a high need for empirical research of applications like these. For that reason, the following chapters do not focus on other teaching and learning principles.

The activities used for the sample unit are mostly based on activities suggested by scholars like Lewis (1997), Lindstromberg (1990), and Boers und Lindstromberg (2008b) but adjusted to fit modern texts and text formats. In order to allow for (near-)authenticity and an embodied connection between students and texts, the language in focus comes from real instagram posts, a German popular second-hand clothing app and real conversations about shopping from the FOLK corpus. The plead for texts allowing embodied connections by the students is based on Robinson and Ellis (2008), Littlemore (2009), Holme (2009), and Tyler (2012), and Langacker's (2008) and Lakoff's (1980, 1987) general frameworks. The unit is supposed to take between 4 and 6 hours. The vocabulary, here in form of a list of chunks to be learned by the students, is build from the chunks used in the three different authentic texts or text collections introduced and includes the most important words to be learned in the topic of clothing and shopping. Most of the words can be found in regular textbooks in a similar unit. The fact that the vocabulary to be memorized is a list of chunks (*wird schon, keine Rücknahme*) instead of isolated words (*werden, schon, kein/-e, die Rücknahme*) is based on usage-based linguistic principles as brought forward by Pawley and Syder (1983) and Sinclair (2001) and Nattinger and DeCarrico's (1992), Lewis' (1993, 1997), Wray's (2002) and Boers and Lindstromberg's (2009) didactical applications.

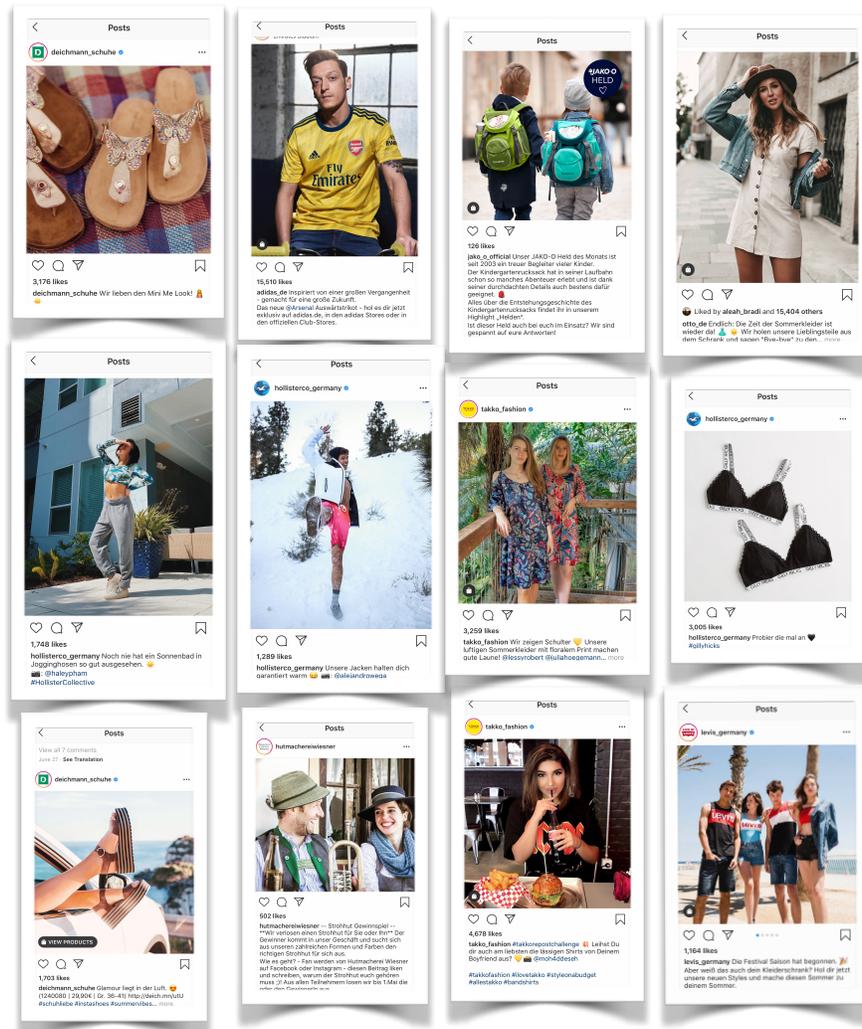
RESULTS

Ich darf nur nicht so viel auf einmal kaufen...

2

Du brauchst unbedingt neue Klamotten! Aber wo kaufst du die am besten? Online? Second-hand? In der Stadt?

Sieh dir die Anzeigen an, die in einer App gezeigt werden! Zerlege die Texte in Chunks und überlege, welche Chunks dir am nützlichsten sein können.



2

Viele Leute in Deutschland benutzen Apps, um ihre Kleidung weiterzuverkaufen, wenn sie keine Lust mehr darauf haben oder die Sachen nicht mehr passen. Sieh dir die Anzeigen an, ordne die Texte den Bildern zu und suche auch hier nach Chunks!

The grid contains 16 images arranged in a 4x4 layout. The first column shows four clothing items: a pair of blue jeans, a green long-sleeved top, a black dress, and a pair of high-heeled sandals. The second column shows four marketplace listings with text descriptions and details. The third column shows four more marketplace listings with text descriptions and details. The fourth column shows four more clothing items: a pink top, a pair of black sandals, a pair of high-heeled sandals, and a white dress.

2

3

a) Welche Klamotten findest du schön? b) Sprich mit deinem Partner darüber!
c) Diskutiert und findet Klamotten, die ihr beide schön oder gar nicht schön findet! d) Präsentiert eure Ergebnisse vor der Klasse!

4

Mit welchen Wörtern werden die Slots in den Chunks wahrscheinlich normalerweise gefüllt? Finde so viele Kombinationen der neu gelernten Wörter wie möglich!

Hol	dir	jetzt	unsere neuen Styles! unsere luftigen Sommerkleider. ein wunderschönes grünes Tunika-Kleid. diese wunderschönen Highheels.
-----	-----	-------	--



5

Beispiel: Vielleicht ist es doch besser, in die Stadt zu gehen? Immerhin kann man da die Sachen direkt anprobieren! Das hier ist das Shoppingcenter und die Einkaufsstraße in deiner Stadt! Finde heraus, welche Chunks die Leute benutzen!

In Nürnberg ist mir auch schonmal eine Tasche geklaut worden.

Beim Shoppen, ja. Schuhe angeguckt...

Ja, eine Freundin von mir studiert in Nürnberg und das ist halt die größte Shoppingmeile wenn man im Kernmünsterland wohnt. Nicht wie hier.

Ich geh da auch nicht mehr hin, seit mir die Tasche geklaut worden ist.

Ah scheiße.

Ja, glaub ich.

