

*Crosslinguistic effects at the conceptual level:
How cognitive linguistics can inform transfer research*

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Abstract

This paper attempts to offer a state-of-the-art review of recent works that address crosslinguistic influence at the conceptual level from the viewpoint of cognitive linguistics. The recent interest in and growth of empirical evidence of a cognitive-oriented analysis of crosslinguistic influence has led to the emergence of an entirely new line of research on mother tongue influence. This review presents points of divergence between cognitive linguistics on the one hand and conceptual transfer on the other, thereby surveying numerous notions within cognitive linguistics that can aid transfer research. The notions that are paid attention to are conceptualization, categorization, and construal. This also gives an idea of what cognitive linguistics is able to contribute to research on second language acquisition more generally. The second aim of the paper is to point to empirical works that investigate crosslinguistic influence through the lens of cognitive linguistics, thereby highlighting how and to what extent speakers' conceptual representations and cognitive patterns that are prevalent in their L1 influence the acquisition and use of conceptual structures in their L2. Taken collectively, the empirical findings of these studies give rise to the advantageous effect of employing a comprehensive and sophisticated account of language to the study of how conceptualizing systems in speakers who use two or more languages influence one another.

Keywords: conceptual transfer; cognitive linguistics; categorization; construal

1. Introduction

The aim of this paper is to review recent works that focus on how conceptualizing systems in speakers who use two or more languages influence one another. Much inspired by the theoretical developments in conceptual transfer and cognitive linguistics, this paper aims to show to what extent speakers' conceptual representations and cognitive patterns that are prevalent in their L1 influence the acquisition and use of conceptual structures in their L2. According to Jarvis, conceptual transfer involves those instances of crosslinguistic influence that originate from "the ways a person has learned – as a speaker of a particular language and as a member of a particular discourse community – to attend to, perceive, interpret, construe, conceptualize, categorize and refer to experience" (2017, p. 21). The overarching objective of conceptual transfer studies is to detect differences in learners' use of target-language structures that can be systematically traced to differences in the way their conceptual systems are shaped during the process of L1 and L2 acquisition. A lot of research on conceptual transfer that has been undertaken is associated with Thinking for Speaking (Slobin, 1996) and Linguistic Relativity (Odlin, 2005). The main question that guides the present paper, however, is whether a purely cognitive-inspired approach to explaining whether speakers' different conceptualizations of space, time, motion etc. might have consequences for their L2 use is a worthwhile endeavor. I follow the direction of Jarvis (2016), who proposes that conceptual transfer can be studied through the lens of one of the theories situated within the cognitive linguistics framework.

2. Conceptual transfer: Setting the scene

Conceptual transfer describes the similarities and differences in multilingual speakers' conceptual representations, patterns of conceptualization and expression of meaning that underlie linguistic categories in their L1 and L2. As an example, Finnish- and Swedish speakers of English living in Finland have shown different preferences for using spatial prepositions when describing a scene of two people sitting *in* or *on* the grass in front of a house (Jarvis and Odlin, 2000, revisited in Jarvis, 2016). While both prepositions are correct, Finnish speakers generally used the preposition *on*, whereas the Swedes preferred the preposition *in* when describing the same scene. One possibility of why these two groups differed in how they expressed such a simple spatial relationship is that they relied on two distinct concepts, or conceptual representations, of the same scene. To this end, Jarvis (2016, p. 627 ff.) hypothesized that Finns may have considered the Finnish word *nurmikko*, which refers to grass in someone's yard,

instead of the word *heinikko*, which refers to grass in a field when considering the scene of two people sitting in/on the grass in front of a house. Since the word *nurmikko* in Finnish requires the use of the external locative case (*nurmikolla*, "on the grass"), it may have been possible that Finnish speakers relied on their L1-based conceptual experience when describing the scene in their L2.

In the 1990s, the term *conceptual transfer* became the predominant term for describing research on crosslinguistic influence (CLI) with special focus on those instances of CLI that originate from the experiential categories and patterns of conceptualization that a person has acquired as a speaker of another language. The publications by Cadierno (2008), Ellis and Cadierno (2009), Jarvis and Pavlenko (2008), Jarvis (2011), Pavlenko (2000, 2003) and Robinson and Ellis (2008), marked the beginning to associate the term *conceptual transfer* with a specific approach to research. More specifically, conceptual transfer has become synonymous with investigating crosslinguistic influence within the cognitive linguistics (CL) paradigm (Jarvis, 2011, p. 3), drawing on theoretical developments and empirical accounts in cognitive grammar (Langacker, 1987, 1991), cognitive semantics (Talmy, 2000), construction grammar (Goldberg, 1995), metaphor theory (Lakoff, 1987; Kövecses, 2005) and mental space theory (Fauconnier & Turner, 2002). The benefit of addressing CLI effects from any of the theoretical perspectives situated within CL is to explore how the nature and structure of mental concepts and patterns of cognition that underlie linguistic forms in one language influences the emergence and use of a new conceptual system in another language. This has inspired the present paper, whose purpose is to offer an overview and discussion of the theoretical background of those studies that address crosslinguistic influence from the viewpoint of CL. This paper pays particular attention to the advantageous effects of using Langacker's cognitive grammar theory to the study of conceptual transfer. Some of these issues have been briefly addressed in an introductory chapter on conceptual transfer by Jarvis (2011), but the present paper takes a more comprehensive and in-depth view and is more explicit about the types of empirical evidence obtained from recent works.

3. Cognitive linguistics: Overview

CL is a flexible framework that describes the modern school of linguistic thought in which the study of language is the study of patterns of conceptualization, with language offering "a window into cognitive function, providing insights into the nature, structure and organization of thoughts and ideas" (Evans & Green, 2006, p. 5). The thrust of CL research is to characterize how linguistic structures reflect what is known about the human mind, cognition, embodied experience, and

other cognitively related phenomena from other disciplines, mainly from the cognitive sciences, neuroscience, and psychology (Evans, Bergen, & Zinken, 2007; Evans & Green, 2006; Lakoff, 1990). More importantly, only those cognitive phenomena are invoked that are well-known, plausible, and easily demonstrable (Langacker, 2007). In this view, cognitive abilities such as perception, attention, conceptualization, and reasoning are manifested in linguistic organization (Taylor, 2002). The visual perception of human beings is intimately linked to what we perceive, or conceptualize, in certain aspects of a scene in our visual field and how we do so. Primacy of meaning represents one of the key tenets in CL: it is an outspoken attempt to explain linguistic structure via imagery. Since language is viewed as a product of human interaction with the world, there is no principled distinction between knowledge of language and use of language (Tyler, 2012). Repeated use of certain linguistic constructions and categories gives rise to conventional units that consequently form a linguistic system. This usage-based approach to language allows for the interpretation that language is a tool for reaching communication-oriented goals in situational contexts in which meaning is derived dynamically and the choice of linguistic forms emerges in consideration of the communicational purpose (Barlow & Kemmer, 2000; Ellis, 2008). In a communicative situation, the speaker's choice of linguistic structure is determined by his perspective relative to the situation, which can result in an altered linguistic manifestation of the same conceptual content (Bybee, 2008; Langacker, 1987).

