

Space, Time and Motion in Czech as a Second Language¹



Karel Šebesta

ABSTRACT:

The introductory study deals with two main topics that are relevant to the given special issue:

a) changes which the research in the study of the conceptualisation of motion events, space and time and the ways and means of their expression in language in general and in specific individual languages has introduced into the study of language acquisition — both first and second/foreign, and the characteristics of such research. In addition to the global context, it also goes over the domestic Czech linguistic tradition of research in this field and contemporary Czech studies;

b) the current state and needs of teaching Czech as a foreign language and its resources for more extensive empirically based research, especially the acquisition corpora resource. For the first subtopic, the study provides an overview of the development of interest in teaching Czech as a foreign language abroad and at home. In both areas, there is a growing interest in teaching Czech or the need to teach it to speakers whose first language is a Slavic one, as well as typologically and distantly related languages (Chinese, Korean, Arabic, etc.). It is therefore necessary to pay increased attention to research into the processes of acquisition of Czech by speakers of these languages and its teaching. In connection with the second subtopic, the study provides an overview of the Czech acquisition corpora resources (including learner corpora), which are necessary for more extensive empirical research in this area.

ABSTRAKT:

Úvodní studie se zabývá dvěma hlavními tématy, která jsou pro dané zvláštní číslo relevantní:

a) změnami, které výzkumy v oblasti studia konceptualizace pohybových událostí, prostoru a času a způsobů a prostředků jejich vyjadřování v jazyce obecně i v jednotlivých konkrétních jazycích vnesly do studia osvojování jazyka, prvního i druhého/cizího, a charakteristickými rysy těchto výzkumů; vedle světového kontextu připomíná rovněž domácí, českou lingvistickou tradici výzkumu v této oblasti a soudobé výzkumy bohemisticky zaměřené;

b) současným stavem a potřebami vyučování češtiny jako cizího jazyka a její vybaveností pro rozsáhlejší empiricky založené výzkumy, především vybaveností akvizičními korpusy. U prvního subtématu přináší studie přehled vývoje zájmu o vyučování češtiny jako cizího jazyka v zahraničí i na domácím poli. V obou oblastech se ukazuje růst zájmu o výuku češtiny či potřeba její výuky u mluvčích jednak s prvním jazykem slovanským, jednak s jazyky typologicky i co do příbuznosti vzdálenými (čínština, korejština, arabština aj.). Je tedy nutné věnovat výzkumům procesů osvojování češtiny mluvčími těchto jazyků i jejího vyučování zvýšenou pozornost. V souvislosti s druhým subtématem podává studie přehled vybavenosti češtiny akvizičními korpusy (včetně korpusů žákovských), nezbytnými pro rozsáhlejší empirické výzkumy v této oblasti.

1 This paper was supported from the project Kreativita a adaptabilita jako předpoklad úspěchu Evropy v propojeném světě [Creativity and Adaptability as a Prerequisite for Europe's Success in the Connected World], reg. no. CZ.02.1.01/0.0/0.0/16_019/0000734, funded from the European fund for regional development and project Progres Q 10 — Jazyk v proměnách času, místa, kultury [Language across Time, Space and Culture].



KLÍČOVÁ SLOVA / KEYWORDS:

akviziční / žakovský korpus, čeština jako cizí jazyk, pohybová událost, sémantická typologie
 acquisition / learner corpus, Czech as a second language, motion event, semantic typology

1. SPACE SEMANTICS AND LANGUAGE ACQUISITION RESEARCH

Papers included in this monothematic issue deal with a question that has two aspects: what are the options for conceptualising and expressing motion events in space and time in the Czech language, how these options, particularly those typical and characteristic for Czech which differentiate it from other languages, manifest in the acquisition and use of Czech by non-native speakers, and how the teaching of Czech as a second language responds.

This issue is not new to our thinking about language and language acquisition, use or teaching. Thinking about space, time, motion and their perception and experience has a tradition as far back as our cultural memory reaches; similarly long is the tradition of thinking about the nature of these categories and whether they are innate or constructed, as well as the tradition of linguistic research trying to analyse the expression of these concepts in language² and answering the question of what is the role of language and the means of expression that it offers to us in our perception or construction of these categories.³ These categories have also been explored by language teaching, the didactics of language and the study of first and second/foreign language acquisition.⁴

2 In modern Czech linguistics, this includes in particular various analyses of the means used to express certain aspects of space or motion in Czech and other languages, including a research of cases (with and without prepositions), the system of prepositions, prefixes, verbs of motion, verb aspect etc. The list includes many classic and more recent papers on the general/holistic meanings of cases and true prepositions, verbs of motion, verb aspect, time etc. (Skalička, 1950; Novák, 1959, 1974a, 1974b; Konečná, 1969, 1974; Hirschová, 1977; Běličová, 1978; Panevová, Sgall & Bémová, 1989; and others). In the category of verbs of motion, there is also a recent monograph based on a new cognitive approach (Saicová Římalová, 2010). The Czech tradition of research in this field is described in more detail by Saicová Římalová in her paper.

3 Time and space are particularly useful for finding answers to these questions because they are the two most important conceptual domains of human thought (as claimed e.g. by Haspelmath, 1997, p. 6).

4 This applies both to the attention paid to these issues in research, teaching materials and in textbooks / study plans, and to didactically-oriented research. One of the typical traits of the teaching of Czech as a second language is, for example, that in the first lessons, students are already taught to differentiate between and to express some of the basic opposition pairs of movement (somewhere) and standing still, and to master the necessary constructions (*doma — domů, venku — ven, ve škole — do školy, na stole — na stůl*, 'at home — home, outdoors — outside, at school — to school, on the table — at the table' etc.), even before learning the formal system of the locative case. Similarly, in the early stages considerable attention is paid to the system of original prepositions (e.g. the *na-do* 'on-to' opposition)



The development of cognitive linguistics and psycholinguistics has changed this field considerably in recent decades (approximately since the 80s). The prevailing view of many different aspects, such as the relationship between language and cognition, the conceptualisation of motion, space and time or the means of expressing these concepts in language in general and in specific languages, has been transformed. Particularly important for us will be the change in perception of the processes of language acquisition, language teaching and related transformations of the design of research projects focusing on these aspects. The present collection of papers is our response to these transformations and intends to serve as a contribution to (and potentially a stimulus for) more systematic research on the acquisition and teaching of Czech as a second language with regard to the conceptualisation and expression of motion events in space and time. The individual papers always take into account (some more so than others) the possibilities of application in practice, meaning that whenever possible, they refer to the current state and development of the teaching of Czech as a second language and its needs.

For the same reason, this introductory paper will focus on two thematic areas: on the impact of changes in the research of the conceptualisation of motion events, space and time and the means and forms of their expression on the study of first and second language acquisition, and on the current state and needs of teaching Czech as a second language and the potential for further development of research in this field.

1.1 The key impulse for the new approach to studying spatial semantics in particular was Talmy's analysis of the semantic and syntactic aspect of expressing motion events in languages (Talmy, 1975, developed further e.g. in Talmy, 2000) and the typological distinction between languages using verb framing and satellite framing. Talmy's language typology was based on the differences in the way the two key components of a motion event, path and manner, are expressed. Verb-framing languages (from European languages, this includes e.g. the Romance languages as well as Basque or Turkish) typically express a path in the verbal root of the verb and the manner by other means that Talmy considers "satellite"; on the other hand, satellite-framing languages (most other European languages including Slavic and Finno-Ugric) primarily express manner in the verbal root and the path component using satellite means (prepositions, affixes, semantic cases etc.) or verbs — in Talmy's concept, this includes e.g. languages with serial verbs such as Thai.

Talmy's proposed structure of the motion event and his typology proved to be exceptionally inspiring. In response, many linguists embarked on more detailed

and verbs of motion. In terms of the didactics of Czech as a second language, these are particularly important because they can be used to systematically introduce some other significant categories related to the expression of motion events in space and time — e.g. determination, resultativeness, time and other meanings related to verb aspect (aktionsart), serving as a suitable methodological entry point into the topic of verb prefixes.

