MOTION EVENTS IN ENGLISH AS A FOURTH LANGUAGE A linguistic analysis of a selected episode in multilingual learner narratives

MARTINA IRSARA FREE UNIVERSITY OF BOZEN-BOLZANO

Abstract – This article reports on a study that investigated the description of motion events in narrative texts written by 13-14 and 17-18 year olds learning English as a fourth language at schools where multilingualism is a key objective. The focus was placed on the learners' references to the animate beings featured in the story and their use of verbs and satellites in order to describe the movement situations elicited from the image selected for analysis from the wordless picture story the teenagers had to retell in words. The main objective of the study was to draw a comparison between the two age or proficiency-level groups within a functional-pragmatic framework. The learners' narrative and linguistic choices in their motion-event constructions were analysed, with a number of comments made on the basis of the participants' other languages. Findings revealed preferences and tendencies that were partly similar and partly different in the two school grades. The predominant figures turned out to be the same at both proficiency levels, with the use of superordinates to fill lexical gaps identified as one of the main communication strategies and the more frequent use of personal pronouns characterising the higher-level texts. With the exception of the motion undertaken by one figure, the motion events depicted were described with similar verbs, and a non-target like use of the satellites *after* and *behind* was noticed in both age groups. The article is argued to constitute the basis for further investigations into motion events in multilingual learners' texts.

Keywords: Motion verbs; prepositions; adverbs; frog story; fourth language acquisition.

1. Introduction

The semantic domain of motion has been examined in detail by Talmy (1985, 1991, 2000), who defines a motion event as "a situation containing movement of an entity or maintenance of an entity at a stationary location" (Talmy 1985, p. 60). Motion events can therefore be understood as situations containing motion with no change of location as well as "motion in which the location of the figure changes" (Talmy 2000, p. 25). In the present study, it is translational motion as defined in the latter statement that is central (Talmy 2000).

A basic motion event can be examined as having four central components: (1) the Figure, namely the object "moving or located with respect to another object" (Talmy 2007, p. 70); (2) the reference object, defined as Ground; (3) the Path, which is "the path followed or site occupied by the Figure object" (p. 70); and (4) Motion, referring "to the presence *per se* of motion or locatedness in the event" (p. 70). The four components are illustrated in Talmy's (2007) example "The pencil rolled off the table" (p. 71), in which *the pencil* functions as the Figure and *the table* as the Ground, while *off* indicates the Path and the verb *rolled* expresses Motion. It is with an examination of the figures, namely the salient moving entities in the motion events, that the present article starts out, observing learners' preferences and tendencies in their choice of figures to mention in the narrative episodes considered. Since it was supposed that not all learners would be familiar with the English expressions identifying the figures, communication strategies adopted by them to



compensate for their knowledge gaps were also scrutinised, observing their labelling of entities, or the form-meaning connections established by them.

Attention was subsequently shifted from the figures to the verbs of motion occurring in the learner texts. The following four types of verbs of movement are distinguished by Berman and Slobin (1994), three types of which are considered in the present article, omitting causative verbs, hence concentrating on verbs of self-movement:

(1) **activity** predicates... in which a volitional actor performs a durative activity like *go*, *walk*, *run*, or *fly*; (2) change-of-state verbs or **achievement** predicates, where a protagonist shifts to another location, primarily *fall*...; (3) the **causative** counterparts of such verbs, in which an agent causes the protagonist to undergo this change, e.g., *push*, *throw*; and (4) a noncausative category of optionally **transitive** verbs, in which two protagonists are involved in a durative activity, such as *run after* or *chase*, *run away* or *flee*. (Berman, Slobin 1994, pp. 152-153)

Although in English there are approximately three times as many nouns as verbs, it is the verb that is central in sentences (Aitchison 2003). Moreover, verb learning appears to be more demanding than noun learning, as also emphasised by Maguire, Hirsh-Pasek and Golinkoff (2006), who maintain that "mapping from action or mental state to word is considerably more challenging than mapping from object to word" (p. 367). As pointed out by Crossley, Subtirelu and Salsbury (2013), "nouns are more concrete, meaningful, imageable, specific, and unambiguous than verbs" (p. 727). In learning verbs, language learners need to be sensitive to a number of features of an action, for instance in the case of motion verbs to path and manner, namely to the trajectory followed by the figure and "the way in which the action or motion is carried out" (Pulverman *et al.* 2006, p. 137). While manner verbs like *run* or *jump* encode motion together with manner, path verbs like *enter* or *descend* express motion and path (Pulverman *et al.* 2006).

Moreover, actions and events are packaged by verbs in different ways in different languages. In Talmy's (1985, 1991, 2000) bipartite typological framework, languages that characteristically map path of motion into the verb are known as verb-framed languages (V-languages), e.g. Romance languages, while languages that characteristically express path through a satellite to the verb are said to be satellite-framed (S-languages), e.g. English and German. In V-languages, manner of motion is therefore normally expressed by means of a gerundive form, a prepositional phrase or an adverb, whereas in Slanguages it is usually encoded in the main verb itself (Cardini 2008). Italian, for instance, normally favours verbs of inherent directionality, e.g. entrare 'enter', while "English has a large collection of verbs of motion which convey manner, but not directionality (walk, run, crawl, fly, etc.), combinable with a large collection of satellites (in, up to, across, etc.)" (Slobin 1996a, p. 196). While prepositions are excluded from Talmy's (2000) idea of satellites, which he defines as "the grammatical category of any constituent other than a noun-phrase or prepositional phrase complement that is in a sister relation to the verb root" (p. 102), in the present article an inclusion in the category of both adverbs and prepositions turned out to be more functional. Beavers' (2008) suggestion was therefore followed that prepositional phrases should also be incorporated in the concept, as they seem to "serve the same function as satellites in motion constructions" (p. 285).

Hence, as emphasised by Slobin (1996a), a motion verb "is situated in a typological frame that provides and limits the means of expressing components of a motion event in a particular language" (p. 195). In Slobin's (1996b) thinking-for-speaking hypothesis, "each native language has trained its speakers to pay different kinds of attention to events and experiences when talking about them" (p. 89). In second and further language learning, this childhood training hence needs to be restructured to some

jingue e

extent. In a functional-pragmatic analysis of motion events as expressed in fourth language learner texts, typological characteristics of the learners' other languages as well as developmental issues therefore seem to warrant some consideration.

In the analysis presented in this article, a comparison between two age groups or proficiency levels was carried out in order to find differences and similarities in the references to the figures and in the elaboration of spatial trajectories. The analysis adopted a functional perspective, focusing on the language selections made by the pupils to describe the motion events elicited in the writing task. The linguistic forms commented upon were therefore regarded as devices to fulfil communicative functions. As put forward above, an interpretation of general tendencies was also sought by reflecting on the learners' other languages, more precise information on which is provided in Section 2, together with an illustration of the participants' general characteristics. Section 3 then briefly presents the writing task assigned to the pupils, whereas Section 4 describes the analysis procedure followed and lists the research questions around which the study is organised. The main findings are presented and discussed in the following sections, which also give an outlook of possible future work.