Aber ich weiß nicht, ich geh da eigentlich nie hin, weil ich finde das so voll, also wird es immer so voll und so stressig.

Ja genau und dann passiert nämlich sowas, ja.

3

In meinen Schrank passt echt eine Menge rein.

Also es ist jetzt alles reingegangen aber mit viel pressen und viel falten und ich hab zum Beispiel ja von diesen Kapuzenpullovern, da hab ich ja sicher zehn Stück.

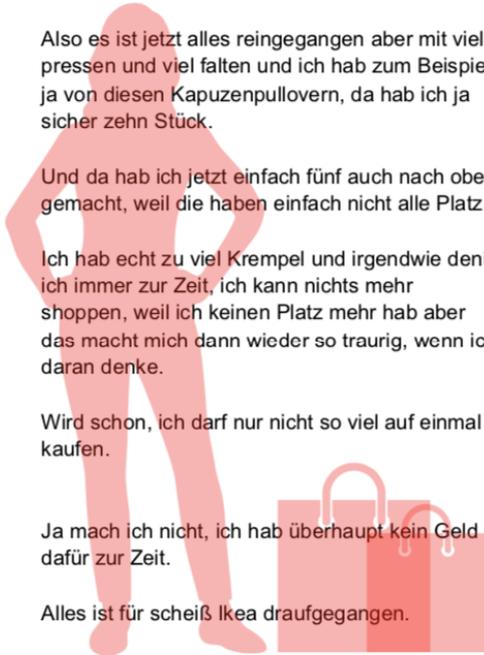
Und da hab ich jetzt einfach fünf auch nach oben gemacht, weil die haben einfach nicht alle Platz.

Ich hab echt zu viel Krempel und irgendwie denk ich immer zur Zeit, ich kann nichts mehr shoppen, weil ich keinen Platz mehr hab aber das macht mich dann wieder so traurig, wenn ich daran denke.

Wird schon, ich darf nur nicht so viel auf einmal kaufen.

Ja mach ich nicht, ich hab überhaupt kein Geld dafür zur Zeit.

Alles ist für scheiß Ikea draufgegangen.



Hm.

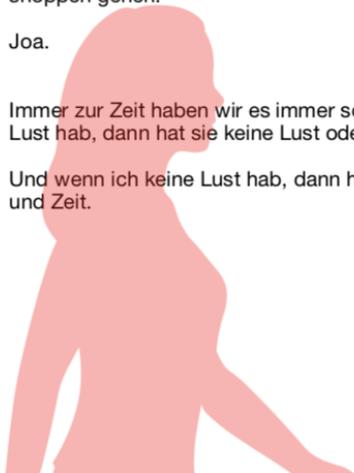
Aber du bist ja Gott sei Dank jemand, der macht das nie.

Ich muss jetzt aber eigentlich auch noch shoppen gehen.

Joa.

Immer zur Zeit haben wir es immer so. Wenn ich Lust hab, dann hat sie keine Lust oder keine Zeit.

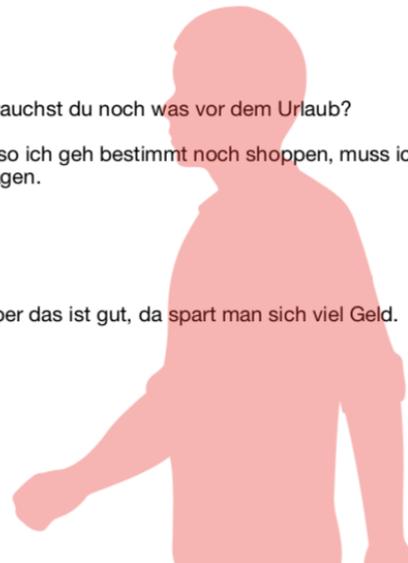
Und wenn ich keine Lust hab, dann hat sie Lust und Zeit.



Brauchst du noch was vor dem Urlaub?

Also ich geh bestimmt noch shoppen, muss ich sagen.

Aber das ist gut, da spart man sich viel Geld.



4

5

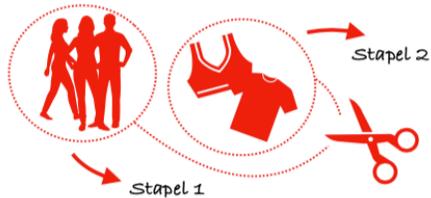
Die ganzen Geschichten vom Shoppen machen müde. Man fühlt sich, als wär man den ganzen Tag lang in der Stadt herumgelaufen und hätte Tüten geschleppt. Entspann dich ein bisschen und suche nach neuen Slots und Kombinationen von Chunks.



6

In manchen Sätzen gibt es 1) jemanden, der etwas tut und 2) jemanden oder etwas, mit dem etwas getan wird. Schneide die Bilder aus und mache zwei Stapel, einen für Kategorie 1) und einen für Kategorie 2)!

Beispiel: Wir holen unsere Lieblingsteile aus dem Schrank.



Ich habe das Kleid ein paar mal getragen.



(Ich) verkaufe hier eine schöne Hose von ___.



Ich habe diese wunderschönen Highheels selbst hier gekauft.



___, weil ich keinen Platz mehr hab.



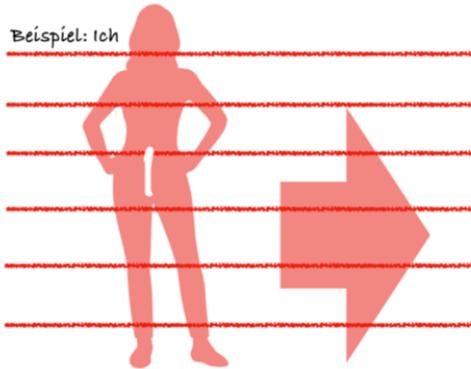
__, dann kann ich den Schuh an den Fuß anpassen.



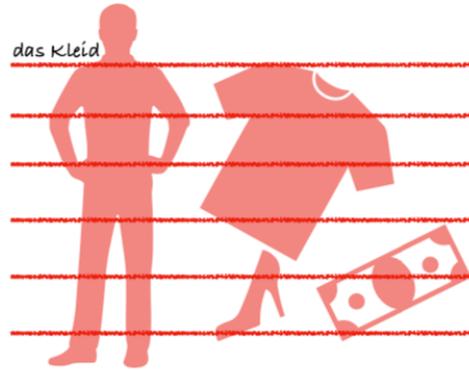
7

In manchen Sätzen gibt es 1) jemanden, der etwas tut und 2) jemanden oder etwas, mit dem etwas getan wird. Teile die Personen und Objekte der folgenden Sätze in diese beiden Kategorien ein!

Beispiel: Ich



das Kleid



Beispiel: Ich habe das Kleid ein paar mal getragen.