Literature on these aspects includes e.g. Hrdlička's (2000) summary analysis of prepositions, Schmiedtová's (2004) monograph on learning Czech as a second language, see note 11, or Škodová (2018).



analyses of various languages and their lexicalisation patterns (i.e. regular ways in which the conceptual components of a motion event are coded into lexical units in individual languages and related language patterns). These analyses were usually typological or predominantly typological and led to a greater specification of the original binary typology (expanding the concept of verb-framing and satellite-framing languages with equipollently-framed languages, which use equivalent forms for path and manner, such as many of the languages of Southeast Asia, typically the Sino-Tibetan group, e.g. Mandarin, and others; even more categories have been proposed by various scholars).⁵ In addition, they led to a more detailed understanding of the lexicalisation patterns in individual languages (one example that bears mentioning is Stosic's (2013) paper exploring the morphological means of expressing motion in Serbian), the typological development of languages (Lin, 2020), etc.

At the same time, it has become clear that the comparative analysis of the conceptualisation and expression of motion events and their basic conceptual elements opens up a very promising opportunity to establish a new empirical base for researching the relationship between how people perceive and cognitively process experiential data and the means offered in this respect by specific languages.

This led to a revival and reappraisal of the old idea of linguistic relativity, i.e. the claim that individual languages give people different and incomparable tools for processing experiential data (different semantic structures), which also affects their thinking and behaviour.⁶ Space, time and motion and their continual processing and expression turned out to be a very useful way of determining whether this assumption is valid, i.e. whether languages truly can and do influence how a person perceives the world, how he or she thinks and talks about the world and behaves in the world.

More recently, the linguistic determinism hypothesis has been reformulated as a more moderate thinking-for-speaking hypothesis which assumes that every lan-

5 Even earlier, there were researchers who pointed out that some languages do not match the categories proposed by Talmy very well (particularly those with serial verbs), e.g. Thai, Mandarin (Mandarin Chinese), some West African languages etc., claiming they form a separate group. The term equipollently-framed languages for this group was coined by Slobin (2004). Slobin later revised this typology and expanded it further, dividing equipollently-framed languages into three subtypes (see Slobin, 2006, p. 64). A more detailed breakdown of Talmy's typology was proposed by Croft, Barðdal, Hollmann, Sotirova & Taoka (2010). Hickmann et al. (2012) claim that *the typological status of languages should be seen as part of a continuum rather than in terms of a dichotomy*.

6 The two opposing views of language, one of which sees it as a simple nomenclature that children learn to apply to pre-existing concepts, and the other as a factor that helps shape human thinking about the world, have been going in and out of fashion in the history of philosophy and linguistics for a very long time. The latter is typically associated with W. von Humboldt, G. F. Herder, F. Boas and particularly with the linguistic relativity hypothesis (also known as the Sapir-Whorf hypothesis, after E. Sapir and B. L. Whorf). The history of the linguistic relativity hypothesis has been briefly described by Gumperz & Levinson (eds., 1996), and even more briefly in an earlier paper with the same title (1991). A more detailed discussion on the history and current thinking can be found in Everett (2013); for recent empirical research, see Niemeier & Dirven (eds., 2000).

guage offers certain options for what can be expressed easily and automatically, which shapes the thinking and speech behaviour of the speakers of this language. The hypothesis was proposed and explored by Slobin (e.g. 1986, 1996), but relatively widely adopted. Slobin (1996, p. 71) tracks the roots of this hypothesis particularly to F. Boas (“each language has a peculiar tendency to select this or that aspect of the mental image which is conveyed by the expression of the thought”), and states (*ibid.*) that he is mainly building on the traditions of anthropological linguistics: “I am following a tradition in anthropological linguistics that has taken a less deterministic approach in the face of linguistic diversity”. The hypothesis represents a significant shift from abstract, substantial entities (thinking and language) to activities, leading to the analyses of real processes.⁷

Even though the thinking-for-speaking hypothesis as a softer version of linguistic relativity is not generally accepted,⁸ it has proved to be a relevant challenge for contemporary researchers who are formulating their response to it.

1.2 For our purposes, it is important to note that the hypothesis (thinking for speaking) significantly influenced the research of language acquisition and use, making it

7 The idea of language as a factor that impacts the conceptualisation of reality and its expression has a considerable tradition in Czech as well. See for example Mathesius on language stylisation:

This is the first stage of language stylisation: thought content is deconstructed by purposefully selecting elements expressible by language. If we want to describe the experience mentioned above in Czech, we can choose from the elements: učitel, psáti, tabule [teacher, write, board]. There are other languages, however, that have different means (one can, for example, imagine a language that does not have a word for “blackboard” but only for a “wall with a blackboard” etc.). These expressible elements are different in every language, even though they are sometimes very similar in Indo-European languages. (Mathesius, 1961, p. 18)

or his claim that “every language understands reality in its own way, modifies it and simplifies it to fit its own sign system” and that every language “has its own idiosyncratic way of expressing reality and many peculiarities that cannot be imitated in any other language” (Mathesius, 1942, 1967). Even clearer is the statement in the study of the essence of the sentence (Mathesius, 1924), where it is stated the “overall situation (objective) or experience (subjective) have a part in the formation of the sentence” followed by the “linguistic conceptualisation of this overall situation or experience” and finally an “expression of this linguistic conceptualisation with segmented sounds”, concluding that “for linguistics itself, the most important part is the linguistic conceptualisation, i.e. the central element of this three-part chain” (*ibid.*).

8 Let us also gloss over certain other partial differences in this stream of thought, e.g. differentiating between universal conceptual representation systems on the atomic level and language-specific patterns on the molecular level — even cognitive research focused on this model shows that speakers almost always think on the molecular level, meaning that this model (Levinson, 2001, 2003) essentially shares the same assumption.



relevant also for language teaching.⁹ The hypothesis impacted not only research and theories on the acquisition of a first as well as a second/foreign language, but also research of speech disorders (e.g. Williams syndrome, Alzheimer's disease) and related topics. Some authors (Slobin & Bowerman, 2007) claim that research of language acquisition still mainly draws on typological theory rather than vice versa, but it seems that research of acquisition processes can also offer a valuable contribution to typology and provide important findings and empirical data.

The volume of literature on language acquisition based on this theoretical background is very extensive and cannot be systematically summarised here. Let us at least try to identify some distinctive characteristics and tendencies, particularly those that seem important for our perspective.

First of all, there is a strong tendency towards comparisons between languages. This kind of comparison is very traditional and typical for second and other languages (comparing the first language and target language in a contrastive analysis, comparing the interlanguage and target language in student error analysis etc.) and seems natural. However, with first languages it is motivated by another effort which can be linked to what has been the central question of cognitively-oriented research from the very beginning: using reliable empirical data to determine where the meanings that children operate with come from. Do they come with cognitive development, which is universal in character, or are they shaped by the language that the child is in contact with and in the process of acquiring, and if so, to what extent, how etc.

In the first decades after the cognitive turn (in part because of Piaget's influential concept), the former assumption (e.g. that meanings come with cognitive development) tended to dominate;¹⁰ since the 80s the question has been more open-ended. Contemporary research assumes (and frequently confirms) that there is some interaction between non-linguistic conceptual development in children and the specific language that the child is learning and aims to determine what is the relative impact of both factors on this development. The conceptualisation of space is particularly useful for this purpose because in this domain, the cognitive and linguistic development of children is without any doubt significantly influenced by non-linguistic factors (interaction with the world) and at the same time, there are very substantial differences between how space is conceptualised and meanings are expressed in individual languages. This makes the parallel influence of both factors and the interaction between them easier to examine than in other domains.

One of the most extensive comparative projects to date was launched by D. I. Slobin with the secondary aim to discover the general and universal principles of language acquisition. The project involving a large team of researchers from several countries took many years and resulted in an extensive five-volume monograph (Slobin, ed., 1985–1997) which examines data from dozens of languages. The con-

9 Concerning linguistic relativity in the study of second language acquisition, see, for example, Han & Cadierno (2001).

10 E.g. Bowerman & Choi (2003) characterise this period with a quote by the respected developmental psychologist K. Nelson: "instead of asking 'how does the child form a concept to fit the word?', we should be asking 'how does the child match words to his concepts?'".

clusion of the research however mainly pointed out the importance of the role of language- and culture-specific factors.¹¹ This was related to the second aspect of the research — an emphasis on very thorough empirical analyses of extensive collections of language data.