4. Cognitive linguistics and conceptual transfer: Common ground

The frameworks within the CL movement have offered valuable tools in examining the nature of language-specific conceptual structures and their influence on a person's learning and use of other languages. Overall, these cognitive theories constitute an attempt to explain the formation and use of linguistic structures of varying complexity by means of our general cognitive processes. Among the general cognitive capacities that have been subject to study by cognitive linguists are categorization, construal, inferencing, automatization, and memory storage (Bybee, 2010; Langacker, 1996; Taylor, 2002). The notions that appear most beneficial in explaining CLI effects at the conceptual level, *conceptualization*, *categorization* and *construal*, are duly reviewed in the forthcoming section.

4.1. Conceptualization

Conceptualization is the primary means of engaging with the world, and combined with linguistic expression reflects how conceptual knowledge is processed, organized and verbalized by the speaker (Langacker, 2008, p. 4). In a cognitive

approach to language and grammar, the process of conceptualization encompasses any embodied experience (Bergen, 2012; Bergen & Chang, 2013) or mental experience (Langacker, 2007, p. 431) and consists of temporary representations of the world in the speaker's working memory. The process of conceptualization encompasses objective features, such as the content and the context of the perceived situation, as well as more subjective features, such as the speaker's own assessment of the situation. Since conceptualization is inextricably linked through the speaker's own examination and presentation, it is dynamic and emphasizes the importance of more general cognitive abilities, sensory and motor skills, and emotive experiences that are at play during language processing (Achard, 2004, p. 174). Consequently, meaning is not a property of an expression in the sense that linguistic units do not carry meaning; rather, since meaning resides in the speaker's mind, it varies among individual people, communities and cultures (Evans & Green, 2006, p. 363). For communication and interaction among individual speakers and larger speech communities to be successful, an expression's meaning and its degree of conventionality in the speech community is assessed by the speaker. Only those expressions that are entrenched and accepted as conventional by the speech community are recognized as part of the language shared by the members of the speech community (see Langacker, 2008, p. 38 for discussion on entrenchment and conventionality).

The notion of conceptualization as discussed above bears importance for the study of L2 learning and CLI effects at the conceptual level. As suggested by Slobin (1996), conceptualization patterns learnt in the L1 are likely to be transferred to a speaker's L2. A cognitive-based view of conceptual transfer allows for the interpretation of conceptualization transfer in terms of an L1 perspective driven by the meaning of the construction that covers a concept in L1 which is transferred to L2. The conceptualization patterns that are subject to transfer are process of categorization (see section 4.2), selection and organization of conceptual content (see section 4.3), and more general cognitive abilities pertaining to visual perception, memory, and attention. Investigating the transfer patterns of these conceptualization strategies, then, includes work on how the L1 system guides the speaker's mechanisms of perceiving, categorizing, and organizing conceptual content. This falls exactly within the domain of a cognitive-oriented framework to work on CLI effects.

Empirical evidence for conceptualization transfer effects has accumulated substantially over the past ten years. This includes work on learners from different language backgrounds and their differences in conceptualization patterns of grammatical aspect (Bylund & Jarvis, 2011), the extent to which L2 users display traces of L1 spatial conceptualization transfer (Flecken, Carroll, Weimar, & von Stutterheim, 2015), how they refer to path and manner movement in motion

events (Brown & Gullberg, 2011; Daller, Treffers-Daller, & Furman, 2011; Hohenstein, Eisenberg, & Naigles, 2006), how they categorize and distinguish between events of *cutting* and *breaking* (Majid, Boster, & Bowerman, 2008) and how they refer to endpoints in event-time structures (Bylund & Jarvis, 2011; von Stutterheim, 2003). Furthermore, there is ample empirical evidence that suggests that CLI effects originate within a speaker's conceptual system; examples of this include the work by Athanosopoulos (2009, 2011) and by Athanosopoulos, Damjanovic, Krajciová, and Sasaki (2011), who examined cognitive representation of color categories in bilinguals with learners from language backgrounds that differ in the way they code the color space; the study by Cook, Bassetti, Kasai, Sasaki, and Takahashi (2006), who showed that learners with different L1s categorize objects and substances in distinct ways as well as the work by Pavlenko and Malt (2011), who showed that bilingual's naming patterns of drinking vessels was influenced by L1-mediated concepts.

4.2. Categorization

The position that language mirrors cognition has led to increased interest in the study of our capacity to compare a new experience to a set of prior experiences and judge it to be a member of a category. At its basic level, a category is a conceptual entity, representing the sum of individual, similar experiences that are relevant to any human being (Croft & Cruse, 2004; Evans & Green, 2006; Langacker, 1987, 2008; Radden & Dirven, 2007). The cognitive ability to establish thousands of categories of our experiences with the world is one of the most prominent phenomena within the CL framework, and this ability is expected to be manifested in language organization. The categorical division of language is displayed in all aspects of language, in phonology, syntax, etc., including grammatical classes, such as noun, verb, and adjective.

Since CL highlights the speaker's active role in conceptualization and language organization, categorization is also understood as a result of the speaker's subjective assessment of the perceived situation (Langacker, 2008). For instance, most users of English would unanimously accept that the category of 'pets' would include animals such as cats, dogs, hamsters and goldfish, but would have more difficulty in accepting that an elephant falls within the same category (though in some cultures they may do) (Littlemore, 2009). While cats and dogs are more representative of the category 'pets', an elephant is somewhat less central as a member of that category. Furthermore, given that conceptualization and meaning making is grounded in embodied experience, the different degrees of membership derive from how humans experience with members of the category. Cats, dogs, elephants etc. become central or

peripheral members of the category because our physical experience with them defines what these animals mean to us and our reality.

