Irsara, Martina

# Encoding climbing scenes in English : frequency and patterns in descriptions written by speakers of diverse languages 

Brno studies in English. 2022, vol. 48, iss. 2, pp. 5-24

ISSN 0524-6881 (print); ISSN 1805-0867 (online)

Stable URL (DOI): https://doi.org/10.5817/BSE2022-2-1
Stable URL (handle): https://hdl.handle.net/11222.digilib/digilib. 77875
License: CC BY-NC-ND 4.0 International
Access Date: 16. 02. 2024
Version: 20230331

Terms of use: Digital Library of the Faculty of Arts, Masaryk University provides access to digitized documents strictly for personal use, unless otherwise specified.

Digital Library of the Faculty of Arts,
Masaryk University
digilib.phil.muni.cz

# Encoding Climbing Scenes <br> in English: Frequency and Patterns in Descriptions <br> Written by Speakers of Diverse Languages 

Brno Studies in English

Volume 48, No. 2, 2022
ISSN 0524-6881 | e-ISSN 1805-0867
https://doi.org/10.5817/BSE2022-2-1

MARTINA IRSARA


#### Abstract

The English verb climb has a greater range of syntactic formulations than its Ladin and Italian counterparts, the majority of which do not take direct objects and most commonly express effortful uphill movement; however, German appears typologically closer to English. As a result, the question arises as to whether English learners with diverse first languages make different lexical and syntactic choices when describing climbing scenes in the target language. Because of diverse cross-linguistic impacts, it is expected that German speakers will employ the English verb climb in more contexts than Ladin and Italian speakers. Trentino-South Tyrolean speakers of Ladin ( $n=13$ ), Italian ( $n=40$ ), and German ( $n=40$ ) describe 12 artworks depicting a figure rising in various surroundings and directions, to confirm this fact. The preceding finding is corroborated by an online video-description task completed by speakers of Ladin ( $n=57$ ), Italian ( $n=45$ ), and German ( $n=45$ ). Despite difficulties distinguishing across multilingual groups of learners, this study reveals disparities amongst student groups with similar multilingual backgrounds. Contrastive assessment of multilingual learners' descriptions of human climbing scenarios indicates tendencies that are likely attributable to cross-linguistic variance.


## Key words

Motion events; satellite-framed languages; verb-framed languages; manner; path

## 1. Introduction

The research issue under consideration in this article is motion event encoding. Talmy $(1985,2000)$ defines motion events as occurrences involving both translational and confined motion, in which a figure can move from one precise location to another or keep moving while remaining roughly in the same basic area. A person can cycle to work and then run into the office, or cycle on an exercise bike and then run on a treadmill in a gym. Zlatev et al. (2010: 394) use the term translocative motion to refer to "the continuous change of an object's average position according to a spatial frame of reference," which is like Talmy's (2000)
translational motion. The universal notion of motion is articulated using a variety of linguistic resources across languages, resulting in typological groupings based on these qualities. In the description of human climbing scenarios, which is the subject of this article, different languages offer varied lexicalisation alternatives. ${ }^{1}$

A figure can follow a path from a source to a destination, possibly passing landmarks along the way, such as from there [...] through the passes to the south (BNC). Apart from moving in different directions, a figure can also move in specific ways, which correspond to factors such as the motor pattern of the figure's movement, rate, and effort (Özçalişkan - Slobin 2000). An individual can, for example, climb a tree, in which case the stem of the English verb climb indicates upward direction and includes information about how the figure physically moves; namely, with difficulty or effort, in this case using hands and feet, so that direction and manner are expressed together. ${ }^{2}$ When it collocates with locative prepositions and adverbs that imply various directions, such as climbing down a mountain or climbing through a hole in a hedge, the English verb climb appears to lexicalise just manner of movement and not direction (Levin - Rappaport Hovav 2011). ${ }^{3}$ The English climb occurs in a broader range of semantic and grammatical contexts than analogous verbs in numerous other languages, which lexicalise both manner and upward direction but are more limited in scope.

As a result, the question arises to what extent learners of English from various first languages (L1) employ the English climb to describe movement scenarios that only partially contain similar verbs in their L1s. This research intends to determine the degree of similarity in descriptions provided by three groups of English students with various linguistic backgrounds: 1) Ladin, Italian, German, English, 2) Italian, German, English, and 3) German, Italian, English. We want to know if one group of students would stand out from the rest in their task-based assignments by using the English verb climb, and if so, how any differences in their selections are rationalised. By analysing English data obtained from learners with similar multilingual backgrounds, including a minority language that is under-researched in this domain, the study hopes to contribute to ongoing research on the expression of motion in languages. It has been demonstrated that L1 patterns can endure and that adopting target-like motion expressions and structures in a foreign language is difficult and may result in fossilisation (Alghamdi et al. 2019; Slobin 1996b; Treffers-Daller - Calude 2015; Treffers-Daller - Tidball 2015).