2. Study area and participants

The data examined and presented in this article were gathered in the valleys of Badia and Gherdëina, two Rhaeto-Romance (or Ladin) minority valleys located in the province of Bozen-Bolzano (or South-Tyrol), in the north of Italy. The attainment of multilingualism is a core objective in the schools of the area chosen for the analysis, where pupils normally all "have regular use of more than one language in their everyday lives" (Franceschini 2011, p. 346) and learn English as a chronologically fourth language. Ladin, Italian, German and English language classes form a compulsory part of the local school curriculums. While Ladin is the first language learnt by most pupils in their childhood (L1), both Italian and German can be viewed as their second languages (L2), as they are usually acquired after Ladin and are learnt and used not only at school but also in the surrounding environment, which welcomes many Italian and German speaking holidaymakers and adjoins valleys populated by a majority of German and a minority of Italian speaking communities. In addition to the language classes offered, an equal number of school subjects are taught in Italian and German in all the schools that provided the study data, namely five lower secondary schools and three upper secondary schools, also known respectively as Middle Schools (henceforth MS) and Secondary Schools (henceforth SS).

Speaking Ladin, Italian, German and English, the study participants might be taken to be familiar with the motion lexicalisation patterns of both verb-framed and satelliteframed languages. As pointed out in the introductory section and outlined in Table 1, the learners' chronological fourth language, English, is classified as an S-language, while their L2s, Italian and German, are described respectively as verb-framed and satellite-framed. However, no studies on the topic have been carried out so far on the learners' L1, Ladin. Although Romance languages are normally viewed as mainly verb-framed, in that "the path of motion is expressed within the verb, i.e., the language conflates fact of motion and path information" (Feiz 2011, p. 402), Ladin appears to typically express path by means of an adverb and to adhere in this way to the satellite-framed typology like German, a language Ladin is in close contact with. However, Ladin also seems to show a typical trait of V-languages, namely the low-manner salience, since in their everyday speech Ladin

	Verb-framed language (V-language)	Satellite-framed language (S-language)
English Italian	V	X
German		X
Ladin	(X)	(X)

speakers do not appear to display a wide array of manner verb types. In some respects, Ladin might therefore be considered a mixed language.

 Table 1

 Language classification as verb-framed or satellite-framed.

While the learning of a fourth language in an institutional setting is perhaps rather exceptional, areas displaying linguistic diversity do not seem to be so, particularly if dialects and regional languages are also considered part of the multilingual repertoire (Franceschini 2011). The learning of not only one but of at least two languages beyond the mother tongue or L1 has been formulated as a long-term objective and corner stone in education by the European Union (European Commission 2013). Given the growing interest in multilingualism around Europe and the world, fourth language learning therefore seems to provide an interesting context for research (Grosjean 2010).

As outlined in Table 2 below, the investigation involved a total of 306 teenagers. While 263 participants were 13-14 years of age, 43 of them were 17-18 years old. The former attended their 8th school year and were hence MS pupils, whereas the latter were 13th graders and attended the SS. The younger pupils were studying English for the 5th year, as they had already benefited from the rather recent introduction of English into primary school education. The older pupils were learning English for the 8th year, since they had not taken up the language in their 4th but only in their 6th school year. While the MS participants had had two hours of English per week throughout the five years, the SS learners had two weekly hours in their first three years and three to four in the latter five. Up to the moment of data collection, the younger learners had therefore had approximately 300 hours of English instruction, whereas the older ones had had roughly 770.

Number of participants	Age	School year	Year of English	Weekly hours of English
263	13-14 years	8 th (MS participants)	5th	2
43	17-18 years	13 th (SS participants)	8th	3-4

Table 2 Participants.

3. Writing task

Written narrative texts were elicited from the participants on the basis of a shortened version of Mayer's (1969) famous pictured storybook *Frog, where are you?*, which depicts the adventures of a boy undertaking a search for his run-away pet frog. Together with his dog, the boy starts looking for the frog in his bedroom. After the dog's fall from the window, the boy and the dog both move into the forest, where the searching adventure is intensified by the encounter with an owl, a swarm of bees and a deer. On landing in a



river, the two friends finally find the lost frog in happy company.

The stories were written by the learners under test conditions, with no dictionaries at their disposal or any help from teachers and peers. For purposes which go beyond the scope of the analysis presented here, a total of thirteen and nineteen images were given to the MS and SS participants respectively, who all had forty minutes time for the test, which also comprised multiple-choice questions to be answered by the MS participants. The SS learners only had to compile the narrative text. A number of test characteristics are specified once more in Table 3.

Middle School Test	Secondary School Test
40 minutes	40 minutes
28 multiple-choice questions	0 multiple-choice questions
Story writing based on 13 images	Story writing based on 19 images

Table 3 Test characteristics.

4. Analysis procedure and research questions

For the purposes of the study presented here, an in-depth analysis of the story sections going along with one specific image was seen as the best way to proceed. Hence, the choice fell on the picture given as Image 1, in which an owl is shown swooping out of a tree hole, the boy falling to the ground and the dog running past the boy chased by a swarm of bees. The picture was considered to be one of the most complex and therefore also interesting ones, leaving the viewer or storywriter with a number of narrative options and possible expression patterns.

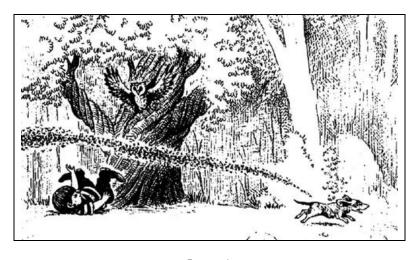


Image 1 Mayer (1969).

In order to achieve the overall objective of better understanding and accounting for the motion events as occurring in the learner extracts accompanying Image 1, a number of research questions were formulated, which were supposed to provide a good starting point for discovering general patterns, ascertaining differences between the two proficiency

levels considered and interpreting the data. The analysis report provided here therefore gives a close description developing answers to the following questions.

- 1. Which animate beings predominate in the story sections considered?
- 2. Is there a noticeable difference between the two school levels or age groups in the number of references to the animate beings?
- 3. How are the animate beings indicated at the two school levels?
- 4. Which verbs of motion and satellites prevail in the dog, the bee, the owl and the boy events at the two school levels?
- 5. Can L1 or L2 influence be detected in the references to the figures and in the use of motion verbs and their satellites?
- 6. Does the tendency to elaborate on spatial trajectories increase or decrease?