The collection and processing of such a volume of data (and related metadata) across languages is exceedingly difficult and requires considerable amounts of effort, time and money. The key factor for the research therefore is the availability of sufficiently large and internationally accessible acquisition corpora of various languages. With first languages, the primary source is the CHILDES databank established in the mid-80s and continuously developed since then (MacWhinney, 2000). The selection of corpora for second and foreign languages (termed *learner corpora*) is more fragmented. There are however many languages for which we have more or less extensive learner corpora to rely on (for more on the situation of Czech, see section 2.2).

The research itself led to the creation of new corpora adapted to the needs of these analyses or to the expansion and adaptation of existing corpora to the purposes of specific research projects. E.g. Hickmann (2002) created four narrative corpora for her comparative research of the development of narration in children (one for each of the selected languages — English, French, German and Chinese); the material was collected by eliciting a narrative with two brief comic strips with five and six panels; Harr (2012) in her research of French and German used two short cartoons for the same purpose.

The third typical aspect of this type of research is a focus on narrative speech.¹² This is not by accident; narrative speaking is well suited to the task of following the development of the expressions of motion, space and time in children, examining which aspects children note and which they ignore. The story used as basis for the narrative, either a film or a comic, can be selected and adjusted as required to meet the needs of the research project (movement up and down, various forms of motion, deliberate or caused etc.).

The largest collection of narrative corpora based on a comic to date was originally created for the research initiated in the 80s by D. I. Slobin and R. Berman which focused on the various aspects of narrative development in children and within this also the expression of motion events. The narrative was elicited with a short story in pictures about a boy looking for his frog, focusing on five languages — two satellite-framing (English and German) and three verb-framing (Spanish, Hebrew and Turkish). The results showed, among other things, that already at age three, expressions

11 As mentioned e.g. by Berman (2014, p. 33) in a discussion on the current state of thinking about the universals and specifics of languages, “the idea of language universals is abandoned as a myth”. She adds, however, that many of the questions asked about the acquisition process still remain: “as to the precise nature and weight of the impact of target language typology on processes of acquisition in different areas of linguistic form and language use”. In the Czech context, interesting findings were published by Schmiedtová (2004).

12 In these analyses, the term “narration” is employed in its usual sense of “telling a story” (a meaningful chain of events — Ricoeur).



of motion (selection of information, means of expressing it) differ depending on the child's first language, resembling the speech of adults (Berman & Slobin, eds., 1994).

After this first exploration, many more researchers started collecting data elicited by the same story of the boy and his frog and analysing them, resulting in quite a rich body of literature. Strömquist & Verhoeven (eds., 2004), provide an overview of 72 languages from 13 families for which there are narrative corpora based on the boy and frog story, and more collection efforts are still ongoing. This extensive collection of corpora using a unified methodology is extremely valuable and enables comparing languages on a remarkably wide scale. (Corpora based on this elicitation for Czech as first and second/foreign language are being prepared; part of the material collected so far was used in some of the presented papers.)

The results achieved in this field so far clearly show that from the very beginnings, children prefer the conceptual framing of motion, time and space that is typical for the language they are acquiring. Other experimental surveys confirm this hypothesis. It was also determined that development in this field extends far beyond the boundaries of pre-school or early school age and continues into adolescence.

Research of the acquisition of a second/foreign language points at another important aspect traditional for L2 acquisition theory: transfer. This means for example focusing on how the use of a specific language (often English) by non-native speakers is affected by the differences in the conceptualisation of a motion event between the two languages, i.e. whether and to what extent students of a second language are able to adapt their expression style to the conventions of the target language.

The research shows that the process is far from simple — it is not enough for a non-native speaker to master the lexicalisation patterns of the target language, they must also learn the skill and acquire the habit of paying appropriate attention to the individual components of the motion event typical for the target language (and its rhetoric style). Filipović & Ibarretxe-Antuñano (2015) also note that the influence of the first language and its style is present regardless of lexicalisation patterns and language type and that it affects not only the verbal aspects of speech, but also gestures, even for advanced students. All these findings are not only important from the general psycholinguistic perspective, but also pose a clear challenge for the research of the acquisition of specific languages, including Czech, as second/foreign, and their didactics.¹³

13 Papers relevant for Czech specifically are mainly those that relate it to other Indo-European languages — German, English, Spanish, Danish, Russian etc. In addition to publications listed in note 2, one could mention research based on contrastive analysis — Čermák, Kratochvílová, Nádvořníková & Štichauer (eds., 2020), which focuses on the typological differences between the four most widely spoken Romance languages and Czech; Nádvořníková (2013), which focuses on Czech and Spanish and relies mainly on translation, or Martinková (2018) which offers a contrastive analysis of Czech and English, also based on translation; contrastive analysis of German and Czech, e.g. Schmiedtová (2013), resp. Nekula, Šichová & Valdřová (2013) etc. Schmiedtová/Mertins has written extensively about the acquisition of Czech as a second/foreign language and about native speakers of Czech learning a second/foreign language, regularly comparing speak-



The central questions of these research projects (with a didactic focus) are clustered around the main theoretical problem which is also crucial for didactics: what is the ratio between universal and language-specific factors in the acquisition and use of the lexicalisation patterns of a second/foreign language, how do they manifest in the acquisition of a specific second/foreign language and, in more practical terms, what does this mean for the language acquisition process in speakers of relevant specific first languages. This research can then feed into specific didactic work that would propose and verify suitable and effective methods of teaching.

Methodologically, this research is unavoidably very varied; the field is dominated by very detailed analyses of the lexicalisation patterns of specific languages and the interlanguage of students acquiring these languages; another very important aspect are comparisons between languages, often typologically distinct, and where possible, the use of extensive acquisition and particularly learner corpora.

2. CZECH AS A SECOND/FOREIGN LANGUAGE AND HERITAGE LANGUAGE

The second topic addressed by papers in this issue concerns Czech as a second/foreign language and heritage language, its acquisition and use by non-native speakers, language teaching and related research. In this context, we will focus on two issues in particular:

- a) the current needs of the teaching of Czech as a second/foreign language, as dictated by the current state of teaching in the Czech Republic and abroad,¹⁴
- b) resources for material-intensive research and in particular the availability of Czech acquisition corpora, including learner corpora.

2.1 Czech is taught as a second/foreign language and heritage language in the Czech Republic and abroad in many different ways, on various levels and with varying objectives. In the domestic context, this has in recent decades particularly meant teaching at schools — pre-schools, primary and secondary schools and naturally also tertiary schools.

While universities in the Czech Republic have a tradition of teaching Czech as a second language, in the most recent decades there have been (besides changes in methodology) some transformations in the structure of students and their aims. These are largely related to the changing motivations for studying Czech at universities abroad. This can be illustrated and measured e.g. by examining foreign students

ers of various first languages from the Indo-European family: Schmiedtová (2004, 2011a, 2011b), Schmiedtová & Flecken (2008), Schmiedtová, von Stutterheim & Carroll (2011), Mertins (2013, 2018) and others. Contrastive and acquisition analyses of Czech and typologically more remote and unrelated languages are quite rare — for a comparison of Czech and Chinese, see e.g. Lin (2017).

14 For more details, see e.g. Šebesta, Hrdlička, Chen & Lin (2020).



in the Czech Republic in general and those applying for short-term stays in exchange and other programmes, interest in summer schools (in Prague, Brno, Olomouc and elsewhere), study stays, internships etc. as well as the interest of foreign universities in signing inter-university agreements that include studies of Czech, interest in cooperation in setting up lecturer positions in the Czech language and literature abroad etc.