Section 2 begins by defining typological aspects of the languages involved in expressing motion before zooming in on the English verb climb and its primary comparable verbs in the participants' other languages to put the study in context.

## 2. Background

### 2.1 Typological characteristics of English, German, Italian, and Ladin

Variation in the lexicalisation of motion events among languages has been accounted for in typological terms. Talmy (2000: 25) uses the terms lexicalisation,
incorporation, and conflation to "refer to the representation of meanings in surface forms." Languages that lexicalise the path of motion in the verbal root are characterised as verb-framed, whereas satellite-framed languages have the semantic component of path outside of the verbal root (Talmy 1985, 1991, 2000). English and German are satellite-framed languages, but standard current Italian is verbframed, with a predilection for path verbs such as enter, exit, ascend, and descend, with manner expressed as an optional adjunct outside the primary verb.

The English, German, and Italian examples in (1a), (1b), and (1c) show different typological preferences, with English and German lexicalising the dimension of manner in the main verb, but Italian describing the optional co-event of manner in an adverbial outside of the main verb, which lexicalises direction in its root and is used as a bare verb in this example. In verb-framed languages, rather than satellite-framed languages, bare verbs, which occur without extra locative addition, are preferred (Berthele 2006; Slobin 1996a).
(1) a. He ran into the house. (English)
b. Er rannte in-s Haus. (German)
he ran in-the.ACC house
'He ran into the house.'
c. Entrò (di corsa / correndo). (Italian)
entered.3sg (of run / running)
'He entered (running).'
Talmy's (1985) early clear-cut typological system of satellite-framed and verbframed languages has been challenged, re-examined, and expanded, and it remains a plausible basis for research, despite the existence of intratypological and intralinguistic variation, as well as the need to consider register and sociolinguistic features in discussions of the topic (Berthele 2004, 2006; Filipović 2013; Hijazo-Gascón - Ibarretxe-Antuñano 2013; Martínez-Vázquez 2013). The distinction has been extensively recast as a continuum along which languages fall, adopting lexical and syntactic choices that are essentially typical of verb-framed and satellite-framed languages (Filipović 2013).

Talmy (2000: 145) identifies motion constructions that are common across languages, while acknowledging the use of both verb-framed and satel-lite-framed patterns in different languages. For example, Italian typically uses path verbs with inherent directionality in their roots, as well as verb-particle constructions of the type "andare fuori/dentro/su/giú 'go out/in/up/down'". Italian phrasal verbs "convey directional meaning both with manner verbs (saltare fuori 'jump out'), generic and deictic verbs of motion (portare via 'take away,' andare dentro lit. go in/inside 'enter'), path verbs (uscire fuori lit. exit out 'exit')," according to Iacobini (2009: 7). Cordin (2011) affirms the widespread usage of locative verb-particle formations across the Romance language family, particularly in non-standard variants, although their use is more limited in standard languages, which adhere to strict prescriptive constraints. In the Romance languages, it is widely acknowledged that diatopic, diamesic, and diaphasic qualities merit consideration.

Because of its extensive use of adverbial locatives to track precise trajectories and its limited number of manner-of-motion verbs, Rhaeto-Romance Ladin spoken in the South-Tyrolean valley of Badia (Italy) is best defined as a high path and low manner-salient language within the Romance group of languages. Generic motion verbs are frequently accompanied with complicated paradigms of multidimensional adverbs in spoken Ladin, allowing speakers to convey locations and directions in connection to an egocentric and environment-centred frame of reference. In example (2), the figure's motion towards his castle is described by a semantically light verb ( $j i$ 'go'), an adjunct that describes the manner of motion (dlun saltan 'incessantly running'), a particle of direction that depicts motion away from the deictic centre on a level surface or in a straight line ( $i a$ 'thither ${ }^{\text {'4 }}$ ), and a final ground-containing phrase (so ciastel 'his castle') (Irsara 2015).
(2) Dlun saltan vá-l ia cuntra so ciastel. (Ladin, CLL) Incessantly running goes-he thither towards his castle 'He runs towards his castle.'