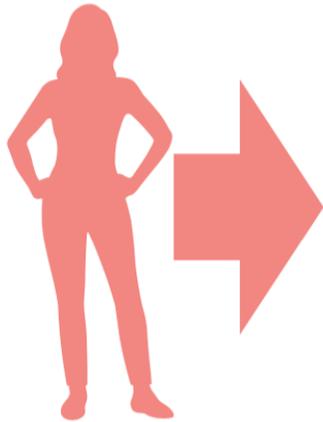
- 1) Wir holen unsere Lieblingsteile aus dem Schrank.
- 2) Ich habe diese wunderschönen Highheels selbst hier gekauft.
- 3) Ich verkaufe hier ein wunderschönes grünes Tunika-Kleid für 52.
- 4) __, weil ich keinen Platz mehr hab.
- 5) __, dann kann ich den Schuh an den Fuß anpassen.
- 6) Wir lieben den __look.
- 7) Ich hab überhaupt kein Geld dafür zur Zeit.
- 8) __, deswegen verkaufe ich sie.
- 9) __, deswegen verkaufe ich den Pulli.

8

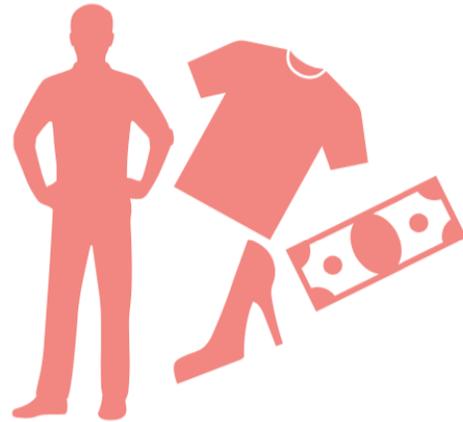
Welche Wörter aus der Chunkliste gehören in Kategorie 1) (jemand, der etwas tut) und welche gehören in Kategorie 2) (jemand oder etwas, mit dem etwas getan wird)?

9

Die Wörter der Kategorie 1) in einem Satz nennt man Subjekt. Die Wörter der Kategorie 2) nennt man Objekt. Alle Subjekte stehen im Nominativ. Alle Objekte im Akkusativ. Ordne zu!



____bjekt
____ativ



____bjekt
____ativ

10

Schau dir die Artikel aller Objekte (Wörter in Kategorie 2) an. Was fällt dir auf?

11

Welchen Unterschied könnte es machen, wenn ich das Objekt zuerst nenne?

12

Endprojekt: Deine Mutter versteht nicht, warum so viele Leute sich für Online-Shopping entscheiden. Erklär es ihr und entscheidet zusammen, wo und wie ihr die 200 Euro, die Papa euch zum Shoppen gegeben hat, ausgeben wollt (Benutze so viele gelernte Chunks, wie möglich!).

Hol es dir jetzt auf __.de! – Get it now on __.com!

Hol dir jetzt unsere neuen Styles! – Get our new styles now!

Mache diesen Sommer zu deinem Sommer! – Make this summer to your summer!

Probier die mal an! – Try them on!

Noch nie hat __ so gut ausgesehen. – __ has never looked so good.

Unsere Jacken halten dich (garantiert) warm. – Our jackets will (definitely) keep you warm.

die lässigen T-Shirts von deinem Freund – the casual t-shirts from your boyfriend

Leihst du dir auch am liebsten __ aus? – Do you also love to borrow __?

Unsere luftigen Sommerkleider machen gute Laune! – Our light summer dresses put you in a good mood!

schon so manches Abenteuer erlebt – already lived through many adventures

dank __ bestens dafür geeignet – thanks to __ suited best for it

Wir sind gespannt auf eure Antworten! – We are excited to hear your responses!

Glamour liegt in der Luft. – Glamour is in the air.

Wir lieben den __look. – We love the __look.

Wir holen unsere Lieblingsteile aus dem Schrank. – We take our favorite clothes out.

__und sucht sich den richtigen Strohhut für sich aus. __and finds the right straw hat.

Wir verlosen einen Strohhut. – We have a straw hat you can win.

Ich habe das Kleid ein paar mal getragen. – I wore the dress a couple of times.

Dennoch ist es in einem guten Zustand. – It still is in great condition.

Am Rock fehlt an einer Seite __ – The skirt misses __ on one side.

(Ich) verkaufe hier eine schöne Hose von __. – I am selling these pretty pants from __.

Ich verkaufe hier ein wunderschönes grünes Tunika-Kleid in 52. – I am selling a beautiful green tunic dress size 52.

Das Kleid fällt um einiges größer aus. – The dress tends to be really small.

Es ist mir inzwischen zu groß geworden. – It is now too large for me.

Das Kleid kann wunderbar mit Sandaletten im Sommer als auch mit blickdichter Strumpfhose und Boots im Herbst/Winter getragen werden. – The dress fits sandals in summer as well as opaque tights and boots in fall/winter perfectly.

Meldet euch gerne, wenn ihr Fragen habt! – Do not hesitate to contact me if you have questions!

Ich habe die Schuhe zwei mal getragen. – I wore the shoes twice.

Sie passen mir (jedoch) nicht gut, deswegen verkaufe ich sie. – They don't fit well, though, which is why I am selling them.

Es gibt zwei Schnallen, um den Schuh an den Fuß anzupassen. – There are two straps to adjust the shoe to the foot.

Der Schuh hat dezente Gebrauchsspuren an der Sohle. – The shoe has decent wear marks on the sole.

Ich habe diese wunderschönen Highheels selbst hier gekauft, jedoch ___ – I bought these beautiful high-heels here myself but ___

___, aber beim Tragen sieht man das nicht. – ___ but you cannot see that when they are worn.

Keine Rücknahme! – No returns!

In meinen Schrank passt echt eine Menge rein. – My closet can fit a lot!

Von diesen Kapuzenpullovern hab ich ja sicher zehn Stück. – I probably have like ten of these hoodies.

Ich hab echt zu viel Krempel. – I definitely have too much stuff.

___, weil ich keinen Platz mehr hab. – ___ because I don't have any space left.

Wird schon. – It's going to be fine.

Ich darf nur nicht so viel auf einmal kaufen. – I just cannot buy that much at once.

Gott sei Dank! – Thank God!

Ich hab überhaupt kein Geld dafür zur Zeit. – I don't even have money for that right now.

In Nürnberg ist mir (auch schonmal) eine Tasche geklaut worden. – In Nürnberg, someone stole a bag of mine one day.

Eine Freundin von mir studiert in Nürnberg. – A friend of mine goes to school in Nürnberg.

Das ist die größte Shoppingmeile, wenn man im Kernmünsterland wohnt. – That's the biggest shopping center when you live in the main part of the Münsterland.