The general trend observed since roughly the 90s, when interest in Czech studies at foreign universities was at its peak, is one of declining demand, particularly in certain countries in Western Europe and the USA. Consequently, some foreign universities have closed their departments of Czech studies, including some where these departments had an exceedingly long tradition.¹⁵

In other countries, however, interest in the study of Czech as a second language and in Czech Studies as a specific field remains high or is even increasing. This typically applies to countries that use related Slavic languages, particularly Russia and Ukraine but also Poland and Bulgaria, and geographically close countries — Germany and Austria.

The second area where interest in Czech is on the rise, besides Egypt,¹⁶ is Asia and particularly the Far East: China and various countries in Central Asia.¹⁷ In the Far East, Czech has a tradition as a subject in Mongolia, Korea, China, Japan and Vietnam. University-level Czech Studies in South Korea (Hankuk University of Foreign Studies, Seoul) and Japan (Tokyo University of Foreign Studies) continue to maintain a particularly good reputation and standard of quality, as well as a corresponding level of interest among students.

The situation in China has developed considerably in the past decade. In addition to the traditionally strong position of Czech Studies in Beijing (Beijing Foreign Studies University), which remains the leader in this field in China, new departments have been established in Taipei (National Chengchi University), another in Beijing (Beijing International Studies University), which offers courses of Czech also for secondary school students, Shanghai (Shanghai International Studies University) and several more Chinese university cities.¹⁸

15 For example the university of Uppsala established a department of Czech studies as early as the 1890s; today, however, the list of Slavic languages taught there is limited to Russian, Polish, Belarussian and Serbian/Croatian/Bosnian (<https://moderna.uu.se/slaviska/>).

16 In Egypt, the Department of Czech Language at the Ain Shams University, Cairo, retains its privileged position among other university departments of Slavic Studies in Africa and the Middle East as well as in the global context. There are currently about 150 students enrolled in its Bachelor's programme of Czech, which ranks it as one of the largest foreign departments with this specialisation in the world.

17 Other Departments of Czech Studies have been established recently, for example at the Baku Slavic University in Azerbaijan (Bozděchová, 2017).

18 For more details on the current situation of Czech Studies in South Korea, Japan and China, see Šebesta & Hrdlička (eds., 2020); for new departments in Chinese university centres, see in particular Huanhuan Chen (ibid.). Our contacts with the departments of Czech Studies in Pyongyang, North Korea and Ulaanbaatar, Mongolia are unfortunately minimal and information about them is largely unavailable. There have been many discussions



The development of Czech Studies in areas that are geographically and culturally very remote represents an important challenge for the didactics of Czech and related research — far more than before, it needs to pay attention to the processes of the acquisition and use of Czech by speakers of typologically different languages, particularly Chinese (or more accurately the Chinese family of languages, especially the most widespread Mandarin), Korean, Vietnamese and others.

More systematic development of the didactics of Czech as a second language in this context has only started in recent years. One particularly important impulse was the international symposium *Jedna cesta — tři jazyky* [One Path — Three Languages] at the Faculty of Arts in 2019; during one of its workshops, it was decided to establish a working group that would focus on the development of cooperation between Czech didacticians of Czech as a second language and Czech Studies staff at selected Asian universities to stimulate joint research projects and other activities. The core of the group consists of members of two closely related departments of the Faculty of Arts, Charles University: the Institute of Czech Studies and the Institute of Czech Language and Theory of Communication (ICS is represented by M. Hrdlička and S. Škodová, ICLTC by I. Bozděchová, L. Saicová Římalová and K. Šebesta). The first output of its activity is a monograph on the current state of Czech Studies in the Far East, its current problems, needs and opportunities (see note 14); the second output is the present issue.

One of the prerequisites of comparative research of the acquisition and use of Czech by speakers of Chinese and Korean is a relatively high representation of texts by Chinese and Korean students in learner corpora of the CZESL collection (see below, section 2.2).

The teaching of Czech as a second language in pre-schools and primary and secondary schools is changing significantly. The specific area of teaching Czech as a second language at Czech schools does not have a very long tradition. The significant rise in the number of students who speak a different first language is a relatively recent phenomenon, related to the increasing multilingualism of the Czech Republic and the establishment of new language minorities. So far, neither teachers nor schools are really prepared for this situation, and there is a lack of both teaching materials and a developed methodology. One additional factor is that (in addition to the rather large group of children whose primary language is Slavic, usually Russian or Ukrainian) many of these pupils speak a first language that is typologically very remote. These are the two main changes that the teaching of Czech as a second language needs to cope with in the country and that the research of didactics must respond to.¹⁹

The teaching of Czech as a second language in secondary schools is also developing abroad. Some of the centres are traditional and established (the French lyceum in Dijon), others have appeared in recent decades, particularly in the German and

about restoring a university-level Czech Studies programme in Vietnam, but none exists so far.

19 To achieve this objective, many non-state institutions have joined this effort, organising language courses and other forms of training for students as well as programmes for teachers. These activities are typically purely practical in their focus.



Austrian borderlands. Some secondary school programmes can be found also in more remote areas, including China (the already mentioned BISU in Beijing).

No overview of the teaching of Czech abroad would be complete without mentioning the issue of Czech as a heritage language in Czech-speaking minorities in other countries (traditionally referred to as “krajané” or “compatriots”). For practical reasons, the teaching of Czech in this group is considered part of teaching Czech as a second/foreign language, even though they are not quite identical — at least for some students, both forms of education are remarkably similar.

There are three types of “krajan” communities: traditional/old (usually formed by migrants from the interwar period or older and their offspring), younger (established during migration waves after the Second World War and 1968) and most recent (people living abroad for various reasons, e.g. work- or family-related, mixed marriages etc.).

Particularly relevant in this context is the teaching of Czech to children and partially adults in traditional krajan communities in South America (Argentina, Brazil, Paraguay), USA, Croatia, Serbia, Romania (Banat), Ukraine, Russia and other places. Some of these communities are trying to keep their traditions alive, which includes learning the heritage language, through various institutions (one good example is the T. G. Masaryk School in Chicago). The Comenius School Association of Vienna has a special position and a tradition dating back to 1872.

On the other hand, the teaching of Czech for the most recent krajan communities is a relatively new phenomenon. It involves teaching children from Czech families who either permanently or for a long period of time live abroad, particularly from mixed marriages (according to some sources, children from mixed marriages account for more than 90% of these students). This type of training is considered to belong somewhere between the teaching of Czech as a first and second language. It is currently mainly provided by the international network of Czech Schools without Borders, currently active in Paris (where the idea originated), London, Munich, Zürich, Brussels, Dresden, Geneva and several cities of the Rhineland-Main region (for more details, see www.csbh.cz), which teach children from pre-school age to 15 and offer also many non-curricular activities such as summer camps.

The study of Czech in these minority communities also requires more attention from Czech researchers and didacticians. The largest obstacle so far has been the fact that language data from krajan communities is not being processed with the same methodology or made available to the wider public; even collections created by specific researchers are often difficult to access.²⁰ The Faculty of Arts, Charles University, is currently trying to address this issue in the KREAS project.

The didactics of Czech as a second language currently needs to focus much more intensively than before on research of the acquisition and use of Czech as a foreign language by speakers from countries where Czech Studies are on the rise both at the university level and in lower stages of education, or the countries of origin of children who currently form significant minorities in Czech schools — both those

20 The Banát corpus of the language used by the Czech-speaking minority in the Banat region of Romania is currently nearing completion, but it has not been made public.

that have a similar language and culture (Slavic countries, particularly Russia and Ukraine) and those that are linguistically (typologically) and culturally very remote: China, Korea, India, Vietnam, Egypt, Azerbaijan, countries in Central Asia, the Middle East and elsewhere. Only then will we be able to establish solid and reliable foundations for the teaching of Czech as a second language for students from these linguistic and cultural regions.

2.2 It has been mentioned above (section 1.2) how important it is for reliable material-based research in our field of interest to rely on sufficiently large acquisition or specifically learner corpora and how this research itself helps expand the offer of acquisition and learner corpora, particularly by creating narrative corpora elicited using comic strips and longer comic stories or cartoons designed to stimulate the expression of various forms and aspects of motion events, depending on the focus of the specific project.