Hence, after digitising the learners' handwritten texts in order to facilitate processing, the extracts accompanying the aforementioned story frame were isolated and examined on the basis of the questions set out above. Outcomes and observations that emerged from the analysis are illustrated in the next sections.

5. Most noticeable findings and outlook

5.1. Research question one

It can be noticed observing Table 4 that, at both the MS and SS level, the dog is the most prominent figure in the narrative extracts that go along with the image selected for analysis, and it is followed by the bees. The dog was referred to by the great majority of the MS participants and by all the SS learners. It was pointed out by Berman and Slobin (1994) in their examination of the choice of perspective made by English L1 speakers in the description of the chase scene that, whereas the majority of the younger narrators referred either to the dog or the bees, all the 9-year olds and adults indicated both parties. In the study presented here, 65.02% of the 13-14 year olds and 88.37% of the 17-18 year olds mentioned both the dog and the bees.

Whereas the bees turned out to be more prominent than the boy in the MS extracts, the two parties were mentioned by an identical percentage of narrators in the higher school grade.

At both proficiency levels, the frog is hardly mentioned in the text chunks accompanying the picture analysed, where the pet is in fact not to be seen, so that explicit references to it might seem rather redundant. On the other hand, the frog is a background referent which somehow also needs to be kept alive.

nguagai

Extract analysis: types ¹	Percentages MS	Percentages SS	Difference
/dog/	79.09%	100%	+ 20.91%
/bees/	68.82%	88.37%	+ 19.55%
/boy/	57.41%	88.37%	+ 30.96%
/owl/	30.80%	72.09%	+ 41.29%
/frog/	1.52%	2.33%	+ 0.81%

Table 4

Percentage of narrators mentioning the different figures at least once (100% = the total number of pupils).

Concerning question number one on the predominant figures in the scene examined, in future analyses it might be further investigated whether the dog is treated as a central figure throughout the learners' complete narratives, and some coherence is therefore maintained, or whether the boy's friend is put in the spotlight in this scene only. Berman and Slobin (1994) point out that there is always "more than one way to encode an event, the speaker has a choice of perspective, that is, an event can be construed from a particular point of view" (p. 516). Furthermore, they maintain that "children often find difficulty in arriving at selection of perspectives on event construal dimensions" (p. 536). The same difficulty might be experienced by teenagers learning foreign languages.

5.2. Research question two

As can be viewed in Table 4 above, the number of learners mentioning the owl makes the most noticeable difference between the two school levels with regard to the animate beings mentioned. The bird of prey is more prominent among the SS than among the MS participants. The absence of the owl from many MS extracts might be due to a lexical gap or retrieval problems. In other words, MS participants might deliberately omit an entity that is lexically difficult for them, implementing an avoidance strategy, which is common among language learners, as confirmed by Bialystok (1990). However, avoidance is often difficult to detect, as emphasised by Bialystok (1990). In particular, in the study presented here, the considerably lower number of references to the owl in the MS compared to the SS school extracts might also be due to the fact that the owl is not a figure that is present in the front of the scene, and weaving secondary figures into the story plot might be argued to require specific skills, which are probably less developed at the lower school level. Integrating background figures into the story plot might be argued to be an aspect of narrative organisation, which is confirmed by Berman and Slobin (1994) to "remain a problem long after the acquisition of complex syntax and basic narrative capacity" (p. 537). Similarly, Hickman (2004) mentions the late appearance of discourse uses "that differentiate the discourse foreground and background" (p. 286). The treatment of background figures might therefore be worth some attention in a future inquiry into learner narratives.

jingue e

¹ The labels provided in the first column of Table 4 are not the expressions as literally found in the learner texts but umbrella terms that subsume personal pronouns, a number of spelling versions and different noun phrases referring to the dog, the swarm of bees, the boy, the owl and the frog.

5.3. Research question three

At both school levels, in the great majority of cases the dog is referred to by using noun phrases with the head *dog*, as illustrated in Table 5, which also shows that the percentage of personal pronouns indicating it is higher in the extracts from the SS than in the ones from the MS. The MS pupils therefore still seem to "overuse available devices" (Berman, Slobin 1994, p. 609), which appears to be typical in low-proficiency L1 narratives. Besides, repeated noun-phrase reference might be due to "problems conceptualising a sequence of pictures as a story, resulting in a description of each of the pictures as a separate element, rather than in a narration" (Hendriks 2002, p. 320).

Extract analysis:	Percentages MS	Percentages SS	Difference
(xxx) dog (token)	82.97%	76.27%	- 6.7%
Personal pronouns			
indicating the dog	14.86%	22.03%	+ 7.17%

Tabla	5
- i abie	

How the dog was referred to (100% =the total number of times the dog was indicated).

Observing the learners' references to the swarm of bees, great variation was found in the lower-level extracts, as illustrated by the different forms in Table 6, which shows the bestrepresented noun-phrase heads. As was probably to be expected, the target-language form bees is more strongly present in the SS than in the MS extracts, although some L2 transfer can be noticed at both levels. While the German form Bienen was only found in the MS extracts, Italian-based word coinage was noticed in both the MS and SS extracts, which exhibit a few instances of the form apes, clearly not meant to indicate gorillas or chimpanzees. A communication or achievement strategy, aimed at finding a solution to problems of expression due to inadequate target-language knowledge, was also identified in the use of the superordinate insects, which was found at both levels, and whose percentage turned out to be even higher in the higher-proficiency extracts (Bialystok 1990). Furthermore, it seems that a number of MS participants resorted to an approximation strategy, substituting the more accurate but probably unknown term bees with *flies* (Bialystok 1990). In the pupils' eyes, flies probably share certain characteristic features with bees, so that they might be seen as the best candidates to fill the lexical gap. Finally, the last row of Table 6 illustrates again that personal pronouns are used more in the SS than in the MS extracts.

Extract analysis: tokens in italics	Percentages MS	Percentages SS
(xxx) bees	43.00%	73.81%
(xxx) beens	17.62%	/
(xxx) beans	5.18%	/
(xxx) bins	1.55%	/
(xxx) bienen	1.55%	/
(xxx) vesps	1.04%	/
(xxx) apes	1.04%	4.76%
(xxx) insects / insekts	2.59%	4.76%
(xxx) flyes / fly's / flies	2.07%	/
Personal pronouns indicating the bees	7.25%	11.90%

Table 6 How the bees were referred to (100% =the total number of times the bees were indicated).

It can be viewed in Table 7 that the child in the story is mainly referred to by using the noun phrase *the boy*, who is sometimes also given proper names. As for the dog and the bees, personal pronouns indicating the boy are again more strongly represented in the SS than in the MS extracts.

Extract analysis	Percentages MS	Percentages SS	Difference
the boy (token)	76.32%	65.31%	- 11.01%
Proper name	1.97%	8.16%	+ 6.19%
Personal pronouns	17.76%	24.49%	+ 6.73%
indicating the boy			

Table 7

How the boy was referred to (100% =the total number of times the boy was indicated).