Categorization systems go beyond the lexical level; the same way lexical entities are compared and judged to prior instances of that category, grammatical structures cluster around the most central member. The grammatical category 'present progressive' in English, as illustrated in examples 1-3, is associated with numerous alternate meanings that are linked with each other, making it a polysemous structure. Some instances of the construction are more representative of the category than others, which can be shown in their semantic behavior. The ability to assess each instance of the progressive in accordance with several parameters and compare it to prior experiences to which the progressive has been applied to facilitates the categorization of those parameters (Langacker, 2002a, pp. 118-119; Radden & Dirven, p. 7 ff.). The best instance of that category is referred to as the prototype and is a highly salient and strongly entrenched concept for the category when compared with other category members (Radden & Dirven, 2007, p. 17). In case of the progressive construction, the concept of 'current ongoingness' is posited as the prototype in the semantic network, i.e., this sense is the most entrenched one among the alternate senses (Brisard, 2013). The prototype and other category members, which are extensions from the prototype, do not only form a semantic network, but this semantic arrangement is a hierarchical organization with different levels of salience (Janda, 2015; Langacker, 2008). In the examples below, 1 represents a prototypical present progressive instance, current ongoingness, while 2 and 3 display instances that are less prototypical instances of the category and thus have less common features with the prototype. In the examples with less prototypical usages of the category, the present progressive has no direct temporal connotation but an epistemically motivated association. There is no temporal motivation observable for applying the progressive; the primary point of using the progressive in these examples lies in the speaker's intention to express his subjective evaluation of the state of affairs (De Wit & Brisard, 2014, p. 84). While this type of analysis is largely ignored in other, especially generative analyses of the present progressive, a cognitive perspective can account for the variation in our embodied experience and language use (De Wit & Brisard, 2014, pp. 71-84):

1. He doesn't know what's going on in this world. [current ongoingness]
2. Two weeks ago I'm watching TV.... [historical usage]
3. I'm telling you, withholding goodies works. [modal usage]

The notions of categorization, prototype and semantic network become interesting from a conceptual transfer perspective when we compare how different

languages divide information into semantic categories, how this variation in categorization patterns is manifested in language and how, as well as to what extent, the categorization system from one's L1 exerts an influence on the L2 learning process. There are a number of areas of crosslinguistic variation in categorization patterns that have received attention, with the main goal of revealing how L2 learners cognize the target language categorization system and understand the often subtle differences in semantic judgments between the two language systems. A key area of crosslinguistic variation and influence in categorization patterns is that of semantic space. Bowerman (1996) showed that the linguistic variation in the use of prepositions across 38 languages originated in the variation in how speakers of these languages structure space. While in English the prepositions *in* and *on* are used to express situations such as *cups on the table*, *picture on the wall* and *apple in the bowl*, in Spanish the preposition *en* would be used to cover most of the domains where the English prepositions *in* or *on* are used (Littlemore, 2009). Understanding how semantic categories in the domain of space are formed and which category member occupies which part of the semantic network can present an enormous challenge for the L2 learner. In a recent study by Alonso Alonso, Cadierno and Jarvis (2016), it was revealed that conceptual transfer in categorization patterns is at play in the word choice of L2 learners of English when describing spatial relationships that are typically referred to by English native speakers with the preposition *in*, *on*, and *at*. Two written tasks were given to two groups of learners, Danish and Spanish learners of English, and to three monolingual groups, L1 speakers of Danish, Spanish, and English, to investigate whether spatial construal patterns would differ among L2 users and monolinguals and demonstrate an influence of L1-based spatial construals (Alonso Alonso et al., 2016, p. 99). In Danish, the prepositions *på* ("on"), *i* ("in") and *ved* ("at") appear to cover the same semantic categories as in English and are employed for the identical functional spatial relations as their English counterparts. In Spanish, the single preposition *en* is used to refer to a variety of situations for which the three prepositions *on*, *in*, *at* in English are used. The main result drawn from the study is that albeit Danish and English L1 speakers exhibited conceptual differences in their reference to spatial relationships, Danish learners of English drew on a similar conceptual inventory as English monolinguals speakers. Because the Spanish learner group, on the other hand, preferred categorization patterns in their L2 system that were similar to the ones in their mother tongue (Alonso Alonso et al., 2016, p. 113), Spanish learners of English were required to alter their understanding of which preposition the meanings of *en* maps onto. In this case, Spanish L2 learners had to divide one category (*en*) into three (*on*, *in*, *at*), form new semantic networks around the prototypes of each category and decide which semantic space is

occupied by which prepositions; in other words, they needed to adapt the target language categorization system in the domain of space (Slobin, 2000).

A cognitive point of view to second language acquisition suggests that instead of developing two independent categorization systems in their mind, multilinguals process new linguistic and conceptual information in the formation of a blend between the L1 and the target language (Croft & Cruse 2004). The semantic networks aid the L2 user to compare and organize new experiences, whereby L2 users can store 'old' and 'new' information within a single system (Slobin, 2000). The different general and language-independent cognitive processes assist the L2 user to connect novel/previous functions to novel/previous linguistic forms.

4.3. Construal

In CL, meaning is equated with the dynamic process of conceptualization, expressions describing an objective situation are subject to a number of cognitive operations that come into play each time a conceptualization is formed (Langacker, 1996, pp. 157-163). The speaker's intended meaning and perspective regarding an 'objective' situation is shaped by the speaker's selection of certain components of the conceptual content and the way conceptual content is combined (Evans, 2011; Langacker, 1987, 2002, 2008). The ability to conceive and construe the same 'objective' reality in alternate ways and select the most fitting structural choice from among an open-ended inventory of grammatical descriptions to describe that reality is referred to as *construal* (Givón, 1989, p. 90; Langacker, 1997). Consequently, every linguistic expression reflects a particular view imposed upon the conceptual content and the way conceptual content is organized in light of that particular viewing arrangement. Importantly, all aspects of conceptual content, including the formation of categories, are subject to construal (Croft & Cruse, 2004).

One pivotal assumption in describing construal operations relates to the idea that conceptualization corresponds to visual perception in the sense that conceptual constructs can be described by means of perceptual constructs (Langacker, 1999, p. 204). More importantly, most visual notions have a conceptual construct and an effect on the linguistic resources the speaker employs. This postulation is grounded in the claims that (i) humans have the mental capacity to apprehend forms and relations in space and (ii) general cognitive processes are always instantiated by visual perceptions. Visual constructs manifest themselves in conceptual constructs; for instance, a viewer of a scene corresponds to the conceptualizer or the subject of conception, and the maximal viewing frame is known as the maximal scope on a conceptual level (more detail in section 5.2).