As far as general acquisition corpora are concerned, including learner corpora, the situation of Czech is relatively favourable and roughly comparable to large European languages.²¹ Efforts to establish acquisition corpora of Czech started roughly in 2005;²² since then, the list of corpora has been constantly expanding (in terms of

21 One obvious exception is English, which enjoys a very specific position globally; the availability of acquisition corpora for English is incomparable with any other language, not just Czech.

22 The Akviziční korpusy češtiny [Acquisition Corpora of Czech] project (AKCES) was established in 2004 and is gradually being developed by K. Šebesta's team at the Faculty of Arts, Charles University. The first, especially conceptual and organizational steps were taken as part of the solution of the long-term research project MSM 112100003 (Jazyk — struktura, vývoj, komunikace [Language — Structure, Development, Communication]). The first acquisition corpora were published with support from the follow-up research project MSM 0021620825 (Jazyk jako lidská činnost, její produkt a faktor [Language as Human Activity, Its Product and Factor]).

The effort was subsequently funded from various other grant projects. One of the most important of them was CZ.1.07/2.2.00/07.0259 (Inovace vzdělávání v oboru čeština jako druhý jazyk [Innovation in the Teaching of Czech as a Second Language]), jointly implemented by Charles University and the Technical University Liberec, resulting in the first learner corpus of Czech, CZESL (Czech as a Second Language) which in turn became the foundation for other corpora; the PRVOUK P 10 — Lingvistika project of the Faculty of Arts, Charles University and the project Zvýšení kvality vzdělávání a začleňování žáků s OMJ spojené s jeho radikální inovací [Increasing the Quality of Education and Inclusion of Students with Other Native Languages through Radical Innovation], CZ.074.68/0.0/0.0/16_037/0000299. The most significant ongoing projects are Progres Q 10 — Jazyk v proměnách času, místa, kultury [Language across Time, Space and Culture] and KREAS (Kreativita a adaptabilita jako předpoklad úspěchu Evropy v propojeném světě [Creativity and Adaptability as Prerequisites for Europe's Success in the Connected World], CZ.02.1.01/0.0/0.0/16_019/0000734).

The project team varied in response to the focus of the individual corpora, but the project lead and the core of researchers remain constant — currently K. Šebesta, A. Rosen and



their type, character and volume of language data and metadata) and developing (by modifying the rules for collection and transcription, the used software and rules for transcribing written and spoken data; adding linguistic and error annotations to corpora; developing new specialised corpus tools — for linguistic and error annotations, transcriptions, searches etc. or adapting existing tools for transcription, emendation or error annotation of non-standard Czech texts).

Currently, there are two groups of corpora: (a) acquisition corpora of Czech as a first language,²³ on the one hand spoken, on the other handwritten, (b) corpora of the Czech of non-native speakers, i.e. learner corpora — in particular those included in CZESL (Czech as a Second Language).

All corpora that are currently available for broader use are either cross-sectional or pseudo-longitudinal (consisting of data gained by collecting material by age (for Czech as L1) or by language skill level (for the Czech of non-native speakers)).

As of the time of writing, work is ongoing on other corpora in various stages of completeness; from those, three could be of particular interest for our readers. The first of them is a new, third type of corpus of Czech as a heritage language, focusing on the language of traditional krajan communities abroad. This corpus incorporates earlier collection efforts as well as new data. It will be a spoken corpus, based on recordings of uneven quality, featuring very non-standard and highly variable language; for this reason, primary data processing is very time- and labour-intensive and it is therefore currently unknown when the project will be completed.

The second type is a mixed corpus of written and spoken data from the same non-native speakers. The data was obtained over a longer time period (several years), making this a longitudinal corpus. It will enable tracking the development of the same speakers' language skills in written and spoken language, presenting a quite unique and valuable opportunity for researchers of the acquisition of Czech as a second language. This corpus is currently close to completion.

S. Škodová. From the beginning, the project was implemented by the Institute of Czech Language and Theory of Communication, since 2009 in collaboration with the Institute of Czech Studies and the Institute of Theoretical and Computational Linguistics. Some stages of the development of corpora also involve experts from other departments (Institute of Formal and Applied Linguistics, Faculty of Mathematics and Physics, Charles University, Institute for Language and Preparatory Studies, Charles University and others). The corpora are published either through Český národní korpus (<https://www.korpus.cz/>) or the Centre for Language Research Infrastructure LINDAT/CLARIAH-CZ of the Institute of Formal and Applied Linguistics, Faculty of Mathematics and Physics, Charles University (<https://lindat.mff.cuni.cz/>).

²³ For simplification, these include also corpora containing only or partial data on the language of young people from socioculturally disadvantaged locations. These corpora however require somewhat special treatment — these are primarily children from families speaking Romani, Slovak or Hungarian who typically consider Czech their first language but whose speech does include some features typical for language minorities (e.g. the occurrence of contact elements, traces of ethnolect etc.) — see e.g. Bořkovicová (2006) or the corpus-based research by Bedřichová (2014) and Kráčmarová (2019).



The third corpus being prepared is a narrative corpus. The team is currently engaged in pseudo-longitudinal collection of data based on the story of the boy and his frog among pupils who have Czech as their first language and non-native speakers. At this stage, the collection effort focuses on native speakers of Chinese (Taiwanese and Mandarin) and Korean; it is also expected to expand with native speakers of Slavic languages.

a) The list of publicly available acquisition corpora of Czech as a first language today includes SCHOLA 2010, SKRIPT 2012, Romi 1.0 and SKRIPT 2015.

Within the LINDAT offer, these are: corpus ROMi 1.0 (spoken expressions of learners from socially excluded localities; <http://hdl.handle.net/11234/1-160>) and corpora of the AKCES series, materially corresponding to the CNK corpora: AKCES 1 (counterpart of the SKRIPT 2012 corpus; <http://hdl.handle.net/11234/1-1741>), AKCES 2 and AKCES 2 ver. 2 (corresponding to the SCHOLA 2010 corpus; <http://hdl.handle.net/11234/1-1741>, <http://hdl.handle.net/11858/00-097C-0000-0023-3FBB-3>, respectively) and AKCES 4 (written speeches of children from socially excluded localities, also included in CZESL-PLAIN; <http://hdl.handle.net/11858/00-097C-0000-000C-2293-0>).²⁴

These corpora are particularly useful for the research of Czech of non-native speakers because they enable comparisons of the development of spoken and written language of Czech pupils and non-native students.

SCHOLA 2010 (and its corresponding corpora AKCES 2, AKCES 2 version 2) are corpora consisting of transcriptions of 204 classes at Czech primary and secondary schools. These are spoken corpora featuring 2,410 speakers, most of them aged 6–23 years; the total volume of transcribed data is more than 1 million positions. The corpora can be used to examine the speech of students and teachers on a large scale as the only publicly available corpora of this type.

Spoken data of pupils was also processed in the Romi 1.0 corpus which contains transcriptions of 1,701 recordings of semi-structured interviews with pupils from locations at risk of social exclusion whose families typically speak Romani, usually combined with Slovak and sometimes Hungarian, or Czech and its Roma ethnolect (see note 23). The corpus can be of interest to researchers focusing on the language of non-native speakers because the language of communities from socially excluded locations in some ways represents a zone in between the language of native and non-native speakers.