Although a number of pupils avoided references to the owl, as explained in an earlier paragraph, it can nonetheless be assumed that the bird of prey is not unknown to them, considering that their living environment is surrounded by larger areas of wood that provides habitat for owls. A certain number of MS learners adopted in fact the German expressions *Uhu* and *Eule* and the Italian term *gufo*, as displayed in Table 8.

The percentages in the table also show that the superordinates *bird* and *animal* occur in both the MS and SS extracts, with the noun-phrase head *bird* even better represented at the higher than at the lower proficiency level. This might suggest that the target-language term *owl* is also unfamiliar to a number of SS learners, who nonetheless strive to find a solution to the lexical gap problem in order to also give voice to this secondary figure. Increased interest and ability in dealing with background characters therefore seems to be shown in the higher-level school extracts.

Extract analysis: tokens in italics	Percentages MS	Percentages SS	Difference
(xxx) owl	45.12%	28.12%	- 17%
(xxx) bird	9.76%	62.5%	+ 52.74%
(xxx) animal	8.54%	3.12%	-5.42%
(xxx) uhu	6.10%	/	/
(xxx) gufo / Guuf	4.88%	/	/
a Eule	2.44%	/	/

Table 8

How the owl was referred to (100% =the total number of times the owl was indicated).

Hence, concerning question number three as to how the figures are indicated at the two school levels, two main results might be worth pointing out:

1. Superordinates were found at both levels, with the upper proficiency texts showing higher percentages for a number of them, e.g. *insects* for *bees* and *bird* for *owl*. The application of superordinate labels to the swarm of bees and to the owl was interpreted as a communication strategy that is normally more effective than avoidance in interlanguage development. Although the use of words with a general meaning might occasionally serve stylistic purposes, in the narratives analysed it was interpreted as an effort made to overcome lexical difficulties, and hence as a problem-solving activity, in agreement with Shorrocks (1991) that "learning and using language is a high-level, cognitive, problem-solving activity" (p. 273). The better ability to solve lexical

ingue e

problems shown by the older pupils therefore seems to confirm Fisher's (1995) statement that a central difference between novices and experts is that the latter "have the skills and strategies that allow them to deal with problems" (p. 32). Besides, the fairly high number of occurrences of the superordinate *bird* for *owl* in the SS extracts appears to confirm the older pupils' wish and better capacity to deal with background figures, in spite of lexical difficulties. In general, the ability to solve communication problems might be seen as an instance of linguistic dynamism, which is arguably particularly pronounced in multilinguals (Bialystok *et al.* 2012; Franceschini, Irsara 2013).

2. Personal pronouns are used more extensively among the 17-18 year olds than among the 13-14 year olds. In contrast, a study by Hickmann and Hendriks (1999) on cohesion and anaphora in English L1 acquisition found a slight increase in pronouns until the age of ten with a slight decrease after that age into adulthood. More in line with the study presented in this article, Chen and Pan (2009) confirm a steady growth in the use of pronouns between age eight and adulthood in English L2 acquisition.

5.4. Research question four

The motion verb-phrase heads with the highest numbers of occurrence turned out to be the manner verbs *run* and *fly*, the chasing verb *follow* and the path verb of inherently directed motion *come*. At both levels, the motion verbs used were therefore verbs with a high frequency of occurrence, whereas lower-frequency verbs were missing from all the extracts analysed.

The choices made by the MS and SS learners in expressing the motion events depicted were partly similar and partly different. In their descriptions of the dog's escape from the swarm of bees, both the younger and the older pupils selected forms of the head verb *run* and showed a strong preference for the phrasal verb *to run away*.

120 and 25 motion verb tokens were used respectively in the extracts from the MS and SS narratives to describe the dog's event, among which expressions containing the manner verb *to run* were found to represent 90.83% of the tokens in the former and 92% in the latter, as can be observed in Table 9. The lower percentage in the MS extracts is mainly due to the use of the verb *to go* in these, with expressions containing it amounting to 6.67%, whereas this verb does not appear once in the SS extracts. In the picture analysed, the dog does in fact not seem to be depicted as simply going somewhere but as moving faster than walking. Similarly, the deployment of the basic motion verb *to go* by less experienced language learners was pointed out by Griessler (2001) in her analysis of L2 oral narratives.

Among the satellites occurring in the dog event, the adverb *away* resulted to be the most commonly used at both proficiency levels, with the phrasal verb *to run away* equalling percentages of 60.83% and 52% of the total number of motion verb tokens in the MS and SS extracts, as displayed in Table 9.

Extract analysis: tokens	Percentages MS	Percentages SS	Difference
in italics			
(xx) to run (xx)	90.83%	92%	+ 1.17%
to run away	57.50%	52%	- 5.5%

Table 9 Motion verbs in the dog event (100% = the total number of motion verb tokens describing the dog event).

ງ inquaqai

In illustrating the sudden emergence of the owl from the tree hole, both groups opted likewise mainly for verb phrases revolving around forms of *come*, as illustrated numerically in Table 10. Among them, the phrasal-prepositional verb *to come out of* was preferred. This deictic expression, which adopts the viewer's perspective, is cited by Slobin (2004) as the most common in descriptions of this event given in their L1 by speakers of satellite-framed languages.

Manner expressions containing the verb *to fly* also resulted to be well represented, especially at the SS level, where a higher percentage was recorded than in the MS grade extracts. In total, 38 and 11 motion verb tokens were counted in this event for the MS and the SS level respectively.

Extract analysis: tokens	Percentages MS	Percentages SS	Difference
in italics			
to come (xx)	81.58%	63.64%	- 17.94%
to come out of	42.10%	27.27%	- 14.83%
to fly (xx)	15.79%	36.36%	+ 20.57%

Table 10

Motion verbs in the owl event

(100% =the total number of motion verb tokens describing the owl event).

In describing the boy suddenly lying on his back after climbing the tree and peeping into the hole, both the younger and older pupils strongly favoured phrases headed by forms of the manner verb *to fall*, as the high percentages given in Table 11 illustrate.² The only other verb that was found in the description of this event was *to jump*, accompanied by *on* and *to the floor*. The total number of motion verb tokens counted in the representation of the boy's fall event was 114 for the MS extracts and 28 for the SS excerpts.

Extract analysis	Percentages MS	Percentages SS	Difference
to fall (xx)	99.11%	96.43%	- 2.68%

Table 11

Motion verbs in the boy event (100% = the total number of motion verb tokens describing the boy event).