In any viewing arrangement, certain components of a scene are more noticeable, while the other elements of the scene serve as an anchor for the foreground

and are often left implicit (Casad, 1996, p. 24). According an entity a greater degree of salience, selecting certain entities as focal points, describing the scene with a certain degree of precision and from a particular vantage point as well as ascertaining the interlocutor's prominence within the viewing arrangement all comprise a linguistic expression. For instance, the notion of specificity is related to the idea that a situation can be viewed in either general or specific manner, resulting in the use of semantically general or specific lexical and grammatical elements at the linguistic level. The noun *Ferrari* elaborates upon its more general referent, *car* or *vehicle*. The vantage point, for instance, reflects the speaker's choice of focus of attention, which entity or facet of the situation stands out the most from the spot at which the speaker construes the situation (Langacker, 1996, p. 158). In the default viewing arrangement, the speaker's vantage point defines the actual location of the interlocutors, but adopting the vantage point of another person, or place, is equally commonplace and simply a result of construing a particular scene differently (Radden & Dirven, 2007, pp. 24-25). In the sentence *Next year will be full of surprises*, the notion of vantage point is used in the domain of time. *Next year* serves as a reference point and situates a less noticeable event or situation in relation to the vantage point; it thus corresponds to the conceptualization of the year following the one encompassing the speaker's vantage point (Langacker, 1996, p. 158). The sentence *The students had collected a lot of money*, in contrast, exemplifies the speaker's shift of vantage point to the past, from which a retrospective stance towards the posterior event of collecting money is taken (Radden & Dirven, 2007, p. 222). The posterior viewpoint enables the interlocutors to apprehend the conceptualization realized by the past perfect construction; *had collected* designates a process that occurred prior to the speaker's anterior viewpoint (Langacker, 2008).

Much in the spirit of the discussion offered by Casad (1996, pp. 24-25), the examples *The man and the boy crossed the stream* vs. *The crossing of the stream was done with extreme difficulty* show how the same situation can evoke different construals. The examples address the same scenario involving a man and a boy, a stream, and the crossing of the stream by these two, but each sentence reflects a certain cognitive organization and portrays lexical and grammatical elements in specific ways. The situation depicted in the former sentence categorizes both participants (the man and the boy) and accords the greatest degree of salience to the them, resulting in a construal that foregrounds the participants, while in the situation represented in the latter sentence, the activity and the struggles that were involved in executing that activity are made salient. The examination of the usage of *crossed* vs *crossing* evokes two different categorizations on a conceptual level. The former, *crossed*, is construed as having successive states through time, with an initial and end state functioning as

the boundaries of that process. The *-ed* participle form locates the situation in an anterior time and consequently conveys temporal distance from the speech event. In contrast, the speaker may shift the degree of prominence in the entirety of states, thus causing the activity of *crossing* to be construed as unbounded (Langacker, 1987, pp. 246-247; Taylor, 2002, pp. 399-400). There are many more construal dimensions that are at play in the conceptualization and organization of conceptual and linguistic content, though only a few were mentioned in this section (see Croft & Cruse, 2004; Langacker, 1987, 2008; Radden & Dirven 2007; Taylor, 2002 for detailed discussion).

The use of grammatical descriptions in prototypical contexts of communication commonly reflects the default viewing arrangement (see for detailed discussion in Langacker, 1996, pp. 24-25; 2008, p. 74 ff.), whereas non-canonical viewing arrangements allow for non-typical conceptualization patterns. Since language structure is understood as demonstrating traces of general cognitive abilities, also non-prototypical instances of language use symbolize conceptualizations instantiated by visual perception and are part of the language system in the sense that they are within-speaker variations induced by the differing roles in the relationship between the viewer and the object(s) of perception (Langacker, 1996, 2008).

Not only can the construal of a situation vary among speakers of the same language, but also across languages. It has been shown that significant variation in terms of how typologically different languages structure space and time can occur. Consequently, the linguistic means available to organize the vast amount of forms and relations in space may vary cross-linguistically (Talmy, 2000; Verhagen, 2007). For instance, Gennari, Sloman, Malt and Fitch (2002) showed how different lexical categories in event construal were utilized in typologically different languages, namely in English and Spanish. While in English the verb expressing a motion event also describes manner (*to slide, to roll, etc.*), in Spanish the verb commonly expresses path (*to enter, to exit, etc.*). And while prepositions or particles (such as *up/down, in/out*) are obligatory to encode path in English, adverbial phrases are optional to express manner in Spanish (Talmy, 2000). This distinction carries over to how English and Spanish speakers refer and construe the same observed event, particularly the change of location. In their study, Gennari et al. (2002) found that due to the language-specific constraints in expressing the manner of the event in Spanish, speakers of Spanish were also less inclined to employ the verb + manner modifier (p. 65). Since English prefers the lexicalization of manner-of-motion verb + path particle and does not allow optional marking of path modifiers, speakers of English are also compelled to express manner more often than Spanish native speakers. The results indicated that these two languages employ different construals on the conceptualization of motion events and provide different linguistic means for the realization of these differing conceptualizations (Verhagen, 2007).

Necessarily, the fact that every language provides a specific set of construal patterns for prototypical and non-prototypical conceptualizations bears important implications for second language learning. As shown above, lexical and grammatical elements are susceptible to crosslinguistic variation and language-specific categorization and construal operations. One of the skills L2 learners need to employ when engaging with another language is to identify patterns of construal in the target language and compare them with the construal patterns employed in their L1. In several studies, it has been indicated that L1 construal patterns are likely to influence the learner's choice of construal patterns during the L2 learning process (Ellis and Cadierno, 2009; Higby & Obler, 2014). Indeed, Cadierno (2004, 2010), Cadierno and Robinson (2009) and Cadierno and Ruiz (2006) found that crosslinguistic influence in the choice of construal patterns plays a significant role in second language learning. Cadierno's (2004) study looked at the ways in which intermediate and advanced Danish learners of Spanish construed and expressed motion events in their L2, Spanish, and found that the construal patterns used to express motion in the L2 were influenced by the ways in which these construal patterns are used in their L1. However, the results did not show a consistent picture of L1-induced use of construal patterns in the L2, but they did point to behavior that supports the prediction that our L1 influences and shapes the way we think in another language (Cadierno, 2008, p. 263).

The notion of construal can also be applied to research on the relationship between grammatical aspect and event structure and how that relationship is represented in the speaker's preference to encode an event's endpoint or the course of the action (Bylund, 2009; Bylund, Athanasopoulos, & Oostendorp, 2013; Flecken, 2011; van Ierland, 2010; Carroll & von Stutterheim 2006). Collectively, the findings of these studies point to a pattern observed before: although speakers are advanced speakers of the target language, their patterns of event structure construal do not follow the target-like construal patterns. They also found that due to conceptual differences in the use of aspectual categories in the L1 and L2, learners are inclined to take a different perspective on event structure in their L2. L2 conceptualization patterns for grammatical aspect, however, are not necessarily specific to the L1 system but bilingual-specific. This was found in a study by Flecken (2011), who looked at Dutch-German bilinguals', Dutch and German monolingual speakers' description of events, particularly their reference to the ongoingness of events. She found that Dutch speakers preferred the progressive construction more than German speakers when referring to the ongoingness of an event (Flecken, 2011, p. 67). The highest level of reference to ongoingness, however, was found in the Dutch-German bilinguals' performance. The evidence further suggested that the bilingual speakers did not only use the progressive construction with higher frequency to describe the course of an action, but they also fixated more on the action in progress than the monolingual Dutch and German speakers did.