The SKRIPT 2012 (with its counterpart, corpus AKCES 1) and SKRIPT 2015 corpora contain transcriptions of essays written by school pupils. The first of them includes written essays by students from the second half of their primary school studies and

24 Published corpora are available at www.korpus.cz, or (corpora of the AKCES series and ROMi 1.0 corpus) <https://lindat.mff.cuni.cz/repository/xmlui/>, basic information about them can be found there and on the website www.akces.ff.cuni.cz. For details about individual corpora see e.g. Šebesta (2010), Šebesta & Škodová (eds., 2012), Bedřichová, Šebesta & Šormová (2011), Bedřichová, Šebesta, Škodová & Šormová (2011), Štindlová, Škodová, Rosen & Hana (2013), Rosen (2017), Šebesta & Šormová (eds., 2019).



all four years of secondary schools. In total, there are 1,694 essays amounting to roughly 600 thousand words. The second, SKRIPT 2015, partially uses earlier data collected for SKRIPT 2012 and parts of CZESL-PLAIN (see below), selected to enable comparisons between the use of written language by primary school students from the majority society and students from special schools (with mainly Romani/Slovak language background). There are 380,555 positions in the corpus, lemmatised and linguistically annotated.

b) Learner corpora have been created for AKCES since 2009. The first to be published was CZESL-PLAIN, followed by its various derivatives. CZESL-PLAIN is a non-reference corpus of more than 2 million words with only a limited selection of metadata. Language data from non-native speakers accounts for slightly more than half of its total volume, i.e. over 1 million words. It is partially available for download as AKCES 3 (contains texts by non-native speakers; <http://hdl.handle.net/11858/00-097C-0000-000C-2112-B>) and AKCES 4 (see above) in the LINDAT/CLARIAH-CZ repository. Its direct use for research is limited, but it is an important resource for follow-up corpora derived from it, typically with added metadata and grammatical and/or error notation, either automatic or manual, including CZESL-MD, CZESL-UD, CZESL-GEC and AKCES-GEC.²⁵ One important and promising derived corpus is the CZESL-MAN (a manually annotated corpus of data from non-native speakers and Roma pupils); its scope is however relatively small (128 thousand words).

For broader use in research, the CZESL-SGT²⁶ (Czech as a Second Language with Spelling, Grammar and Tags, in its non-public, somewhat larger version CZESL-SGT 1.1) is particularly useful because of its size (about 1 million words) and its features that enable effective use. This is the most extensive learner corpus of Czech yet. As some of the papers in this issue are based on it, it is worthwhile to look at it in more detail.

Its core consists of data from non-native speakers from the CZESL-PLAIN corpus, expanded with further texts and tagged with detailed metadata, particularly on authors (including important didactic data), text and situation. All the data is automatically emended (corrected), assigned to lemmas and annotated for linguistic features (including part of speech) and errors, both for emended and original, uncorrected data.²⁷

²⁵ CZESL-MD — part of the CZESL-MAN corpus focused on morphematics and morphology (available from <https://bitbucket.org/czesl/czesl-md/src/master/>); CZESL-UD — text of the CZESL-MAN corpus with syntactical annotation following the Universal Dependencies standard (<http://hdl.handle.net/11234/1-2927>); CZESL-GEC and AKCES-GEC — corpora/data sets for grammatical error correction (see Náplava & Straka, 2020). CZESL-GEC and AKCES-GEC are available within LINDAT (<http://hdl.handle.net/11234/1-2143>, <http://hdl.handle.net/11234/1-3057>, respectively).

²⁶ In LINDAT it corresponds to the corpus AKCES 5 (CzeSL-SGT) and AKCES 5 (CzeSL-SGT) Release 2 (<http://hdl.handle.net/11858/00-097C-0000-0023-95B1-E>, <http://hdl.handle.net/11234/1-162>, respectively).

²⁷ Linguistic and error tagging of acquisition corpora is primarily carried out by the Institute



The public version of the corpus contains roughly 9,000 texts from 2,000 authors (i.e. on average approximately four texts for each author) representing 54 different native languages, in total about 1,100 thousand positions. Not all the languages and language groups are represented evenly, however. For illustration, Table 1 shows the representation of individual language groups and the most prominent languages in them.

Language group	Language	Number of positions	Percentage of total	Percentage of language group
Slavic languages		769,723	40,15	
	Russian	684,177	35,69	88,89
	Ukrainian	49,436	2,58	6,42
	Polish	19,304	1,01	2,51
Other Indo-European languages		110,537	5,77	
	English	26,022	1,36	23,54
	French	13,428	0,7	12,15
	Spanish	13,225	0,69	11,96
Non-Indo-European languages		224,59	11,71	
	Chinese	61,895	3,23	27,56
	Korean	27,198	1,42	12,11
	Japanese	26,15	1,36	11,64
	Kazakh	25,166	1,31	11,21
	Arabic	13,436	0,7	5,98
Unspecified language		42,627	3,54	

TABLE 1: Representation of languages and language groups in the CZESL-SGT corpus.

The existing and publicly accessible learner (and broadly acquisitional) corpora of Czech can form a good basis for extensive research of the processes of the acquisition of Czech as a second/foreign language and its use by non-native speakers of various, including typologically distant and non-related first languages.

3. PAPERS INCLUDED IN THIS ISSUE

The papers included in this issue can be broadly divided into two categories. In the first, Lucie Saicová Římalová offers a general characteristic of typical and specific aspects of Czech in the conceptualisation and expression of motion events and their components. Readers coming from other disciplines will definitely appreciate her overview of the Czech research tradition in this field and its results. The paper pro-

of Theoretical and Computational Linguistics and its collaborators (see e.g. Jelínek, 2012, 2017; Štindlová, Škodová, Hana & Rosen, 2013; Rosen, 2015a, 2015b, 2016, 2017; Hana & Hladká, 2018; Rosen et al., 2020).



vides an exceptionally good foundation for the subsequent empirical studies. The second contribution is also more general in character. Zdeněk Starý uses Czech as his source language to explore the often-discussed issue of the relationship between spatial and temporal meanings and their expressions, particularly in relation to aspect.

The third paper by Melissa Shih-hui Lin analyses how motion events are expressed in Czech by non-native speakers whose first language is Chinese. She combines qualitative and quantitative analysis. The following paper by Svatava Škodová analyses the use of two verbs of motion, *jít* and *jet* 'go and go by', by non-native speakers; her source of material are not speakers of Chinese as a first language, but the CZESL-SGT corpus with emphasis on speakers of Slavic languages, in particular the three that are best represented in the sample: Russian, Ukrainian and Polish.

The final contribution, written by Milan Hrdlička, discusses prepositional constructions with a spatial meaning from a direct linguodidactic perspective. The author examines how this issue is treated in programme documents for the teaching of Czech as a second language, the Czech version of the Common European Framework of Reference for Languages and Czech textbooks, providing direct didactic recommendations.

The presented papers offer different perspectives on the selected issues, from general questions related to the conceptual processing and expression of spatial and temporal meanings in Czech through analysis of interfering phenomena in the speech of non-native speakers of Czech whose first language is typologically different and the analysis of use of the related means of expression by non-native speakers to linguodidactic processing and specific recommendations.

BIBLIOGRAPHY

- Bedřichová, Z. (2014). *Jazyk jako stigma?: Analýza chybovosti textů romských žáků 9. ročníků základních škol praktických*. Praha: Filozofická fakulta UK.
- Bedřichová, Z., Šebesta, K., & Šormová, K. (2011). ROMi — první rozsáhlá databanka romského etnolektu češtiny. *Lidé města*, 13, 160–163.
- Bedřichová, Z., Šebesta, K., Škodová, S., & Šormová, K. (2011). Podoba a využití korpusu jinojazyčných a romských mluvčích češtiny: CZESL a ROMi. In F. Čermák (Ed.), *Korpusová lingvistika Praha 2011, 2 — Výzkum a výstavba korpusů* (pp. 93–104). Praha: Nakladatelství Lidové noviny.
- Berman, R. A. (2014). Crosslinguistic comparisons in child language research. *Journal of Child Language*, 41, 26–37.
- Berman, R. A., & Slobin, D. I. (Eds.). (1994). *Relating events in Narrative. A Cross linguistic Development Study*. Mahwah, NJ: Lawrence Erlbaum.
- Bémová, A., Panevová, J., & Sgall, P. (1989). Znovu k významu prostých a předložkových pádů. *Slovo a slovesnost*, 50(2), 128–136.
- Běličová, H. (1978). K systému prostorových vztahů v současných slovanských jazycích. *Slavia*, 47, 122–142.
- Bořkocvová, M. (2006). *Romský etnolekt češtiny. Případová studie*. Praha: Signeta.
- Bowerman, M., & Choi, S. (2005, 2001). Shaping meanings for language: universal and language-specific in the acquisition of spatial semantic categories. In M. Bowerman & S. C. Levinson (Eds.), *Language acquisition and conceptual development* (pp. 475–511). Cambridge: Cambridge University Press.
- Bozděchová, I. (2017). Čeština v Ázerbajdžánu. *Studies in Applied Linguistics, Special Issue*, 139–140.