Ich geh da eigentlich nie hin. – I actually don't ever go there.

Ich geh da auch nicht mehr hin. – I don't go there anymore, either.

Es wird immer so stressig. – It's always super stressfull.

Dann passiert nämlich sowas. – That's when things like that happen.

Brauchst du noch was (vor dem Urlaub)? – Do you need anything (before our vacation?)

Also ich geh bestimmt noch shoppen. – I will probably still go shopping.

Wenn ich Lust hab, ___ – When I want to, ___

___, dann hat sie keine Lust oder keine Zeit. – ___, then she does not want to or she doesn't have time.

Da spart man (sich) viel Geld. – That's how you save a lot of money.

1

Welche Möglichkeiten gibt es, Klamotten zu kaufen?

2

Du kannst dich noch immer nicht entscheiden? Da hilft nur Ablenkung! Verbinde die Chunkteile so, dass sie gut zusammenpassen, um auf andere Gedanken zu kommen!

Wir lieben den
Hol dir jetzt
Leihst du dir auch am liebsten
Ich verkaufe hier eine
Wir holen
Probier
Ich habe das
Dennoch
Ich verkaufe
Das Kleid fällt

die mal an!
unsere Lieblingsteile aus dem Schrank.
unsere neuen Styles!
die lässigen T-Shirts von deinem Freund aus?
__-Look.
Ist es in einem guten Zustand.
Kleid ein paar mal getragen.
schöne Hose von __.
hier ein wunderschönes grünes Tunika-Kleid.
größer aus.

3

Wo werden welche Chunks benutzt? Ordne zu!

A



wenn du deine alten Klamotten verkaufst

B



wenn Werbung für Kleidung im Internet gemacht wird

Hol es dir jetzt aufde! - Get t now o
com!

Hol dir jetzt unsere neuen Styles! - Get our ne styles now!

Mache die en Sommer zu dein m Sommer! - Ma
 e this summer t your summer!

Probier die mal an! - Try the on!

Noch nie hat ... so gut ausgesehen. - ... has nev
 r looked o good.

Unsere Jacken halten d ch (garantiert) w rm. - Our
 ackets will (definitely) keep ou warm.

Hol dir jetzt aufde! - Get it oncom!

Hol dir jetzt ere neuen Styles! - Get our ne styles
 ow!

Mache diesen Som zu deinem Sommer! - Make thi summer
you summer!

Probier die mal ! - Try them !

Noch nie hat __ so gut gesehen. - ... h s never looke
 so good!

Unsere Ja halten dich (garantiert) warm. - Our jacke s wi
 l (definitely) ke p yo warm.

DISCUSSION: PUTTING THE THREEFOLD APPROACH INTO USE

This chapter discusses the sample exercises and activities to be used for teaching German in a first-year college level class, unifying the three approaches described earlier. The sample exercises, put together to form a 10-page sample of a coherent textbook were presented in the previous chapter. The sample unit deals with clothing items and shopping (*Kleidung* and *Einkaufen/Shoppen*) and the grammar topic explicitly taught is the German accusative case in direct objects. However, the focus does not necessarily lie on the different endings of the accusative case but rather on the concept and conceptualization process of a direct object and marking the concept through language. The learning objectives are that the students become familiar with chunks frequently used when talking about clothes and shopping, have them stored in short-term memory with the following goal being long-term memory storage, that they can recognize clothing, especially *Kleiderkreisel* offers by websites like *Kleiderkreisel*, and that they can use the German accusative when used for direct objects (in contrast to when needed after a preposition). The sources for the language chunks being taught are Instagram posts, *Kleiderkreisel* offers, and personal conversations about shopping extracted from the FOLK corpus (*Forschungs- und Lehrkorpus Gesprochenes Deutsch*) which makes the language used register- and structurally authentic⁹. One of the language chunks from the corpus, *Ich darf nur nicht so viel auf einmal kaufen...* ‘I just can’t buy that much at once’ is chosen to form the

⁹ Having authentic language makes the language more complex than in common textbooks. This is an issue which has been discussed for a long time and is still not solved. It has been pointed out in this thesis before, once when summarizing Lewis’ (1993) view on the complexity of language to be taught, and at another point when pointing out the most important topics about pedagogical grammar creation as stated by Meunier (2008).

heading of the chapter of which the sample pages would be a part and therefore to be seen in the top left corner of every page. In general, the language of instruction is the target language, even if students switch back to their native language. However, students making and sharing connections to their native language have been considered beneficial (Boers & Lindstromberg, 2009; Wray, 2000) and should be supported rather than suppressed.

Step 1: Present embodied situation and language

In addition to working with the textbook pages suggested in this thesis, and in order to encourage communication, each class period can be started with a conversation period connected to the last session's content. This has several purposes: on the one hand, just like any other introductory phase, it serves to steer the students' focus towards the upcoming class, trying to make them put thoughts aside they have been thinking about before, on the other hand, it serves as a content-wise introduction to the topic. Lastly, it helps the students remember where they left off in their last session. This introductory conversation would be initiated by a question; however, as soon as the students are speaking German, the outcome of the conversations is of lesser importance in this context as the students are supposed to gain confidence speaking German by getting used to this routine of talking to a partner without the pressure of a textbook-based activity, a teacher monitoring their conversation, or specific instructions other than the initiating question. In an optimal case, students would find partners with whom they feel comfortable talking, to reduce anxiety, and, by talking to someone they might actually talk to in real life, this can potentially increase the level of authenticity. This naturalness can also be achieved by the fact that these activities are not part of the textbook. Such conversations encourage students to speak more freely with lessened potential pressure as the conversations are non-supervised and not externally controlled. Moreover, the conversation questions can serve as

a scaffold (the scaffolding method, Gibbons, 2002, being the key word here) for the final project each unit of this proposed textbook is supposed to have. This final project usually is some sort of speaking task the students have to fulfill using the language they have learned. In this case, since the final project asks the students to explain the concept of online shopping and to decide and negotiate with someone else how they want to spend their money, the daily conversation questions can prepare them for this, the first questions leaving less scope and the later questions being more open-ended. It is difficult to draw lines where in the textbook pages a new lesson would begin, especially considering that class lengths and student and teacher interests vary. If we assume a steady pace and divide the unit into five sessions, the introductory conversation on the second day (the one for the first day might still refer to the previous unit) could be initiated by the question *Würdest du auch bei Kleiderkreisel einkaufen?* ‘Would you also shop at *Kleiderkreisel?*’. The second question could ask *Hast du schon einmal ähnliche Erfahrungen beim Shoppen gemacht?* ‘Have you had similar experiences when shopping?’. This conversation has the potential to be developed into various directions, such as talking about differences between the US and Germany, or differences between the two people involved in the conversation, or differences between online shopping and shopping in shopping streets and centers. The third question could ask which of the shopping methods introduced the students would prefer, already aiming toward the final project question, which could be the introductory question for the last day on which the students will be working on (or start working on) their project. Thus, they can use the introductory question as a means to collect ideas. As just outlined, in general, these introductory questions serve a variety of purposes. While mostly being important parts of near-authentic and embodied use of language (a conversation with a fellow student before class is a situation they have all experienced before), the nature of these questions

is rooted in communicative principles and the principle of language being learned by negotiating meaning and communicating ideas in the target language, which are principles that are true for language teaching way beyond the scope of the approaches considered in this thesis.