5. Cognitive linguistics and conceptual transfer: Representative studies

To date, work on conceptual transfer has not approached crosslinguistic influence from all the theoretical perspectives within the cognitive linguistics movement. Talmy's (2000) research on the cognitive semantics of motion events, and the crosslinguistic lexicalization patterns in the expression of motion events, has been utilized in most studies addressing the differences in conceptualization patterns in L1 and L2 use. These studies have made important contributions to the study of grammar and motion event construal and provided compelling evidence of how speakers of two or more (typologically different) languages construe and encode events (for a thorough review of these studies see Pavlenko, 2014, pp. 144-149).

The studies presented below address crosslinguistic influence through the lens of the principles elucidated in cognitive grammar (Langacker, 1987, 2008), which deals with the direct relationship between grammatical categories/constructions and cognitive operations, such as conceptualization, categorization and construal that were duly discussed above. The novelty of these works lies in the theoretical contextualization to the investigation of how patterns of conceptualization in a language can influence the principles of conceptual and linguistic organization in another language.

One of the most recent studies examining conceptual transfer from a purely cognitive perspective is reported in Krajinovic and Pevec (2015), which analysed the acquisition and use of morphosyntactic structures in the use of present tense by Croatian learners of English. Krajinovic and Pevec aimed to analyse the variety and complexity of lexical and morphological development of the learners as well as instances of morphological and conceptual transfer effects of learner L1 in the use of the simple present and the present progressive in L2 English. To achieve this, they compared oral data, which is part of a larger corpus (*Acquisition of English from an Early Age: Analysis of Learner Language*), consisting of 15-minute semi-structured interviews based on a picture description task. The interviews were collected among 12 pupils from two forms in three successive years. Individual learner profiles were constructed and provided detailed information on the total number of utterances and morphemes, lexical diversity, and the ratio between number of attempted and correct instances of the English present tenses use. In addition, they investigated the incorrect instances of the English present tenses use to detect possible instances of formal and conceptual transfer effects.

It was attempted to show how the notions of categorization (and prototype) and construal in cognitive grammar influence and predict the learners' successful acquisition of the target grammar: (i) how simple and progressive constructions render different construals on a scene (see discussion above) and (ii)

how different conceptualization patterns result in prototypical and non-prototypical constructions (see section 4.1). The results of their data showed that the learners' grammatical competence, including the level of correctness in the use of English present tenses, increased during the three years of explicit English instruction. They also proved that while the learners employed more than 90% of the time the simple present correctly, they failed to use the English present progressive adequately in 15% to 20 % of the time. Furthermore, they found that the incorrect contextual use of the present progressive instead of the present simple was due to conceptual transfer. Most of the learners preferred the progressive construction to refer to their habitual experiences, in which case the use of the simple present tense would have been more appropriate [example: *In summer, I'm swimming*]. Krajinovic and Pecev (2015) argued that the conceptual transfer effects in learners' oral performance can be attributed to the differences in how processes and states are expressed in Croatian and English. When Croatian learners conceptualized a state or stable situation through time, they used the progressive to describe the situation because they created a link between the progressive construction in English and the imperfect aspect of verbs in Croatian. As Krajinovic and Pevec (2015) argued, "[w]hile learning English constructions that conceptualize, i.e. that express the present, primary school learners mostly made errors in using English PC with ambivalent, non-prototypical constructions whose telic or atelic meaning is constructed according to the situation" (p. 105). Their study implies that cognitive descriptions of the English present tenses offer convincing explanations of how the process of expressing present tense develops in second language acquisition.

In a study by Bylund and Jarvis (2011), the choice of aspect in L1 Spanish-L2 Swedish bilinguals and Spanish monolingual speakers was explored. They studied whether typological differences regarding grammatical aspect would influence the bilinguals' sensitivity to tense and aspect use, particularly to their reference to motion endpoints (see also studies by Schmieđtová & Flecken, 2008; von Stutterheim & Nüse, 2003). While Spanish encodes grammatical aspect through verb morphology, formed with the present tense of the verb *estar*, Swedish lacks this grammatical category and thus does not have the same structural means nor the obligation to encode the ongoingness of an activity (Bylund, Athanasopoulos, & Oostendorp, 2013; Chin, 2008).

Similar to Krajinovic and Pecev's study, Bylund and Jarvis also adopted cognitive grammar-based framework to test their hypotheses regarding the relationship between grammatical aspect and cognition. From a conceptual standpoint, the distinction between the progressive and non-progressive is a matter of construal and visual perception (see section 4.3). This characterization relies greatly on the perspective taken by the conceptualizer and highlights the contrast between a maximal and a

restricted viewing frame on the part of the speaker (Radden & Dirven, 2007). Choosing a maximal or restricted viewing frame corresponds to the absence or presence of aspectual markers at the grammatical level. The maximal viewing frame allows to view the event in its entirety and, by default, signals the absence of an aspectual marker. The aspectual properties of events can be explained in terms of bounding (i.e., whether or not a profiled relationship is construed as inherently bounded in its temporal extension) and in terms of heterogeneity (i.e., whether or not the segments of a profiled relationship are construed as involving a change through time). In the absence of an aspectual marker, a verb reflects a maximal viewing arrangement (Langacker, 2008, p. 65), while the use of an aspectual marker imposes a restricted scope on the verb and reflects a restricted viewing frame (Brisard, 2013).

A video clip-description task and a grammaticality judgment test revealed the influence of L2 Swedish on the bilinguals' preference to mention the endpoint: while Spanish-Swedish bilinguals attended to the boundedness of the event, the Spanish monolinguals were more prone to emphasize the course of action. Different factors that influence the pattern of endpoint coding and use of tense, such as overall proficiency and the age of onset of L2 acquisition, were taken into consideration. Bylund and Jarvis (2011) found that particularly those bilinguals who came into contact with Swedish before their Spanish construal event patterns were entrenched preferred to mention the endpoint rather than the ongoingness of an event.

Bylund and Jarvis (2011) interpret these results as showing L2 conceptual influence on L1. Cognitive grammar holds that the frequent use of any construction (and construal pattern) makes the process of its generalization and acquisition easier. As outlined in section 4, certain grammatical constructions are more accessible to speakers because they have become entrenched through repeated activation. These frequently-occurring patterns play a more salient role in the speaker's conceptual and linguistic repertoire, which is precisely what Bylund and Jarvis (2011) found in their study. The analysis also showed that it can be very helpful to study motion event construal from a cognitive perspective; indeed, an account that details the relationship between construal and grammatical morphology can interpret the bilinguals' sensitivity to marking aspectuality in a more in-depth way.