- Bozděchová, I. (2018). Výuka češtiny v zahraničí — proměny a současnost. In S. Škodová & M. Hrdlička (Eds.), *Čeština jako cizí jazyk v průsečíku pohledů*. Euroslavica (pp. 57–69). Praha: Filozofická fakulta UK.
- Croft, W., Barðdal, J., Hollmann, W., Sotirova, V., & Taoka, Ch. (2010). Revising Talmy's typological classification of complex event constructions. In H. C. Boas (Ed.), *Contrastive Studies in Construction Grammar* (pp. 201–236). Amsterdam: John Benjamins.
- Čermák, F. (1996). Systém, funkce, forma a sémantika českých předložek. *Slovo a slovesnost*, 57(1), 30–46.
- Čermák, P., Kratochvílová, D., Nádvoříčková, O., & Štichauer, P. (Eds.). (2020). *Complex Words, Causatives, Verbal Periphrases and the Gerund. Romance Languages versus Czech (A Parallel Corpus-Based Study)*. Praha: Karolinum.
- Everett, C. (2013). *Linguistic relativity. Evidence across languages and cognitive domains*. Berlin, Boston, MA: De Gruyter Mouton.
- Filipović, L., & Vidaković, I. (2010). Typology in the L2 classroom: Second language acquisition from a typological perspective. In M. Pütz & L. Sicola (Eds.), *Cognitive Processing in Second Language Acquisition. Inside the Learner's Mind* (pp. 269–291). Amsterdam: John Benjamins.
- Filipović, L., & Ibarretxe-Antuñano, I. (2015). Motion. In E. Dąbrowska & D. Divjak (Eds.), *Handbook of Cognitive Linguistics* (pp. 527–546). Berlin, Boston, MA: De Gruyter Mouton.
- Gumperz, J. J., & Levinson, S. C. (1991). Rethinking Linguistic Relativity. *Current Anthropology*, 32(5), 613–623.
- Gumperz, J. J., & Levinson, S. C. (Eds.). (1996). *Rethinking Linguistic Relativity*. Cambridge: Cambridge University Press.
- Han, Zh., & Cadierno, T. (Eds.). (2001). *Linguistic Relativity in SLA. Thinking for Speaking*. Bristol, Buffalo, NY, Toronto: Multilingual Matters.
- Hana, J., & Hladká, B. (2018). *Syntactic annotation of a second language learner corpus*. Praha: ICBLT. Available from <http://ufal.mff.cuni.cz/~hana/bib/hana-hladka-2018-hkg-show.pdf>.
- Harr, A. K. (2012). *Language-Specific Factors in First Language Acquisition. The Expression of Motion Events in French and German*. Boston, MA, Berlin: Walter de Gruyter, Inc.
- Haspelmath, M. (1997). *From Space to Time. Temporal Adverbials in the World's Languages*. München, Newcastle: LINCOM Europa.
- Hickmann, M. (2002). *Children's Discourse. Person, Space and Time across Languages*. Cambridge: Cambridge University Press.
- Hickmann, M., Hendriks, H., Soroli, E., Iakovleva, T., & Ji, Y. (2012). *Space and Language Typology: Encoding Motion across Languages*. Available from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.463.5579&rep=rep1&type=pdf>.
- Hirschová, M. (1977). Vzájemné vztahy předpon a předložek ve vazbách s prostorovým významem. (Na materiálu českého jazyka). *Slovo a slovesnost*, 38(2), 103–111.
- Hrdlička, M. (2000). *Předložky ve výuce češtiny jako cizího jazyka*. Praha: Karolinum.
- Hrdlička, M. (2013). Výuka českého jazyka v zahraničí. *Český jazyk a literatura*, 63, 67–70.
- Jelínek, T. (2017). Errors in inflection in Czech as a second language and their automatic classification. In K. Ekštejn & V. Matoušek (Eds.), *Text, Speech, and Dialogue. 20th International Conference, TSD 2017, Prague, Czech Republic, August 27–31, 2017* (pp. 263–271). Berlin, London: Springer International Publishing.
- Komárek, M. (1982). K významu předložkových pádů v češtině. *Acta Universitatis Palackianae Olomucensis — Philologica*, 46, 77–85.
- Konečná, D. (1969). O významech pádů v současné češtině, zejména v místních určeních. *Slovo a slovesnost*, 30(4), 347–357.
- Konečná, D. (1974). O významech českých pravých předložek. *Slovo a slovesnost*, 35(4), 261–264.
- Kráčmarová, D. (2019). *Rozšiřování slovní zásoby u romských žáků na druhém stupni ZŠ*. Praha: Filozofická fakulta UK (nepublikovaná disertační práce).
- Levinson, S. C. (2001). Covariation between spatial language and cognition, and its implications for language acquisition and conceptual development. In M. Bowerman & S. C. Levinson (Eds.), *Language acquisition*



- and conceptual development (pp. 566–588). Cambridge: Cambridge University Press.
- Levinson, S. C. (2003). Language and mind. In D. Gentner & S. Goldin-Meadow (Eds.), *Language in Mind* (pp. 25–46). Cambridge, Massachusetts, MA: MIT Press.
- Lin, J. (2020). Typological shift in lexicalizing motion events: The case of Wenzhou. *Linguistic Typology*, 24(1), 1–38.
- Lin, M. S. (2017). A typological discussion of the predicates expressing possessive meaning “to have” in Taiwan Mandarin and Czech — a learner corpus-based study. *Studies in Applied Linguistics*, 8(1), 139–140.
- MacWhinney, B. (2000). *The CHILDES Project: Tools for analyzing talk*. 3rd ed. Mahwah, NJ: Lawrence Erlbaum Associates.
- Martinková, M. (2018). K tzv. sémantické typologii jazyků: Co česká slovesa pohybu mohou vypovídat o angličtině a španělštině. *Studies in Applied Linguistics*, 9(2), 37–53.
- Mathesius, V. (1924). Několik slov o podstatě věty. *Časopis pro moderní filologii*, 10, 1–6.
- Mathesius, V. (1942). Řeč a sloh. In B. Havránek & J. Mukařovský (Eds.), *Čtení o jazyce a poezii* (pp. 13–102). Praha: Družstevní práce.
- Mathesius, V. (1961). *Obsahový rozbor současné angličtiny na základě obecné lingvistické metody*. Praha: Nakladatelství ČSAV.
- Mertins, B. (2013). Traces of L1 patterns in the event construal of Czech advanced speakers of L2 English and L2 German. *International Review of Applied Linguistics in Language Teaching*, 51, 87–116.
- Mertins, B. (2018). *Sprache und Kognition. Ereigniskonzeptualisierung im Deutschen und Tschechischen*. Berlin, Boston, MA: Walter de Gruyter.
- Nádvorníková, O. (2013). Francouzský gérondif a český přechodník: kontrastivní analýza a jazykové korpusy. *Jazykovědné aktuality*, 50(3–4), 80–95.
- Náplava, J., & Straka, M. (2019). *Grammatical Error Correction in Low-Resource Scenarios*. Available from <https://arxiv.org/pdf/1910.00353.pdf>.
- Nekula, M., Šichová, K., & Valdřová, J. (Eds.). (2013). *Bilingualer Sprachvergleich und Typologie: Deutsch — Tschechisch*. Tübingen: Julius Groos Verlag.
- Niemeier, S., & Dirven, R. (Eds.). (2000). *Evidence for linguistic relativity*. Amsterdam: John Benjamins.
- Novák, P. (1959). K otázce obecného významu gramatických jednotek. *Slovo a slovesnost*, 20(2), 81–88.
- Novák, P. (1974a). K věcné platnosti pádů, jejich tzv. celostnímu (obecnému) významu a lokalismu. *Slovo a slovesnost*, 35(2), 88–95.
- Novák, P. (1974b). K lokalistickému pojetí významu pádů. *Slovo a slovesnost*, 35(4), 256–260.
- Piřha, P. (1977). K popisu předložkových konstrukcí v češtině (předložka před). *Slovo a slovesnost*, 38(1), 14–26.
- Rosen, A. (2015a). *CzeSL-MAN — a corpus of non-native speakers’ Czech with manual annotation*. Available from <http://utkl.ff.cuni.cz/~rosen/public/2015-czesl-man-en.pdf>.
- Rosen, A. (2015b). *CzeSL-SGT — korpus češtiny nerodilých mluvčích s automaticky provedenou anotací*. Available from <http://utkl.ff.cuni.cz/~rosen/public/2014-czesl-sgt-cs.pdf>.
- Rosen, A. (2016). Building and Using Corpora of Non-native Czech. In B. Břejová (Ed.), *ITAT 2016, Information Technologies — Applications and Theory. Proceedings of the 16th ITAT Conference Information Technologies — Applications and Theory, Tatranské Matliare, Slovakia, September 16–19, 2016* (pp. 80–87). Bratislava: Comenius University in Bratislava.
- Rosen, A. (2017). Introducing a corpus of non-native Czech with automatic annotation. In P. Peřík & J. T. Waliński (Eds.), *Language, Corpora and Cognition* (pp. 163–180). Frankfurt am Main, Bern, Bruxelles, New York, NY, Oxford, Warszawa, Wien: Peter Lang.
- Rosen, A., Hana, J., Hladká, B., Jelínek, T., Škodová, S., & Štidlová, B. (2020). *Compiling and annotating a learner corpus for a morphologically rich language*. Praha: Karolinum.
- Saicová Římalová, L. (2009). O významech sloves typu jít a typu chodit v češtině (Pohled kognitivní). *Bohemistika*, 9(3), 161–176.