The sample unit starts with an introduction of the new vocabulary. Alternatively, an introductory classroom discussion about online shopping and places to go shopping in the students' native language is possible, depending on time restrictions. It would be the first activity after the introductory phase in class and would help the students link the new information to their already existing embodied experiences, which is an effect we want to achieve. It also serves the purpose of preparing the students mentally for the upcoming unit, so that they can start imagining being in a shopping-related context. In order to ensure an experience as embodied and authentic as possible, the new words and phrases introduced come from Instagram posts. As an app being used by a large majority of today's youth, the students are likely to already cognitively link the mere appearance of the post to situations in which they encounter similar posts. This is similar to the context in which German speakers would encounter the exact posts presented to the students in this case. Because of reminding the students of authentic and embodied experiences, the introduction of the new vocabulary in the form of Instagram posts follows Tyler et al.'s (2018) principles of teaching language by linking it to embodied situations. Depending on the amount of time there is to spend on the introduction of new vocabulary, the students can read the texts a couple of times and gather ideas about similarities and differences to their personal Instagram experience and talk about it in small groups or with their teacher. There are several methods that can be used to increase the chances that every student engages in these activities, especially when the teacher is talking to the whole class. Methods like these include the Placemat Method, Think-Pair-Share or one-minute-notetaking and sharing techniques. The use of these

should be adjusted and individualized to the concrete group of students the teacher is working with. The choice can also be influenced by the students' and teacher's personal preferences, which can also affect the success of the methods. In general, getting students to talk and engage is one of the key goals and ways to success in a language class, and therefore highly recommended.¹⁰

Similar to the activity just described, the next activity also serves the purpose of introducing new vocabulary in a manner as embodied as possible. In order to accomplish that, the new vocabulary is introduced in form of *Kleiderkreisel* offers, *Kleiderkreisel* being an application used in Germany to privately sell and buy second-hand clothes. The description of the activity shortly explains this concept and then asks the students to make themselves familiar with the texts. In order to increase the students' focus on the content, they are also asked to match the texts with the pictures the people uploaded in their offers. Again, this can be done with a partner and should be reviewed in class with the teacher as a source of the correct solution. This does not mean that this reviewing phase has to be teacher-centered. The students can be the ones talking and picking on fellow students to talk while the teacher only steps in when they find a deviation from their sample solution. This time, the students probably cannot refer back to similar experiences of their own other than the general use of mobile phones, which is evoked by the design of the offers, and can be assigned to the overall genre of apps by experienced smartphone users, which the majority of college students can be assumed to be. However, by reminding the students of the fact that this unit is supposed to help them make a decision about which way of shopping has the most advantages, the students might feel motivated to pay attention to the offers and therefore their language use. The language being used is still authentic

¹⁰ However, the use of methods like these is not directly linked to the topic of this thesis, which is why it is not going to be explained any further, now and when mentioned in the following.

and has other features (the pictures and the format of the actual *Kleiderkreisel* app) ensuring a more embodied experience than if it were plain text. In addition, just like in the first activity, the teacher can decide to spend more time talking about the app, its purpose or any other context-related topic, which would increase the students' ability to relate to the real-life use of the app and therefore make the experience more embodied.

After the introduction of the new vocabulary, the students are asked to talk to their partners about which of the clothing items they like. In case they do not like any, they should be prepared to explain this. With their partner, they are supposed to come up with a list of items they both like or both dislike, which they have to report to the class later on. That way, the students can use the target language to express and negotiate real ideas.

Those first activities are complemented by chunking activities, which are going to be explained in the next paragraph focusing on step 2. After that, there is another introduction of new vocabulary. This time, the language presented comes from personal conversations, extracted from a corpus. The activity is designed to be presented to the students to evoke as many bodily senses as possible. Therefore, a picture of a situation in which the conversations could be heard is printed on the top of the page. In addition, there are different options, depending upon time and resources available, offered to the teacher. One option would be organizing a role play with a few selected students who practice reading the conversations in advance. When in the classroom, they are supposed to stand in the classroom in front of a picture of a German shopping center or street projected onto the wall and then act out their dialogues. To increase the embodiment of the experience for the everyone, the remaining students could walk around in the classroom. The students acting out the role play would only be speaking whenever students are close to them and they would repeat their conversation several times until all or most students have heard all three

dialogues. Another option would be showing a video of the conversations in which the people having the conversations would be standing in or in front of German shopping centers or streets. Even though not part of these sample pages due to limited resources and time, this video would be pre-recorded and included in the textbook of which this unit is a part.

As already mentioned, the sample unit is accompanied by a sample collection of drill exercises which are going to be explained in the following part of this chapter. However, their connection to embodiment is discussed briefly here. Even if drill activities are difficult to evoke embodied experiences because they usually do not use language in context, the design of the pages try to do so, for example by using pictures of clothing items, portraying the situations for the second drill in the form of graphics, using a lightbulb for the tip of looking at the board for more assistance for the third drill, the introductory question asking the students to recollect all the different possibilities to buy clothes, or the word choice in the assignment text telling the students that the drill activities are supposed to be a distraction for the students in case they still cannot decide which way of shopping would be best. Following the guidelines by Tyler et al. (2018) and Elsen (2009) and basic concepts of embodiment found by Lakoff & Johnson (1980, 1999) and others, all these activities have been designed to allow an experience with the language which is as embodied as possible while still being manageable to perform in a classroom setting.

On a side note, it should be added that the textbook pages do not introduce clothing item next to clothing item as traditional textbooks usually do. Every item is part of and surrounded by authentic language units, which is based on the principles of the counter-effectiveness of teaching related items together, as described before.

Step 2: Chunk repetition for memorization

The need for authentic language from corpora or real-life language use is one of the major pillars of usage-based linguistics and teaching methodology. All activities, in which the students encounter new language, are also chunking activities, meaning that they also serve as an introduction to the second step, the memorization of usage-based language. On their own or with a partner, the students are supposed to break down all of the texts at which they looked into meaningful chunks by drawing lines between the language units they identify in textbook texts. In the third introduction of new chunks, the students walking around in the classroom are the ones doing the chunking. They are supposed to note down whatever they hear in the staged fellow students' conversations having the form of chunks. At this point, it becomes apparent how much these two steps interact with each other. As this is not the first unit to be taught in this threefold approach, the students should already be familiar with the definition as well as the importance of chunks for learning and usage purposes but these explanations can be repeated as needed, especially to increase motivation and to increase the accuracy of the results. The chunking activity itself is an activity frequently suggested by scholars of usage-based approaches to teaching like Lewis (1993, 1997), Wray (2002) and Boers & Lindstromberg (2009).