Among the adverbs and prepositions collocating with motion verbs in the boy event, the most popular among the MS learners was *down*, mostly used as an adverb, whereas it was the preposition *from* that prevailed in the SS extracts, as can be observed in Table 12. Similar results are reported by studies on the acquisition of English as an L1, where verb + particle combinations seem to be acquired earlier than verb + preposition phrases (Berman, Slobin 1994; Clark 1993). At both school levels, *on* came third in the list of the best-represented particles accompanying the motion verbs used to describe the boy's event.

² The verb *fall* has been included by Cardini (2008) among the "low manner content motion verbs, that is, motion verbs showing an almost negligible load of manner of whichever kind this may be" (p. 548).

Extract analysis	Percentages MS	Percentages SS	Difference
down	33.63%	42.86%	+ 9.29%
from	22.12%	50%	+ 27.88%
on	15.04%	10.71%	-4.33%

Table 12

Adverbs and prepositions accompanying motion verbs in the boy event (100% =the total number of satellite tokens accompanying motion verbs in the boy event).

The subsequent analysis of the MS and SS participants' explicit references to the source and destination of the boy's fall showed a prevalence of the former over the latter at both school levels. However, the percentages presented in Table 13 indicate that mentioning the source becomes increasingly important at the higher level, while the destination seems to be worth of explicit mention especially at the lower level. Whereas in his typological analysis of motion expressions Slobin (2004) detected a tendency among satellitelanguage writers to mention more than one ground element per verb, maximally one was mentioned in the boy event of the extracts examined. It might however be argued that the destination of someone's fall from a tree can be easily inferred without the need to specify it.

Extract analysis	Percentages MS	Percentages SS	Difference
Explicit source	48.67%	67.86%	+ 19.19%
Explicit destination	23.01%	17.86%	- 5.15%

Table 13

Source vs. destination (100% =the total number of motion verb tokens describing the boy event)

In order to describe the motion undertaken by the bees in the aforementioned picture, 86 and 15 motion verb tokens were used respectively at the lower and higher school level. Different preferences emerged from the learners' descriptions of the bees moving in a swarm towards the dog. While in the lower-level texts it was the head verb fly, followed by an adverb or a preposition, that exhibited the highest number of occurrences, in the higher-level texts the verb with the highest percentage of the total number of motion verb tokens was *follow*, as can be observed in Table 14. The latter therefore confirms Berman and Slobin's (1994) statement that older children "rely less on polysemous verbs and idiomatic verb + particle combinations – e.g., *chase* instead of *run away*" (p. 153).

Moreover, in the bee event in particular, a rather strong tendency among SS pupils was noticed to combine the verbs *to start* and *to begin* with a non-finite form of a verb, e.g. *to fly* and *to follow*, whereas head verbs are hardly ever preceded by *start* or *begin* at the MS level.

Finally, Table 14 shows that, especially among the younger learners, the depicted bees were described not only as moving by using their wings but also by employing their legs as if running and going.

inauaaai

Extract analysis: tokens	Percentages MS	Percentages SS	Difference
in italics			
(xx) to fly (xx)	40.70%	20%	- 20.70%
(xx) to follow (xx)	30.23%	53.33%	+ 23.10%
(xx) to run (xx)	10.46%	6.67%	- 3.79%
to go (xx)	9.30%	/	-9.30%

Table 14Motion verbs in the bee event(100% = the total number of motion verb tokens describing the bee event).

5.5. Research question five

L1 and L2 influence was detected in the learners' references to the figures and in the use of motion verbs and their satellites. L2 influences were noticed in the MS and SS learners' reference to the bees and owl. As pointed out in an earlier paragraph, in some cases learners resorted to the exact Italian and German terms to fill their gaps, while in other cases they were found to coin words on the basis of an Italian form. According to Pfenninger (2014), L2 rather than L1 transfer takes place when the learners are vaguely aware of the divergence between the L1 and the target language "but there is nonetheless some sort of 'information deficiency' (De Angelis, Selinker 2001, p. 50) with regard to the target language form" (p. 158).

In analysing the bee event in particular, L1 influence was detected in the younger learners' employment of the head verb go in phrases like go away / behind the dog to describe the chasing event, probably transposing in this way the semantically more wide-ranging Ladin form ji 'go' to the target-language English. In the learners' L1, the English verb to follow is in fact rendered as ji do (/3i'ds:/) 'to go after'. It therefore seems that the Ladin verb was overgeneralised by a number of lower-proficiency learners, who probably did not have other forms at their disposal and used their L1 as an anchor, whereas higher-proficiency learners probably realised that the Ladin go-expression was not appropriate in this context and had more suitable ones available. Furthermore, it might be supposed that the analytic nature of the learners' L1 fosters the use of analytic forms in English.

In examining the manner of motion verb *to fly* and the bee event in general, the researcher's attention was caught by a non-target like use of *behind* in the lower-level texts. An inconsistent use of *after* as well as *behind* was subsequently noticed at both levels in the bee and also in other events, and was attributed to a lack of equivalence between the learners' other languages and English. With regard to the prepositions and adverbs collocating with the verb *to fly* in the bee event, wide variety was found in the MS extracts, where the 13 particles listed in Table 15 accompanied the manner of motion verb. Among the particles following the verb *to fly*, the one that turned out to be the most popular among the MS pupils was *behind*, which represented 29.03% of the particle tokens occurring with *to fly* in the bee event examined. Next came the prepositions *to*, with 19.35%, and *around*, with 9.68%, while the other particles occurred less frequently.

to fly	behind,
	to,
	around,
	after, into, on,
	to, around, after, into, on, ahead, at, near, next to, of, over, up

Table 15Particles accompanying to fly in the bee event in popularity order.

139

- ingue e
Loinguaggi

A further analysis of *behind* in the extracts going along with the picture examined here showed the presence of this preposition in the MS excerpts, where it appeared twenty times, whereas it turned out to be absent from the SS extracts. As Table 16 illustrates, in the former *behind* accompanies not only the verb *to fly* but also *to run, to go* and *to follow*.

bees	dog
to fly behind the dog	to begin to run behind the trees
to fly behind of the dog	
to run behind the dog	
to begin to run behind the dog	
to go behind the dog	
to follow behind the dog	



English *behind* normally denotes position, destination or passage. Besides, ambiguity can sometimes arise, as in the examples from the MS extracts given underneath. The first clause could suggest that the dog is staying behind the trees, where it might be running back and forth. On the other hand, the back of the trees might be seen as a destination towards which the dog might be heading. In the extracts analysed, however, the most typical use of *behind* is the one illustrated below in the clauses introduced by the conjunction *and*, where *to run* and *to fly behind* appear to paraphrase the verb *to chase*, mostly unknown or unexploited at both school levels.

- (1) The dog begin to run *behind* the trees and the beens run *behind* the dog. (MS)
- (2) ... and the bees fly *behind* the dog. (MS)

The use of the more appropriate *after* to accompany verbs denoting the act of chasing, following or attempting to get someone or something does not appear to be very familiar to the learners. The nine instances detected in the MS and SS extracts considered are given below.