The last study presented in this paper concerns the investigation of conceptual transfer effects on Italian speakers' L2 acquisition of English tense and aspect structures. Austen (2016) paid special attention to the L2 learners' use of the present perfect, simple past and the present perfect progressive. While both English and Italian have a similar tense/aspect system, there are notable contrasts in the core semantics and actual use of the present perfect and present progressive. The author presents a detailed analysis of the contrasts between tense/aspect use in English and Italian on the basis of principles put forward in cognitive grammar and radical construction grammar (see Croft, 2001). Primarily, Austen

employs the notions of conceptualization and categorization (particularly prototypical and related meanings of a construction) and the mapping of language-specific grammatical categories onto conceptual content. Creating conceptual content onto which grammatical categories are mapped enables one to organize linguistic functions according to their similarity and differences in their semantic properties. Austen (2016) administered a verbal and a non-verbal task to Italian-speaking learners of English at pre-intermediate level and to native English and Italian speakers, with the hypothesis errors occurring in the expression of tense/aspect produced in the learner group are a result of conceptual transfer. Indeed, the data revealed several incidents of conceptual transfer; these instances of conceptual transfer were mainly manifested in learners' incorrect distinction between the present perfect and the simple past in English. The novelty in this study was in the use of think aloud reports to differentiate between concept and conceptualization transfer, thus enabling a close-up view on the learner's cognitive processes underlying the tense choice for target concepts (see also Austen, 2017).

6. Conclusion

A CL-grounded examination of crosslinguistic influence makes it possible to investigate whether, for instance, language learners draw on their conceptual system of their mother tongue when speaking another language, how prototypical and non-prototypical meanings of linguistic expression are related to our visual perception and how that knowledge differs across speakers and languages. Crucially, a cognitive analysis also offers means to examine how speakers of different languages attend differently to grammatical categories due to their differing cognizing patterns in the L1. The above presentation highlighted certain advantages of employing cognitive-grounded notions of grammar to the study of conceptual transfer. Some of these benefits also became apparent in the review of the most prominent and current empirical studies concerning the application of cognitive approaches to language to conceptual transfer studies. The most significant of these are: the cognitive approach offers a systematic account of explaining: (i) how conceptualization patterns correspond to visual perception patterns and language use is understood in terms of general cognitive abilities, (ii) how conceptual content in the minds of speakers differs as result of how that content is construed, (iii) how that difference is reflected in language use among and across speech communities, and (iv) how divergence in the lexicalization and grammaticalization of concepts is a potential source for conceptualization differences between speakers of the same or different languages. Section 4 outlined the common ground between cognitive approaches to language on the one hand and conceptual transfer research on the other. This overlap of claims and hypotheses may be considered as a rationale for the growing

interest in researching the applications of CL to crosslinguistic influence. Because the majority of cognitive-based works to the study of crosslinguistic influence relies on Talmy's typological system, this paper paid special attention to the application of Langacker's cognitive grammar to conceptual transfer research.

If crosslinguistic influence is approached by one of the theories within CL, explanations of conceptual transfer effects become more transparent. Taking these theories as a foundation for explaining those cases of crosslinguistic effects that involve differences in speakers' cognizing and conceptualization patterns can aid models of second language acquisition and crosslinguistic influence to better account for instances of transfer that go beyond the lexical, syntactic and semantic level. The review of empirical studies of conceptual transfer studies presented in this paper showed convincing cases for the applicability of a cognitive analysis to investigate language structure.

Another interesting issue pertains to the type of data used to investigate the link between language use and cognition. Assessing the effects of language on non-linguistic cognitive patterns is mainly associated with the research tradition connected with linguistic relativity (Whorf, 1956), and it has been noted that because crosslinguistic transfer effects reflect differences in the perception, construing and evaluation of conceptual content (cross)linguistically, the collection of non-verbal tasks is advantageous (Athanasopoulos, 2009, 2011; Lucy, 1996). Even though verbal responses are considered meaningful and representative of speakers' mental representation (Jarvis, 2007, 2016), it has been claimed that the transfer effects in certain domains of language use are most visible in the speaker's non-verbal behavior (gesture, matching task, eye tracking etc.). This was shown, for instance, in a study by Bylund et al. (2013) and by Brown and Gullberg (2008), who investigated transfer effects in the domain of motion events and found that L2 influence did not extend to linguistic behavior, but was limited to non-verbal preferences. These findings suggest that assessing the extent to which L1-induced conceptual representation and conceptualization patterns surface in L2 use in non-linguistic behavior is a worthwhile endeavor in future research.

Projects like the ones reviewed in section 5 make an important contribution to the field of conceptual transfer research up to date. These studies promote a framework that postulates the interplay between grammar and cognition and views conceptualization as a tool of examining semantic structure, thereby delineating the cognitive operations that underlie the process of language acquisition and transfer. As a final remark, it can be concluded that by no means all instances of crosslinguistic transfer can be accounted for by conceptual differences in the multilinguals' mind; the topic reviewed in this paper was designed to pinpoint more precisely the kind of conceptual representations in the multilinguals' use of the L2 originating from of the L1 conceptual system.

References

- Achard, M. (2004). Grammatical instruction in the natural approach: A cognitive grammar view. In M. Achard & S. Neimeier (Eds.), *Cognitive linguistics, second language acquisition, and foreign language teaching* (pp. 165-194). Berlin/New York: Mouton de Gruyter.
- Alonso Alonso, R. (2016). *Crosslinguistic Influence in second language acquisition*. Bristol: Multilingual Matters.
- Alonso Alonso, R., Cadierno, T., & Jarvis, S. (2016). Crosslinguistic influence in the acquisition of spatial prepositions in English as a foreign language. In R. Alonso Alonso (Ed.), *Crosslinguistic influence in second language acquisition* (pp. 93-120). Bristol: Multilingual Matters.
- Athanasopoulos, P. (2009). Cognitive representation of colour in bilinguals: the case of Greek blues. *Bilingualism: Language and Cognition*, 12(1), 83-95.
- Athanasopoulos, P. (2011). Cognitive restructuring in bilingualism. In A. Pavlenko (Ed.), *Thinking and speaking in two languages* (pp. 29-65). Bristol: Multilingual Matters.
- Athanasopoulos, P., Damjanovic, L., Krajciová, A., & Sasaki, M. (2011). Representation of colour concepts in bilingual cognition: The case of Japanese blues. *Bilingualism: Language and Cognition*, 14(1), 9-17.
- Austen, S. (2016). *Learner error in second language acquisition: the transfer of form or concept?* (Unpublished doctoral dissertation). Cardiff University, Cardiff.
- Austen, S. (2017). Native language (L1) transfer in second language learning: From form to concept, the implications. *Xjenza Online - Journal of the Malta Chamber of Scientists*, 5(1), 77-80.
- Barlow, M., & Kemmer, S. (2000). *Usage based models of language*. Stanford, CA: CSLI Publications.
- Bergen, B. (2012). *Louder than words: The new science of how the mind makes meaning*. New York: Basic Books.
- Bergen, B., & Chang, N. (2013). Embodied construction grammar. In T. Hoffmann & G. Trousdale (Eds.), *Oxford handbook of construction grammar* (pp. 168-190). Oxford: Oxford University Press.
- Bowerman, M. (1996). Learning how to structure space for language: A cross-linguistic perspective. In P. Bloom, M. Peterson, L. Nadel, & M. Garrett (Eds.), *Language and space* (pp. 195-209). Cambridge, MA: MIT Press.
- Brisard, F. (2013). An account of English tense and aspect in cognitive grammar. In K. Jaszczolt & L. de Saussure (Eds.), *Time: language, cognition, and reality* (pp. 210-235). Oxford: Oxford University Press.