At the end of each of the first activities, in order to ensure that every student has found the chunks they are supposed to learn, the students' solutions can be compared to a sample solution. The process of comparing can be a teacher-led activity in which the teacher presents the sample solution and asks the students for additional chunks they found. It could also be a more student-guided activity in which the students individually compare their solutions with each other or a sample solution and then talk about differences between their solutions in groups or with a partner. In case the students have found more and/or different chunks than those in the

sample solution (as has been observed frequently), if the teacher deems them to be helpful these can be discussed and added to the students' list of chunks they have to learn. That way, the students can feel more engaged in the concept of the lesson. This can also be used as an opportunity for differentiated learning if the teacher lets those students who found more useful chunks add them but does not make every student add those. In fact, by teaching the students how to notice chunks in texts and explaining to them the advantages and purposes they have and therefore equipping them with tools to work with language they encounter anywhere, if in the classroom or outside of it, this approach has the potential to assist outcomes with differentiated learning.

The homework after the first lesson (and every other lesson, as well) is designed to entrench the newly encountered and found chunks in the students' minds by frequent repetition, repetition being one of the most important principles for scholars like Lewis (1993, 1997), Wray (2002) and Boers & Lindstromberg (2009). Either online (a sample screenshot is attached to the textbook pages in the *Results* chapter) or on some sort of erasable board with the chunks to be learned, the students are supposed to fill in blanks of missing letters. The teacher can choose from the given list how many of the terms should be learned per day. In order to benefit from the first step of the threefold approach, the teacher should choose those chunks that students already encountered during their lesson. This activity is supposed to be repeated daily and covers all chunks at least twice. When using digital versions (see the Outlook chapter) this repetition can happen even more frequently. The number of letters missing is not as high as to make the activity difficult but high enough for the students to constantly have to be concentrated. Unfortunately, second language learning in classroom contexts usually entails that there is much less time to be exposed to the target language than in first language acquisition. For that reason, a frequent

enough repetition of a variety of language in context is impossible to implement. However, strengthening the links between the words themselves is already one step towards entrenchment and the need of this step becomes even clearer when looking at the fact that the links between words, when established in the students' homework, get further strengthened in every other encounter, for example when focusing on the context, or grammatical regularities in a later step. This is because once the links are strong enough, even encountering only one entity of the chunk suffices to evoke all of the others usually associated with them (Elsen, 2009). For that reason, it would probably be even more beneficial to add another phase of encountering and noticing language in context after the links between the words have already been memorized so that the students can focus on the link to the situation itself while already recognizing the chunk as one unit.

In addition to frequent repetition, other strategies proposed by scholars in this field can help memorization. Boers and Lindstromberg (2008a) published a book of several drills, many of them to be used to aim memorization of chunks and therefore part of the sample textbook pages presented in this thesis. As discussed earlier, there are many more possibilities and activities for this purpose, which should be used in the previous and following chapters of the proposed textbook. As long as there are no contrastive empirical studies about the effectiveness of these different activities, a mix of them should be most promising, also to offer variety and to reserve the possibility to choose fitting ones for each occasion: There can be chunks which have an interesting history of coming into existence, which can be researched by the students, while other chunks might have apparent uses of alliteration or assonance, which can be the focus of memorization activities. A possible drill for this unit would be the sentence- or chunk matching activity with one part of the chunk on the left and one on the right. This is supposed to be a

relatively easy activity as the students will have started their homework memorization activities already. Another possible drill is the activity in which the students have to match chunks to situations, either selling old clothes or buying new ones on the internet. Next to memorization, this also addresses the context in which the chunks are used, both of which attached to the textbook sample pages. These drills only serve as examples. They should mostly be used as homework exercises in order to save the classroom time for actual communicative interaction.

While every lesson should include an assessment component, this is not part of the textbook unit, neither is the chunk memorization homework mentioned. A textbook as envisioned and outlined in this thesis could involve recommendations for assessment. Also, some of the activities can be used as assessments, however, assessment tasks are highly specific to the individual class and the lesson concept because they are supposed to assess whether the actual goals are met. While the goals of this unit have been explained before, the specific goals for each class are based on the context in which the class is taught and the objective the teacher is following. Potential assessments for this part of the unit can be simple fill-in-the-slots activity testing whether the students know the most frequent chunks, for example. The type of activity is also frequently recommended by scholars like Lewis (1993, 1997) and Boers and Lindstromberg (2009) and has the advantage over a regular vocabulary quiz asking for isolated words in either language that it still treats words in their context so that the context can evoke the missing words, which is more authentic than having to come up with isolated words without any context. Other assessments, especially when getting further into the unit, can be conversational tasks, assessing whether the students can make use of the chunks they just learned.

The sample unit makes use of a certain style of activity working with the different slots in chunks that can be filled. They still serve the purpose of memorization while they also start

making students aware of the constructional nature of the language, which is going to be discussed in the third part of this chapter. In order to successfully work on these activities, the students should either already be familiar with the notion of slots and the way they work, or they are going to need additional instruction helping them with this and any other following slot-filling activity. The sample page includes an example of how to exchange words in one of the slots of a chunk with parts of other chunks and it mentions that there is going to be additional help on the board, set up by the teacher. The teacher manual to this textbook would include instructions for the teacher to set up the additional explanations.

The homework for this part could be to keep working on filling in the letters in the chunk list every day. It can easily be accompanied by asking the students to think about which offers they would have picked. In case a student would pick none of the clothing items shown, they can look up some more German speaking offers online, print them, and bring them to class. The first homework serves the same purpose as outlined previously, aiming at the memorization of the chunks, the second one asks the students to get more involved in the topic by including their personal choices and having the added experience of interacting with the websites themselves.

Just as the threefold approach proposes, with the activities just described, the sample pages add a second step to the first one. This second step is mostly restricted to the memorization of chunks. Due to time restrictions, the memorization cannot go further than memorizing the links between the words rather than also establishing links to the situations. However, a combination of step 1 and 2 as in these sample pages is assumed to be a promising compromise.

Step 3: Underlying constructions or: Grammar

Considering that only a certain number of chunks are actually automatized in a speaker's mind and that it can be assumed that a lot of meanings are produced on-line, based on the

meaning of the construction used in a given phrase, teaching students to extract these constructions and to locate and fill slots in phrases, seems essential. The third step in the threefold approach, teaching students the essences of cognitive and construction grammar, deals with the accusative construction in German, in this case.