- (3) ... because lots of bees were *after* him. (MS)
- (4) The vesps run *after* the dog. (MS)
- (5) Suddenly, lots of bees went *after* the dog... (MS)
- (6) ... but the bees fly *after* the dog. (MS)
- (7) ... thousand angry flies were flying *after* the dog... (MS)
- (8) There camed out 1000ds of bees that went *after* the dog... (MS)
- (9) The insects began to run *after* the dog. (SS)
- (10) The honey-maker animals flew *after* the dog. (SS)
- (11) The bees flew *after* the dog... (SS)

Examining story sections going along with other pictures, the non-target like use of the two English terms by a number of learners was confirmed. Examples of *after* employed in the sense of *behind* to express position were noticed at both the lower and higher school level. The non-target like use of *after* can be observed below.

- (12) The boy and the dog look *after* a tree. (MS)
- (13) They look *after* the three and there was 2 frogs. (MS)
- (14) *After* the three he saw his frog with his wife. (MS)
- (15) After a three they saw the frog with his girlfriend! (MS)
- (16) But after the rock was hidden a wild animal... (SS)



- (17) After a tree the boy saw his frog with one other frog. (SS)
- (18) They hid *after* a tree stump... (SS)

Hence, *behind* and *after* seem to be difficult to differentiate for some learners, which might be due to a different or lacking distinction in their other languages. Ladin *do* (/do:/) translates both *behind* and *after*, as the examples in Table 17 illustrate. Similarly, although English *after* with a temporal meaning is normally rendered in Italian as *dopo*, in other contexts *after* and *behind* can both be translated with *dietro*.

English	Ladin	Italian	
to be <i>behind</i> something or	ester (ia) do valch o valgügn	essere dietro a qualcosa o	
someone		qualcuno	
to run after something or	ti saltè do a valch o valgügn	correre dietro a qualcosa o	
someone		qualcuno	
after lunch	do marëna	dopo pranzo	

Table 17Behind vs. after in English, Ladin and Italian.

While the German preposition *hinter* is most often translated into English with *behind*, German *hinterher* and *nach* can both be equivalents of *after*, as illustrated in Table 18.

German	English
jemandem hinterher sein	to be <i>after</i> someone
jemandem oder etwas hinterherlaufen	to run after someone or something
nach wenigen Minuten	after a few minutes

Table 18German hinterher and nach vs. after.

Hence, there seems to be no one-to-one relationship between the learners' languages in expressing notions articulated in English by the terms *behind* and *after*, so that different frames of mind appear to be required when communicating the concepts in different languages. The Ladin form *do* does not require speakers to attend to the differences expressed by English *behind* and *after*. It is argued by Slobin (1996b) that "once our minds have been trained in taking particular points of view for the purposes of speaking, it is exceptionally difficult for us to be retrained" (p. 91). It might consequently be assumed that learners who acquire multiple languages, and who therefore do restructure their points of view, become mentally more flexible, a potential cognitive advantage multilingualism might lead to (Bialystok *et al.* 2012; Costa, Sebastián-Gallés 2014; Della Rosa *et al.* 2013; Paradis 2004).

Although from a formal point of view interlingual transfer can of course be a source of error, with beginner learners being normally particularly vulnerable to interference and overgeneralisation, positive transfer normally also takes place (Herdina, Jessner 2002). A fundamental learning strategy might namely be the ability to use "previously acquired linguistic and/or conceptual knowledge to facilitate a new language learning task" (Brown 2000, p. 126). Writing in a fourth language might therefore not be identical to writing in a second or third language, as links could be established to as many as three other languages, as also pointed out by Pfenninger (2014) in her analysis of the use of periphrastic *do* by multilingual learners.

jingue e

5.6. Research question six

Overall, the average number of motion verb tokens per participant was found to be higher at the SS than at the MS level, as can be viewed in Table 19. Similarly, Alcaraz Mármol (2013) found that the higher-level oral descriptions she examined included more verbs of movement than the lower-level ones. However, it was supposed that the higher number of motion verbs in the SS than in the MS extracts described in this article resulted from the higher number of words in the former than in the latter, which was perhaps partly due to the slightly longer time the older pupils had at their disposal to complete the narrative task, as was explained in the section illustrating the test characteristics. It was therefore the percentages displayed in Table 20 that were regarded as the most interesting, as they seem to prove the tendency to concentrate more on spatial trajectories at lower than at higher proficiency levels. While the motion verb tokens accounted for 10.18% of the total number of words in the MS extracts, they corresponded to no more than 7.40% in the SS extracts, confirming the assumption that lower-proficiency learners "tend to describe what is most salient as new information in the pictures, which is typically the movement itself" (Aksu-Koç 1994, p. 352).

Extract analysis	MS	SS	Difference
Average number of motion verb tokens per participant	1.36	1.84	+ 0.48

Table 19
Motion verb tokens per participant

Extract analysis	Percentages MS	Percentages SS	Difference
Motion verb tokens	10.18 %	7.40%	- 2.78%

Table 20
Motion verb tokens vs. word number (100% = total number of words)

6. Further research

A subsequent study might involve pupils learning English not as a fourth but as a second or third language, so that the hypothesis that L4 learning is not the same as L2 or even L3 learning might be corroborated or refuted (De Bot, Jaensch 2013). The following question might find more detailed answers.

• Do learners studying English as a fourth language follow similar pathways as learners acquiring English as a second or third language in the acquisition of motion verbs or do they demonstrate different ones?

From a typological point of view, a more in-depth investigation might be carried out to ascertain whether Ladin, which was arguably considered a mixed language on the basis of the author's intuitions and introspections, conforms more tightly to the satellite-framed or verb-framed typology. The analysis might usefully be expanded to early Italian vernaculars, which appear to share a number of characteristic features with Ladin (Stolova 2014).

The influence of the learners' other languages on English might be worth further

exploration. With both Italian and German being learnt by the study participants, these were taken to be somewhat acquainted with both verb-framed and satellite-framed patterns. However, if Ladin was ascertained to be closer to the S-languages, mainly due to its rich system of locative adverbials, both Ladin and German might lead the participants to produce English texts particularly rich in path segments attached to the main verb. A comparison could be drawn to texts written by English language learners with verb-framed L1s or L2s and unfamiliar with German.

Finally, a further study might consist in the collection and analysis of the same narratives written in Ladin, Italian and German by learners attending the same Ladin schools considered in the analysis presented here. By comparing the motion expressions across the learners' first, second and further languages, stimulating similarities and differences might namely be identified.

7. Conclusion

It was the main aim of this paper to report on an investigation into motion events in narrative texts written by 13-14 and 17-18 year olds learning English as a fourth language. In particular, the references to the event figures and the use of motion verbs together with their satellites in the lower- and higher-grade texts were compared and commented upon.