In Italian, verb-particle arrangements and synthetic forms frequently alternate (for example, andare su 'go up' vs. salire 'ascend'), whereas similar synthetic forms are absent in the Badia Ladin variety. In contrast to the Italian andare su 'go up', the Ladin $j \imath$ iö 'go up' does not have a synthetic equivalent. Ladin verb-particle constructions resemble complex verbs in German, to some extent, which has likely boosted the employment of these analytic constructs in northern Italy, even though German is unlikely to have initiated them, given that vulgar Latin attests verb-particle formations (Iacobini - Masini 2006; Mair 1984). ${ }^{5}$ The Austro-Italian linguist Ascoli (1873: 2) created the formula "materia romanza con ispirito tedesco" ('Romance matter with a Germanic spirit') to characterise Romance-Germanic connections in Ladin areas. Besides, Ladin speakers are proficient in both Italian and German. Since 1948, the South-Tyrolean Ladin school model has been defined by a linguistic-cultural balance between the instruction languages of Italian and German, with a commitment to preserve and develop the Ladin language and culture, to which English was added as a curricular subject in the 2000s.

### 2.2 The English verb climb and corresponding expressions in German, Italian, and Ladin

From a semantic standpoint, climb is classified as a manner-of-motion verb, and it is sometimes referred to as a neutral or ordinary verb, such as walk and $f l y$, as opposed to more expressive verbs like dash, swoop, or scramble (Cadierno - Ruiz 2006). ${ }^{6}$ Climb implies self-propelled, agentive, voluntary, self-caused, or internally caused motion and can be augmented by a number of locative adverbs and prepositions that give the verb a directional component (Filipović 2007; Goddard 2020; Kudrnáčová 2013; Stolova 2011). Berman and Slobin (1994) discovered that three- to four-year-old English-speaking toddlers connected climb with down, on, out, over, up, up in, and up on in Mayer's (1969) Frog, where are you? Older youngsters begin to use doubly detailed locative trajectories, such as he climbs back up on
the log, according to Berman and Slobin (1994: 161). This example shows a typical satellite-framed composition consisting in a sequence of locative particles, which are less common in verb-framed languages like modern standard Italian.

Climbing often entails translational motion, or a change of place, yet a figure could be climbing for a long time without reaching a specified endpoint by staying in the same fundamental location, such as on a rock face, which could be an example of what Talmy (2000: 36) dubbed "local wander". The girl is climbing, for example, can be used as a bare verb without further explication of path, beyond its intrinsic directionality. A figure climbing anything without a source, a midpoint, or a goal is classified as a translocative non-bounded motion-situation by Zlatev et al. (2010). To put it another way, climb can happen in either a minusground or a plus-ground clause. Minus-ground clauses are bare verbs or verbs with satellites showing direction of movement, whereas plus-ground clauses comprise one or more prepositional phrases encoding source and/or aim, according to Slobin (1996a).

While climb is used both transitively and with locative adverbs and prepositions that express many directions, the Italian reflexive verb arrampicarsi 'climb up' is only used intransitively and is generally associated with mountains, hills, trees, and walls.

Despite the fact that arrampicarsi, 'climb up', implies inherently directed action, it can be followed by the word su 'up'. Cordin (2011) and Iacobini (2009) use the example rampegarse su 'climb up' in Trentino dialects, to highlight the widespread use of locative phrasal verbs associated with northern dialects of Italy in which locative adverbs are frequently related to manner, path, generic, and deictic verbs of motion, resulting in pleonastic constructions. The Italian reflexive and intransitive word inerpicarsi, 'clamber up', conflates upward direction and effortful movement, similar to arrampicarsi, 'climb up'. ${ }^{7}$ The Italian verb scalare, which usually takes direct objects, also suggests an ascending direction, but scavalcare, which means 'climb over', denotes movement over something. ${ }^{8}$ The Ladin verbs arampiché, rampiné, arpizé, and rampizé all mean 'climb up' in the same way that the Italian verb arrampicarsi means 'climb up'.