After an introduction to the lesson asking about the decisions the students made in their homework, the next assignment is supposed to familiarizing the students with distinguishing between subject and object, which are the two main elements of the accusative construction. The students are supposed to cut out symbols and put them in two different piles or groups based on their function in the sentences given. Other than in the following activities, the two categories are represented in form of numbers (one and two), pictures, and explanations of situations (*jemand, der etwas tut* ‘someone who does something’ and *jemand oder etwas, mit dem etwas getan wird*) instead of the grammatical terms. This is useful in making students aware that even constructions are rooted in our bodily experience and that the categories serve the purpose of communicating meaning. It also is especially important because even though embodied, the categorization of subject and object does not come naturally to an English speaker who typically is not used to making that distinction. With this activity, students learn to make the distinction without having to deal with grammatical terms. In order to increase the level of embodiment and decrease the difficulty through language, there could be another activity scheduled right before this one, which does not include sentences at all. It would only consist of situations depicted in pictures or videos from which the students should tell which person or object would belong to one category and which one to the other. These pictures or videos would have to be staged, which is why they are not included in this thesis. For all of these activities, the students will find help (provided on the board by the teacher), again, indicated by a lightbulb on the right margin of the page.

As already mentioned, the second activity in step 3 is very similar to the first one (or first two). After having discussed the solutions of the previous task, the students are now supposed to write out the words used as subjects and objects. The textbook page provides lines for each of the words and distinguishes between these two categories. In order to highlight the meaningful nature of the grammatical phenomenon, the categories are still represented by the numbers one and two and pictures showing the process of a person doing something (indicated by an arrow) to someone or to other objects, a shirt, a high heel, and a banknote, in this case. However, because the students will have to deal with the actual words, the difficulty is increased, and the cognitive task is more abstract. After every student received the chance to work on the task for an (individually determined) reasonable amount of time, the teacher can choose among a variety of methods for the students to share their solutions and to make corrections to those. The sentences used are, like in all other activities, still the same ones as on the chunk boards because, as Lewis (1993, 1997) among others says, repetition is key to language learning.

None of these previous activities have made use of explicit grammar terms yet. Following Norris and Ortega (2000), Ellis (2001), Robinson (2001), and Ellis (2006), explicit grammar instruction has proven to be more effective than implicit instruction, however¹¹. This is a claim supported by several other scholars, as well. Ellis (2005), for example, found how the conscious and explicit involvement as in the initial registration of a pattern or construction is turned into implicit grammar knowledge during following input processing. Explicit knowledge and explicit feedback for flawed output is assumed to guide the conscious building of novel linguistic

¹¹ These studies included pre- and posttests with experimental and control groups. Explicit instruction (deductive and inductive techniques combined) have led to more substantial learning effects than implicit instruction. The differences between pre- and posttest and control and experimental group have both been significant. In addition, instruction that incorporates a *focus on form* integrated in meaning has proven to be as effective as instruction that involves a *focus on forms*.

utterances through processes of analogy until further usage turns that knowledge procedural or implicit.

Even though this is not resembling language acquisition in natural settings, we can assume students learning a foreign language as having more mature cognitive abilities than learners of their native language in early childhood. Also, learning different constructions and their regularities in language is one way of getting cognitively engaged with the language material and therefore might help with the memorization of the individual instances (Boers & Lindstromberg, 2009). In general, it can be assumed that especially older students hold grammatical explanations in high regard (Meunier, 2008), which is understandable considering that a certain need for closure, that you would get when being handed a full explanation of a phenomenon, especially after having made hypotheses on your own, is humane (Webster & Kruglanski, 1997). For that reason, in the next activity, the instructions introduce the students to the notions of *subject* and *object*, *nominative* and *accusative*. This should be accompanied by the teacher clarifying any questions the students may have. They are then asked to match the notions to the pictures they are used seeing for the categories. Following this task, either on their own, with a partner, or advised by the teacher, the students set up hypotheses about the use of the accusative case and what that means for (masculine) nouns and their articles. What is important is that they should not only refer to the newly learned chunks but also to those which have been memorized from earlier units. The decision whether to teach this inductively or deductively cannot be made at this point. There are advantages and disadvantages of both methodologies (Ellis, 2001; Ellis, 2006; Norris and Ortega, 2000; Robinson, 2001; Taylor, 2008) and the effects of either method vary greatly based on the constitution of the class. Furthermore, the question of whether we should teach grammar inductively or deductively might not be as important as

sometimes assumed. When considering that the formulation and entrenchment of grammar hypotheses in authentic language acquisition are slow processes with several trial and error situations and a lot of repetition, the focus should not only be on the first introduction of the grammar phenomenon but rather on all the several instances in which the students deal with grammar hypothesis formation. Those students who might have a natural talent for language learning might already start formulating hypotheses during the repeated encounter with the chunks throughout the unit. These hypotheses can be tested once the teacher gives them explicit grammar rules, whether they are deductively given or part of the final phase in an inductive grammar teaching format. After that, the grammar hypothesis formation is still in process because students cannot entrench constructions in such short time and without a certain amount of repetition (Lewis, 1993). Especially when not only referring to the newly learned chunks but also to those from previous units, one of the great advantages of this threefold approach is that, by having started with step 1 and 2, the students will potentially have a couple of correct examples stored in mind to which they can refer back in order to test the grammar hypotheses. They can also use their learned rule, if they can remember, in order to test whether the sentences they produced are correct. That way, both a top-down and a bottom-up approach is being used, regardless of the first grammar instruction being inductive or deductive, and we can increase the possibilities of meeting each individual learner's demands, whether they learn best with deductive or inductive grammar instruction or with a mix of both.

There is one last activity in this unit before the students are going to start working on a final project. The activity deals with the concept of *conceptualization*. If the students have not been made familiar with the term yet, this would be an opportunity to introduce the concept. In groups, with a partner, or using some method designed for gathering ideas by communicating,

the students are asked to discuss the differences between mentioning the subject first and mentioning the object first in a sentence. Switching around these parts of speech is easily possible in German because of its less restricted word order but also possible in English by using passive voice, for example. Depending on how interested the class is, the teacher can explain some more details about the phenomenon of conceptualization, might include the fact that other languages prefer passive voice over active voice, and then ask the students which role conceptualization plays in that case.