The article started with a brief elucidation of the notion of motion event as used in the present study and with an introduction to Talmy's (1985, 1991, 2000) typology of verb-framed and satellite-framed languages. The study focus and rationale were clarified in the same introductory section. Information on the participants, their living area and languages was provided in the following paragraphs, before turning to a short explanation of the narrative task administered to the learners. The research questions around which the analysis rotated were then exposed, with a detailed presentation of the study outcomes coming next. The learners' references to the event figures or animate beings were at first focused upon, with the motion verbs and their satellites presented afterwards.

In the extracts accompanying the story picture selected for analysis, the running dog was found to be the predominant figure at both the MS and SS level, whereas the number of learners mentioning the owl appearing from the tree hole turned out to make the main difference between the extracts from the two school grades. The bird of prey, interpreted as a background figure lexically difficult for a number of learners, is namely more strongly present in the higher-proficiency texts. In referring to the bees chasing the dog as well as to the owl, the older pupils made a more extensive use of superordinates, although also the younger participants were found to skilfully paraphrase or circumscribe entities whose exact definitions they could probably not recall. Personal pronouns were found to be more frequent among the 17-18 year olds, maybe due to the younger teenagers' difficulty in conceptualising a sequence of pictures as a cohesive story.

The motion verbs *run, fly, follow* and *come* were found to prevail in the extracts from both school levels. In describing the motions undertaken by the dog, the owl and the boy, both age groups opted mainly for verb phrases revolving around the heads *run, come* and *fall*, with the latter accompanied more frequently by the adverb *down* in the MS texts and by the preposition *from* in the ones written at the SS. In the bee event, the 17-18 year olds favoured the verb *follow*, whereas the 13-14 year olds preferred verb phrases with *fly*, often accompanied by *behind*. The non-target like use of *behind* and *after* at the two proficiency levels was explained by a lack of similarity in this respect between the participants' other languages and English, with the need for the learners' kind of thinking



to be reshaped in formulating English utterances containing the two satellites, hence drawing on Slobin's (1996b) thinking-for-speaking hypothesis. Similarly, although the more extensive use of the motion verb *to go* by low-proficiency learners was also pointed out, a number of verb-particle combinations with *go* were attributed to the semantically more wide-ranging equivalent form in Ladin, whose analytic nature was also hypothesised to foster the use of analytic forms in English. Finally, the tendency of the younger teenagers to concentrate on spatial trajectories more than the 17-18 year olds was emphasised.

Motion events in very young learners' L1 acquisition appear to be widely researched, adopting for instance a cognitive or a typological perspective (Berman, Slobin 1994; Strömqvist, Verhoeven 2004). However, there seems to be a dearth of studies on motion events in texts composed by teenagers learning languages beyond their chronologically second one (Alcaraz Mármol 2013). Despite certain limitations that turned out to be unavoidable at this stage of the investigation, e.g. the concentration on one selected story frame or the insufficient in-depth analysis of a number of aspects raised, the enquiry into the high number of L4 narratives might therefore be argued to provide a good amount of thought-provoking insight and to lay the basis for possible future investigations, some of which were put forward in the last section and which might lead to more definite answers regarding motion event constructions in multilingual learners' texts. Results might subsequently have pedagogical implications for L4 language classes, where raising cross-linguistic awareness in both teachers and learners might be beneficial for the learning process (Irsara 2012, 2013). As emphasised by Ziegler (2013), teachers should become increasingly aware of students' plurilingual realities and adopt languagetransversal perspectives, since fluent multilinguals seem to show some interaction between the different languages at all times (Bialystok et al. 2012; Pallotti, Rosi 2011).

Acknowledgements: The analysis presented in this article grew out of a large-scale testing project conducted in close collaboration with a number of Ladin schools. Many thanks therefore go to the directors, teachers, pupils and other project collaborators providing the data that made this paper possible. Much gratitude is also extended to the Departments of Ladin Culture, Education, Innovation and Counselling, the evaluation centre of the Ladin schools and the Language Study Unit of the Free University of Bozen-Bolzano for competently leading the project. In particular, the name of Prof. Rita Franceschini should be highlighted for her expert supervision. Finally, thankful acknowledgments are due to the members of the Language Study Unit who have commented on a draft version of this paper. Shortcomings the article might still contain are of course to be attributed to the author's responsibility.

inguagai

References

- Aitchison J. 2003, Words in the mind: An introduction to the mental lexicon (3rd ed.), Blackwell, Oxford.
- Aksu-Koç A.A. 1994, Development of linguistic forms: Turkish, in Berman R.A. and Slobin D.I., Relating events in narrative: A crosslinguistic developmental study, Lawrence Erlbaum, Hillsdale, NJ, pp. 329-386.
- Alcaraz Mármol G. 2013, Learning verbs of movement in a foreign language: Spanish students of English in a formal context, in "Revista de Lingüística y Lenguas Aplicadas" 8, pp. 154-160.
- Beavers J. 2008, On the nature of goal marking and delimitation: Evidence from Japanese, in "Journal of Linguistics" 44[2], pp. 283-316.
- Berman R.A. and Slobin D.I. 1994, *Relating events in narrative: A crosslinguistic developmental study*, Lawrence Erlbaum, Hillsdale, NJ.
- Bialystok E. 1990, Communication strategies: A psychological analysis of second-language use, Basil Blackwell, Oxford.
- Bialystok E., Craik F.I.M. and Luk G. 2012, *Bilingualism: Consequences for mind and brain*, in "Trends in Cognitive Sciences" 16[4], pp. 240-250.
- Brown H.D. 2000, Principles of language learning and teaching (4th ed.), Longman, New York.
- Cardini F.E. 2008, *Manner of motion saliency: An inquiry into Italian*, in "Cognitive Linguistics" 19[4], pp. 533-569.
- Chen L. and Pan N. 2009, *Development of English referring expressions in the narratives of Chinese-English bilinguals*, in "Bilingualism: Language and Cognition" 12[4], pp. 429-445.
- Clark E.V. 1993, The lexicon in acquisition, Cambridge University Press, Cambridge.
- Costa A. and Sebastián-Gallés N. 2014, *How does the bilingual experience sculpt the brain?* In "Nature Reviews: Neuroscience" 15 [5], pp. 336-345.
- Crossley S.A., Subtirelu N. and Salsbury T. 2013, Frequency effects or context effects in second language word learning: What predicts early lexical production? In "Studies in Second Language Acquisition" 35, pp. 727-755.
- De Angelis G. and Selinker L. 2001, Interlanguage transfer and competing linguistic systems in the multilingual mind, in Cenoz J., Hufeisen B. and Jessner U. (eds.), Cross-linguistic influence in third language acquisition: Psycholinguistic perspectives, Multilingual Matters, Clevedon, pp. 42-58.
- De Bot K. and Jaensch C. 2013, *What is special about L3 processing?* In "Bilingualism: Language and Cognition" available on CJO, pp. 1-15.
- Della Rosa P.A., Videsott G., Borsa V.M., Canini M., Weekes B.S., Franceschini R. and Abutalebi J. 2013, *A neural interactive location for multilingual talent*, in "Cortex" 49[2], pp. 605-608.
- European Commission 2013, European Survey on Language Competences and European benchmark. http://ec.europa.eu/languages/languages-of-europe/language-competence_en.htm (9.09.2013).
- Feiz P. 2011, Traveling through space in Persian and English: A comparative analysis of motion events in elicited narratives, in "Language Sciences" 33[3], pp. 401-416.
- Fisher R. 2005, Teaching children to learn (2nd ed.), Nelson Thornes, Cheltenham.
- Franceschini R. 2011, *Multilingualism and multicompetence: A conceptual view*, in "The Modern Language Journal" 95[3], pp. 344-355.
- Franceschini R. and Irsara M. 2013, Didaktische Hinweise, in Provincial Service and Committee for the Evaluation of the Ladin Schools, & Language Study Unit of the Free University of Bozen-Bolzano (eds.), Resultac dl'analisa linguistica 5a tlasses scoles autes: Ergebnisse der Sprachkompetenz-Studie 5. Oberschulklassen: Risultati dell'analisi linguistica 5e classi scuole secondarie di secondo grado, Athesia, Bolzano-Bozen, pp. 34-41.
- Griessler M. 2001, *The effects of third language learning on second language proficiency: An Austrian example*, in "International Journal of Bilingual Education and Bilingualism" 4[1], pp. 50-60.
- Grosjean F. 2010, Bilingual: Life and reality. Harvard University Press, Cambridge, MA.
- Hendriks H. 2002, Using nouns for reference maintenance: A seeming contradiction in L2 discourse, in Giacalone Ramat A. (ed.), Typology and second language acquisition, Walter de Gruyter, Berlin, pp. 291-326.
- Herdina P. and Jessner U. 2002, A dynamic model of multilingualism: Perspectives of change in psycholinguistics, Multilingual Matters, Clevedon.
- Hickman M. and Hendriks H. 1999, Cohesion and anaphora in children's narratives: a comparison of English, French, German, and Mandarin Chinese, in "Journal of Child Language" 26[2], pp. 419-452.