- Brown, A., & Gullberg, M. (2011). Bidirectional cross-linguistic influence in event conceptualisation? Expressions of path among Japanese learners of English. *Bilingualism: Language and Cognition*, 14(1), 79-94.
- Bybee, J. (2008). Usage-based grammar and second language acquisition. In P. Robinson & N. Ellis (Eds.), *Handbook of cognitive linguistics and second language acquisition* (pp. 216-236). London – New York: Routledge.
- Bybee, J. (2010). *Language, usage and cognition*. Cambridge – New York: Cambridge University Press.
- Bylund, E. (2009). Maturation constraints and first language attrition. *Language Learning*, 59(3), 687-715.
- Bylund, E., Athanasopoulos, P., & Oostendorp, M. (2013). Motion event cognition and grammatical aspect. Evidence from Afrikaans. *Linguistics*, 51, 929-955.
- Bylund, E., & Jarvis, S. (2011). L2 effects on L1 event conceptualisation. *Bilingualism: Language and Cognition*, 14(1), 47-59.
- Cadierno, T. (2004). Expressing motion events in a second language: A cognitive typological perspective. In M. Achard & S. Neimeier (Eds.), *Cognitive linguistics, second language acquisition and foreign language pedagogy* (pp. 13-49). Berlin: Mouton de Gruyter.
- Cadierno, T. (2008). Learning to talk about motion in a foreign language. In P. Robinson & N. Ellis (Eds.), *Handbook of cognitive linguistics and second language acquisition* (239-275). New York – London: Routledge.
- Cadierno, T. (2010). Motion in Danish as a second language: Does the learner's L1 make a difference? In Z. Han & T. Cadierno (Eds.), *Linguistic relativity in SLA: Thinking for speaking* (pp. 1-33). Bristol – Buffalo – Toronto: Multilingual Matters.
- Cadierno, T., & Robinson, P. (2009). Language typology, task complexity and the development of L2 lexicalization patterns for describing motion events. *Annual Review of Cognitive Linguistics*, 7, 245-276.
- Cadierno, T., & Ruiz, L. (2006). Motion events in Spanish L2 acquisition. *Annual Review of Cognitive Linguistics*, 4, 183-216.
- Carroll, M., & von Stutterheim, C. (2006). The impact of grammaticalized temporal categories on ultimate attainment in advanced L2 acquisition. In H. Byrnes (Ed.), *Educating for advanced foreign language capacities* (pp. 40-53). Washington DC: Georgetown University Press.
- Casad, E. (1996). Seeing it in more than one way. In J. R. Taylor & R. E. MacLaury (Eds.), *Language and the cognitive construal of the world [Trends in linguistics: Studies and monographs 82]* (pp. 23-49). Berlin – New York: Mouton de Gruyter.
- Chin, D. (2008). A cross-linguistic investigation on the acquisition of Spanish aspect. In J. De Garavito & E. Valenzuela (Eds.), *Selected proceedings of the 10th hispanic linguistics symposium* (pp. 36-50). Somerville, MA: Cascadilla Proceedings Project.

- Cook, V., Bassetti, B., Kasai, C., Sasaki, M., & Takahashi, J. (2006). Do bilinguals have different concepts? The case of shape and material in Japanese L2 users of English. *International Journal of Bilingualism*, 10(2), 137-152.
- Croft, W., & Cruse D. (2004). *Cognitive Linguistics*. Cambridge: Cambridge University Press.
- Daller, M. H., Treffers-Daller, J., & Furman, R. (2011). Transfer of conceptualisation patterns in bilinguals: the construal of motion events in Turkish and German. *Bilingualism: Language and Cognition*, 14(1), 95-119.
- De Wit, A., & Brisard, F. (2014). A cognitive grammar account of the semantics of the English present progressive. *Journal of Linguistics*, 50(1), 49-90.
- Ellis, N. (2008). Usage-based and form-focused language acquisition: the associative learning of constructions, learned attention, and the limited L2 end-state. In P. Robinson & N. Ellis (Eds.), *Handbook of cognitive linguistics and second language acquisition* (pp. 372-405). London – New York: Routledge.
- Ellis, N., & Cadierno, T. (2009). Constructing a second language: Introduction to the special section [Special Section]. *Annual Review of Cognitive Linguistics: Constructing a Second Language*, 7, 111-139.
- Evans, V. (2011). Language and cognition: The view from cognitive linguistics. In V. Cook & B. Bassetti (Eds.), *Language and bilingual cognition* (pp. 69-107). Hove, UK: Psychology Press.
- Evans, V., Bergen, B., & Zinken, J. (Eds.). (2007). *Cognitive linguistic reader*. London: Equinox.
- Evans, V., & Green, M. (2006). *Cognitive linguistics: An introduction*. Edinburgh: Edinburgh University Press.
- Fauconnier, G., & Turner, M. (2002). *The way we think: Conceptual blending and the mind's hidden complexities*. New York: Basic Books.
- Flecken, M. (2011). Event conceptualization by early Dutch-German bilinguals: Insights from linguistic and eye-tracking data. *Bilingualism: Language and Cognition*, 14(1), 61-77.
- Flecken, M., Carroll, M., Weimar, K., & von Stutterheim, C. (2015). Driving along the road or heading for the village? Conceptual differences underlying motion event encoding in French, German, and French-German L2 users. *Modern Language Journal*, 99(S1), 100-122.
- Gennari, S., Sloman, S., Malt, B., & Fitch, W. (2002). Motion events in language and cognition. *Cognition*, 83, 49-79.
- Givón, T. (1989). *Mind, code, and context: Essays in pragmatics*. Hillsdale, New Jersey: Lawrence Erlbaum.
- Goldberg, A. (1995). *Constructions: A construction grammar approach to argument structure*. Chicago: University of Chicago Press.