As mentioned before, the students will have a final project as a conclusion to the unit. In pairs, and either acting it out in form of a roleplay in front of the class, videotaping it, or just writing it down in form of a dialogue, the students have to imagine talking to their mom or parent. They will have to explain online shopping to them because they do not understand why so many people choose to shop online as opposed to shop in person. They should also discuss where they would want to spend the 200€ they got for a purpose they can imagine themselves. They will get the preparation time needed, as determined by the teacher, for accomplishing this task, keeping in mind that at this point they will have spent a couple of days thinking about this topic and that the language used should be free rather than memorized. The former activities were supposed to prepare the students for this activity, content- and language-wise. It can be seen as an overall assessment activity to examine whether the students make use of the chunks they just learned. If needed, the teacher can use this as an opportunity to explain the purpose of learning and using more chunks. The assignment can also be modified so that the students are asked to use a certain number of accusatives and a certain number of the chunks they have learned. While this task would increase the chances that students make use of what they learned, it would also decrease the level of authenticity.

CONCLUSION AND OUTLOOK

The approaches described in this thesis are immensely different from traditional approaches to foreign language teaching. In a lot of today's textbooks and classrooms, one major focus lies on isolated words and 1:1 translations, textbook language is rarely authentic, grammar drills rarely have any relation to real world language use, collocations remain mostly unacknowledged, and the meaningfulness of grammar constructions is far from being a topic, in language classrooms as well as in teacher training. Probably not as apparent but still existent are the differences to approaches which have been implemented fairly recently like communicative approaches to language teaching (Cullen & Kuo, 2007; McCarthy & O'Keeffe, 2004; Omaggio Hadley, 2001). Building on some very similar principles, the communicative approach and the threefold cognitive, usage-based and construction grammar approach still have important differences. First, usage-based approaches to teaching most often do make use of the students' native language. Equivalent translations, not word by word translation, and native language descriptions of the function of a certain phrase are regarded as helpful shortcuts. One more major difference is the focus on embodiment. While communicative approaches do make use of hands-on experiencing, e.g. with the use of Total Physical Response and Total Physical Response Storytelling in some cases, and culturally authentic activities, the focus on the use of as many bodily senses as possible is a central element in the threefold approach. In fact, embodied experiences are regarded as the origin of language. Thus, while teachers are supposed to create language learning situations as embodied as possible, they also try to explain linguistic phenomena in terms of experiencing situations (note that this can also be in the students' native

language), which is the third step in the approach, construction grammar. In general, we can still say that the threefold approach makes use of a lot of similar principles as the communicative approach. In fact, the threefold approach makes use of several principles other recently popular approaches are based on. As became clear in the previous chapters, differentiation and flipped classroom, two key words discussed a lot in recent years, are easy to combine with the approaches presented here.

The goal of this thesis was to explore to what extent the recent research findings in cognitive and usage-based linguistics can be used to create a promising lesson concept for teaching German. In order to research this, I developed an approach combining state-of-the-art principles from the three different but related major areas (cognitive linguistics, usage-based linguistics, and construction grammar) and then, taking into account existing applications to second language acquisition and empirical studies for applications in the classroom, combined them to form an approach consisting of three different steps which can be applied to any language teaching situation. After that, I developed a sample textbook unit making use of this *threefold approach of lexicogrammatical language teaching*, in order to potentially test its applicability to lesson planning. Even though the little previous research results seem to be positive, there is still much need for empirical testing, which is the biggest limitation of the method used. For that reason, this thesis is rather to be seen as a stepping stone for further research. An empirical study evaluating the effectiveness of lesson plans developed using the threefold approach of this thesis would be a potential dissertation project. The empirical studies would test lesson plans in which the language being learned would be linked to meaningful situations by encouraging and facilitating the student's imagination in real-world situations while being confronted with the language. Vocabulary would only be treated in form of word

sequences with functionally equivalent rather than literal translations or mere translations of the prototypical version of the word in the target language. What traditionally was considered the grammar part of a textbook would draw on construction grammar and point out meaningful patterns in language originating from embodied experiences rather than making students memorize grammar paradigms or work on grammar drills made up of non-authentic sentences.

Another research field which is far from being exhausted are the construction grammars of different languages and their comparisons between each other to find out where the most important conceptualization differences lie. As discussed earlier, differences in conceptualization are some of the major sources for problems in language learning and account for difficulties in all areas of language, as conceptualization is a huge part in collocation formation and the origin of grammar. Thus, the need for research is not only limited to empirical studies testing the efficiency of the approach. There still are huge holes to be filled regarding the cognitive principles and construction grammar of different languages, German being one of them.

In addition to limitations of the method, there still are limitations of the approach itself. Especially in cases in which classrooms are not equipped with projectors and computers or schools and teachers have a rather low budget for their classroom design, it will be difficult to create near-authentic situations for encountering and using language. Moreover, there are little to no materials to be used for teachers yet, which is important, especially if we want teachers who are not educated in cognitive and usage-based linguistics or construction grammar to make use of the approach. Furthermore, there are other questions still unanswered. For example, even if we know it should be the most frequent language chunks from each register that we want to teach, we still do not know how many concrete chunks and underlying constructions we should teach. And lastly, as pointed out at several points in this thesis, there is still a need to figure out which

concrete chunks are actually entrenched in native speakers' minds and which language units are produced on-line on the basis of constructions. We also still have to evaluate whether students should be taught to have the same ratio of concrete and abstract constructions or if there are advantages in having more of one or the other as a foreign language learner.

Taking another look into the future, cognitive and usage-based approaches seem to be promising theoretical frameworks for lesson planning. The more empirical research is being conducted, the more those principles can be applied in textbooks and other teaching materials. As long as there are no useful materials, it is not to be expected that cognitive and usage-based principles, especially in the form of the threefold approach, find their way into classrooms. One topic still to be addressed is the use of technology in *the threefold approach of lexicogrammatical language teaching*. Meunier (2008, p. 106) suggests the pedagogical grammar of the future to be hyperlink- instead of paper based. Grammar topics would be interlinked, and curious or advanced users could click their way through the grammar if wanted. In alignment with usage-based principles, a direct link to corpora would be easy to establish and could be used frequently by the students. This need for a promotion of corpus (and digital¹²) literacy for teachers and learners has been stated frequently by teaching scholars (Aston, 2001; Reppen, 2010). In addition to a digital grammar, there are several advantages of having the students complete their drills and exercises, as well as the filling in of the chunk list, on portable or handheld devices. The software would help having students repeatedly encounter words in common word sequences, mostly when they are not in class, as this repetition is highly needed but difficult to ensure with the limited time given in a foreign language classroom. That way, they can work on them wherever they are, especially because the activities do not require as

¹² Look into the literature on technology assisted language learning, which is a quickly growing area.

much focus as others do. If part of a software program, the blanks to be filled with letters could be alternated from day to day without effort, making the activities less repetitive. This program could be an app downloadable on any device, giving the students access to their homework drills in order to build their vocabulary, their reference grammar if they want to look up something they are interested in, and links to corpus entries or simplified versions of corpora showing them context and frequency of words and phrases.

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