- Hickman M. 2004, Coherence, cohesion and context: Some comparative perspectives in narrative development, in Strömqvist S. and Verhoeven L. (eds.), Relating events in narrative: Typological and contextual perspectives (Vol. 2), Lawrence Erlbaum Associates, Mahwah, NJ, pp. 281-306.
- Irsara M. 2012, Comparative constructions in English, Italian and Ladin: Cross-linguistic observations and didactic considerations, in "Quaderni Patavini di Linguistica 2010" 26, pp. 39-82.
- Irsara M. 2013, Awareness across languages: From English as and like to Ladin, in Kofler D., Peterlini H.K. and Videsott G. (eds.), Brückenbau(e)r: Festschrift für / Miscellanea per / Publicaziun en onour de / Article collection in honour of Siegfried Baur, Edizioni alphabeta Verlag, Meran, pp. 288-294.
- Maguire M.J., Hirsh-Pasek K. and Golinkoff R.M. 2006, *A unified theory of word learning: Putting verb* acquisition in context, in Hirsh-Pasek K. and Golinkoff R.M. (eds.), *Action meets word: How* children learn verbs, Oxford University Press, Oxford, pp. 364-391.
- Mayer M. 1969, Frog, where are you? Pied Piper, New York.
- Pallotti G. and Rosi F. 2011, Osservare l'interlingua a scuola, in "Educazione Interculturale" 9[3], pp. 339-354.
- Paradis M. 2004, A Neurolinguistic theory of bilingualism, Benjamins, Amsterdam.
- Pfenninger S. E. 2014, *Quadrilingual advantages: do-support in bilingual vs. multilingual learners*, in "International Journal of Multilingualism" 11[2], pp. 143-163.
- Pulverman R., Hirsh-Pasek K., Golinkoff R.M., Pruden S. and Salkind S.J. 2006, Conceptual foundations for verb learning: Celebrating the event, in Hirsh-Pasek K. and Golinkoff R.M. (eds.), Action meets word: How children learn verbs, Oxford University Press, Oxford, pp. 134-159.
- Shorrocks D. 1991, The development of children's thinking and understanding, in Brumfit C., Moon J. and Tongue R. (eds.), Teaching English to children: From practice to principle, Collins ELT, London, pp. 260-274.
- Slobin D.I. 1996a, Two ways to travel: Verbs of motion in English and Spanish, in Shibatani M. and Thompson S.A. (eds.), Grammatical constructions: Their form and meaning, Clarendon Press, Oxford, pp. 195-220.
- Slobin D.I. 1996b, From "thought and language" to "thinking for speaking", in Gumperz J.J. and Levinson S.C. (eds.), Rethinking linguistic relativity, Cambridge University Press, Cambridge, pp. 70-96.
- Slobin D.I. 2004, *The many ways to search for a frog: Linguistic typology and the expression of motion events*, in Strömqvist S. and Verhoeven L. (eds.), *Relating events in narrative: Typological and contextual perspectives* (Vol. 2), Lawrence Erlbaum Associates, Mahwah, NJ, pp. 219-257.
- Stolova N.I. 2014, Cognitive linguistics and lexical change: Motion verbs from Latin to Romance, Benjamins, Amsterdam.
- Strömqvist S. and Verhoeven L. 2004, (eds.), *Relating events in narrative: Typological and contextual perspectives* (Vol. 2), Lawrence Erlbaum Associates, Mahwah, NJ.
- Talmy L. 1985, *Lexicalization patterns: Semantic structure in lexical forms*, in Shopen T. (ed.), *Language Typology and syntactic description*, Cambridge University Press, Cambridge, pp. 57-149.
- Talmy L. 1991, Path to realization: A typology of event conflation, in Sutton L.A., Johnson C. and Shields R. (eds.), Proceedings of the 17th Annual Meeting of the Berkeley Linguistics Society, Berkeley Linguistics Society, Berkeley, CA, pp. 480-519.
- Talmy L. 2000, Toward a cognitive semantics (Vol. 2), MIT Press, Cambridge, MA.
- Talmy L. 2007, Lexical typologies, in Shopen T. (ed.), Language typology and syntactic description: Grammatical categories and the lexicon (Vol. 3) (2nd ed.), Cambridge University Press, Cambridge, pp. 66-168.
- Ziegler G. 2013, Multilingualism and the language education landscape: challenges for teacher training in *Europe*, in "Multilingual Education" 3[1], pp. 1-23.

inquaqai