- Golden A., Jarvis S., & Tenfjord K. (2017). *Crosslinguistic influence and distinctive patterns of language learning: Findings and insights from a learner corpus*. Bristol: Multilingual Matters.
- Hohenstein, J., Naigles, L., & Eisenberg, A. (2004). Keeping verb acquisition in motion: A comparison of English and Spanish. In D. Hall & S. R. Waxman (Eds.), *Weaving a lexicon* (pp. 569-602). Cambridge, MA: MIT Press.
- Higby, E., & Obler, L. (2014). The adaptation of native language construal patterns in second language acquisition. *AFinLA-E: Soveltavan Kielitieteen Tutkimuksia*, 6, 32-44.
- Janda, L. (2015). Cognitive Linguistics in the year 2015. *Cognitive Semantics*, 1, 131-154.
- Jarvis, S. (2007). Theoretical and methodological issues in the investigation of conceptual transfer. *VIAL*, 4, 43-71.
- Jarvis, S. (2011). Conceptual transfer: Crosslinguistic effects in categorisation and construal. *Bilingualism: Language and Cognition*, 14(1), 1-8.
- Jarvis, S. (2016). Clarifying the scope of conceptual transfer. *Language Learning*, 66(3), 608-635.
- Jarvis S. (2017). Transfer: An overview with an expanded scope. In A. Golden, S. Jarvis, & K. Tenfjord (Eds.), *Crosslinguistic influence and distinctive patterns of language learning: Findings and insights from a learner corpus* (pp. 12-28), Multilingual Matters.
- Jarvis, S., & Odlin, T. (2000). Morphological type, spatial reference, and language transfer. *Studies in Second Language Acquisition*, 22(4), 535-556.
- Jarvis, S., & Pavlenko, A. (2008). *Crosslinguistic influence in language and cognition*. New York: Routledge.
- Krajinović, M. M., & Pevec, I. (2015). Present tense development in 11- to 13-year-old EFL learners. In J. M. Djigunović & M. M. Krajinović (Eds.), *Early learning and teaching of English: New dynamics of primary English* (pp. 80-109). Bristol: Multilingual Matters.
- Kövecses, Z. (2005). *Metaphor in culture: Universality and variation*. New York and Cambridge: Cambridge University Press.
- Lakoff, G. (1987). *Women, fire and dangerous things*. Chicago: University of Chicago Press.
- Lakoff, G. (1990). Cognitive versus generative linguistics: How commitments influence results. *Language and Communication*, 1(1), 53-62.
- Langacker, R. (1987). *Foundations of cognitive grammar*. Stanford, CA: Stanford University Press.
- Langacker, R. (1991). *Foundations of cognitive grammar. Vol. 2. Descriptive applications*. Stanford, CA: Stanford University Press.

- Langacker, R. (1996). Viewing in cognition and grammar. In P. W. Davis (Ed.), *Alternative linguistics: Descriptive and theoretical modes* (pp. 153-212). Amsterdam/Philadelphia: John Benjamins.
- Langacker, R. (1999). *Grammar and conceptualization*. Berlin – New York: Mouton de Gruyter.
- Langacker, R. (2007). Cognitive grammar. In D. Geeraerts & D. Cuyckens, D. (Eds.), *The Oxford handbook of cognitive linguistics* (pp. 421-462). Oxford: Oxford University Press.
- Langacker, R. (2008). *Cognitive grammar: A basic introduction*. Oxford: Oxford University Press.
- Littlemore, J. (2009). *Applying cognitive linguistics to second language learning and teaching*. Basingstoke: Palgrave Macmillan.
- Majid, A., Boster, J. S., & Bowerman, M. (2008). The cross-linguistic categorization of everyday events: A study of cutting and breaking. *Cognition*, 109(2), 235-250.
- Pavlenko, A. (2000). Access to linguistic resources: Key variable in second language learning. *Estudios de Sociolingüística*, 1(2), 85-105.
- Pavlenko, A. (2003) "I never knew I was a bilingual": Reimagining teacher identities in TESOL. *Journal of Language, Identity, and Education*, 2(4), 251-268.
- Pavlenko, A. (2014). *The bilingual mind: And what it tells us about language and thought*. Cambridge: Cambridge University Press.
- Pavlenko, A., & Malt, B. (2011) Kitchen russian: Cross-linguistic differences and first-language object naming by Russian-English bilinguals. *Bilingualism: Language and Cognition*, 14(1), 19-45.
- Radden, G., & Dirven, R. (2007). *Cognitive English grammar*. Amsterdam – Philadelphia: John Benjamins.
- Robinson, R., & Ellis, N. (Eds.). (2008). *Handbook of cognitive linguistics and second language acquisition*. New York – London: Routledge.
- Slobin, D. I. (1996). From "thought and language" to "thinking for speaking". In J. J. Gumperz & S. C. Levinson (Eds.), *Studies in the social and cultural foundations of language, No. 17. Rethinking linguistic relativity* (pp. 70-96). New York, NY, US: Cambridge University Press.
- Slobin, D. (2000). Verbalized events: A dynamic approach to linguistic relativity and determinism. In S. Niemeier & R. Dirven (Eds.), *Evidence for linguistic relativity* (pp. 107-138). Amsterdam: John Benjamins.
- Talmy, L. (2000). *Toward a cognitive semantics, vol. 1. Concept structuring systems*. Cambridge, MA: MIT Press.
- Taylor, J. R. (2002). *Cognitive grammar*. Oxford: Oxford University Press.
- Tyler, A. (2012). *Cognitive linguistics and second language learning: Theoretical basics and experimental evidence*. New York & London: Routledge.

- Verhagen, A. (2007). *Construal and perspectivization*. In D. Geeraerts & D. Cuyckens (Eds.), *The Oxford handbook of cognitive linguistics* (pp. 48-481). Oxford: Oxford University Press.
- van Ierland, S. (2010). *Grammatical features influencing information structures: The case of L1 and L2 Dutch and English*. (Doctoral dissertation). Radboud University Nijmegen.
- von Steutterheim, C. (2003). Linguistic structures and information organisation: The case of very advanced learners. *EUROSLA Yearbook*, 3, 183-206.
- Whorf, B. L. (1956). *Language, thought, and reality: selected writings*. Cambridge, Mass.: Technology Press of Massachusetts Institute of Technology.