- Saicová Římalová, L. (2010). *Vybraná slovesa pohybu v češtině. Studie z kognitivní lingvistiky*. Praha: Karolinum.
- Schmiedtová, B. (2004). *At the same Time ... The Expression of Simultaneity in Learner Varieties*. Berlin, New York, NY: Mouton de Gruyter.
- Schmiedtová, B. (2011a). Do L2 speakers think in the L1 when speaking in the L2? *International Journal of Applied Linguistics*, 8, 97–122.
- Schmiedtová, B. (2011b). Seeing for speaking. Wie Sprache unser Denken formt — psycholinguistische Hintergründe. In S. Schulte (Ed.), *Ohne Wort keine Vernunft — keine Welt. Bestimmt Sprache Denken? Schriftsteller und Wissenschaftler im Wortwechsel mit Johann Georg Hamann* (pp. 97–128). Münster: Waxmann Verlag.
- Schmiedtová, B. (2013). Zum Einfluss des Deutschen auf das Tschechische: Die Effekte des Zeitdrucks auf die Sprachproduktion. In M. Nekula, K. Šichová & J. Valdrová (Eds.), *Bilingualer Sprachvergleich und Typologie: Deutsch — Tschechisch* (pp. 177–206). Tübingen: Julius Groos Verlag.
- Schmiedtová, B., & Flecken, M. (2008). Aspectual concepts across languages: Some considerations for Second Language Learning. In S. de Knop & T. de Rycker (Eds.), *Cognitive Approaches to Pedagogical Grammar. A Volume in Honour of René Dirven* (pp. 357–384). Berlin: Mouton de Gruyter.
- Schmiedtová, B., von Stutterheim, Ch., & Carroll, M. (2011). Implications of language-specific patterns in event construal of advanced L2 speakers. In A. Pavlenko (Ed.), *Thinking and Speaking in two Languages* (pp. 66–197). Clevedon: Multilingual Matters.
- Skalička, V. (1950). Poznámky k teorii pádů. *Slovo a slovesnost*, 12(3–4), 134–152.
- Slobin, D. I. (Ed.). (1985–1997). *The Crosslinguistic Study of Language Acquisition I–V*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Slobin, D. I. (1987). Thinking for Speaking. In J. Aske, N. Beery, L. Michaelis & H. Filip (Eds.), *Proceedings of the Thirteenth Annual Meeting of the Berkeley Linguistics Society* (pp. 435–445). Berkeley, CA: Berkeley Linguistics Society.
- Slobin, D. I. (1996). From “thought and language” to “thinking for speaking”. In J. J. Gumperz & S. C. Levinson (Eds.), *Rethinking linguistic relativity* (pp. 70–96). Cambridge: Cambridge University Press.
- Slobin, D. I. (2004). The many ways to search for a frog: Linguistic typology and the expression of motion events. In S. Strömquist & L. Verhoeven (Eds.), *Relating events in narrative: Vol. 2. Typological and contextual perspectives* (pp. 219–257). Mahwah, NJ: Lawrence Erlbaum Associates.
- Slobin, D. I. (2006). What makes manner of motion salient? Explorations in linguistic typology, discourse and cognition. In M. Hickmann & S. Robert (Eds.), *Space in Languages: Linguistic Systems and Cognitive Categories* (pp. 59–81). Amsterdam, Philadelphia PA: John Benjamins.
- Slobin, D. I., & Bowerman, M. (2007). Interfaces between linguistic typology and child language research. *Linguistic Typology*, 11, 214–226.
- Stosic, D. (2013). Manner of motion, evaluative and pluractional morphology. In L. Šarić (Ed.), *Space in South Slavic. Oslo Studies in Language* (pp. 61–89). Oslo: University of Oslo.
- Strömquist, S., & Verhoeven, L. (Eds.). (2004). *Relating events in narrative*. New Jersey, NJ: Lawrence Erlbaum.
- Šebesta, K. (2010). Korpusy češtiny a osvojování jazyka. *Studies in Applied Linguistics*, 1, 11–34.
- Šebesta, K., & Hrdlička, M. (Eds.). (2020). *Čeština na Dálném východě*. Praha: Filozofická fakulta UK.
- Šebesta, K., Hrdlička, M., Chen, H., & Lin, M. S. (2020). Aktuální výzvy pro didaktiku češtiny jako cizího jazyka z hlediska její dynamiky. In K. Šebesta & M. Hrdlička (Eds.), *Čeština na Dálném východě* (pp. 13–19). Praha: Filozofická fakulta UK.
- Šebesta, K., & Škodová, S. (Eds.). (2012). *Čeština — cílový jazyk a korpusy*. Liberec: Technická univerzita v Liberci.



- Šebesta, K., & Šormová, K. (Eds.). (2019). *Korpusy v jazykovém vyučování II*. Praha: Filozofická fakulta UK.
- Škodová, S. (2013). CzeSL — korpus češtiny nerodilých mluvčích. *Korpus — gramatika — axiologie*, 8, 82–89.
- Škodová, S. (2017). Realizace vybraných komunikačních funkcí v porovnání nerodilých a rodilých mluvčích češtiny. *Studies in Applied Linguistics*, Special Issue, 121–135.
- Škodová, S. (2018). Sloveso JÍT v zrcadle užití nerodilými mluvčími češtiny. In S. Škodová & M. Hrdlička (Eds.), *Čeština jako cizí jazyk v průsečíku pohledů* (pp. 246–260). Praha: Filozofická fakulta UK.
- Štindlová, B., Škodová, S., Hana, J., & Rosen, A. (2013). A learner corpus of Czech: Current state and future directions. In S. Granger & G. Gilquin (Eds.), *Twenty Years of Learner Corpus Research: Looking back, Moving ahead. Corpora and Language in Use — Proceedings 1, Louvaine-la-Neuve, September 2013* (pp. 435–446). Louvaine: Presses universitaires de Louvain.
- Talmy, L. (1975). Semantics and Syntax of Motion. In J. Kimball (Ed.), *Syntax and Semantics* (pp. 181–238). New York, NY: Academic Press.
- Talmy, L. (2000). *Toward a Cognitive Semantics*. Cambridge, Massachusetts, MA: MIT Press.

Karel Šebesta | Institute of Czech Language and Theory of Communication,
Faculty of Arts, Charles University
<karel.sebesta@ff.cuni.cz>