Unlike the Italian arrampicarsi, 'climb up', the German klettern, 'climb', can be used transitively, governing a direct object in the accusative case. The German klettern, 'climb', can also take a variety of prefixes, prepositional phrases, and adverbs to express: upward movement (e.g. hochklettern, heraufklettern, hinaufklettern), downward movement (e.g. herabklettern, herunterklettern, hinunterklettern), movement over something (e.g. über die Mauer klettern 'climb over the wall'), and effortful movement into and out of something (e.g. hineinklettern, hinausklettern). In addition, the German steigen is frequently used as a synonym for the English climb to describe movement in a variety of directions and settings. ${ }^{9}$ CifuentesFérez and Molés-Cases (2020) explain how the head-verbs steigen and klettern are used by their German subjects to translate the English climb, as seen in (3), in which the image travels downhill using arms and legs.
(3) a. ... and climbed down the ladder into the small, dark hole... (The Wonderful Wizard of Oz )
b. ... und stieg die Leiter in das schmale, ... and climbed the ladder in the.ACC narrow, dunkle Loch hin-ab... (German)
dark hole thither-down
c. ... kletterte über die Leiter in das kleine, dunkle ... climbed over the ladder in the.ACC small, dark Loch hin-unter... (German)
hole thither-under
(Cifuentes-Férez - Molés-Cases 2020: 100)
According to our study of the corpora Italian Web 2016 (itTenTen16) and German Web 2013 (deTenTen13), the English term climb has penetrated Italian and German through the phrase free climbing. This appears to be the case in Italian to a higher extent than in German. Table 1 reveals that the Italian corpus has a greater standardised frequency of climb forms than the German corpus. It is worth noting that free climbing in English and arrampicata libera in Italian have a similar frequency in the Italian corpus.

Table 1. Search results in itTenTen16 and deTenTen13

|  | Italian Web 2016 (itTenTen16) |  | German Web 2013 (deTenTen13) |  |
| :--- | :---: | :---: | :---: | :---: |
| Query type: simple | instances | per million | instances | per million |
| climb*** | 8894 | 1.52 | 9852 | 0.5 |
| climbing | 4888 | 0.83 | 3597 | 0.18 |
| free climbing | 992 | 0.17 | 237 | 0.01 |
| arrampicata libera | 1020 | 0.17 | $l$ | $/$ |
| freiklettern | $l$ | $l$ | 687 | 0.03 |
| freie(x) klettern | $l$ | $l$ | 123 | 0.01 |

## 3. Current study

### 3.1 Focus of the study and hypotheses

The purpose of the research reported in this article is to determine the frequency of occurrence and similarities in the usage of the English verb climb among Tren-tino-South Tyrolean learner groups who speak Ladin, Italian, and German as their first and second languages. The so-called 'German' speakers speak South-Tyrolean Bavarian dialects at home rather than standard German, which, however, they all learn from early childhood. For ease of reference, the term 'German group' is therefore used in this article in a simplistic way to include speakers of South-Tyrolean variants of Southern Bavarian.

Different results were expected in the Italian and German groups, given that German and English use similar lexicalisation patterns for motion and climbing respectively, whereas Italian belongs to a different typological group, with arrampicarsi, 'to climb up', being less common than climb in English. More specifically, the Italian students were predicted to return fewer climb-instances than the German students. It was anticipated that for Italian speakers, fewer stimulus situations would trigger mental imagery of climbing than for German-speaking English learners. In line with the typological trend of Italian, it was also projected that Italian speakers would use climb as a bare verb more frequently than the German group. Granted the Ladin speakers' high level of competence in both Italian and German, which are both spoken in their surroundings with equal attention given at school, and the typological similarities that Ladin shares with both Italian and German, the results produced by the Ladin participants were expected to fall mostly between the Italian and German groups. Moreover, because of the subjects' shared linguistic backgrounds, a degree of similarity between all the groups was expected.

Finally, by comparing picture and video description tasks, the study hopes to show the results are task-directed. It is envisioned that video stimuli, rather than static drawings, will emphasise the manner component of motion by causing all learner groups to utilise the verb climb more frequently.

### 3.2 Study participants and procedure

Three data collection sessions with several English learners from the Trenti-no-South Tyrol region of northern Italy were arranged. While the initial data collection was part of a larger project with a different goal in mind, the following were specifically designed to encourage the use of the English word climb. The studies aim to assess whether and to what extent Ladin, Italian, and German groups of students will use climb, as well as whether inter-group differences are substantial, as mentioned in Section 3.1 above.

### 3.2.1 The frog-leaves-jar scene: Participants and procedure

Table 2 reveals the initial round of data collection included 41 Ladin speakers, 21 Italian speakers, and 33 German speakers. The Italian participants were university students, as were half of the German speakers. The remaining half of the German speakers were in their senior year at high school. All participants knew some Italian and German, with Ladins having a higher level of German proficiency than Italians. Relative to the Common European Framework of Reference for Languages, the participants' English levels were evaluated to be between B1 and B2.

Table 2. Participants who described the frog-leaves-jar scene

| Number of participants | L1 | Education | English level |
| :---: | :--- | :--- | :--- |
| 41 | Ladin | Upper secondary school | B1-B2 |
| 21 | Italian | University | B1-B2 |
| 33 | German | University / Upper secondary <br> school | B1-B2 |

A shortened version of Mayer's (1969) Frog, Where Are You? elicited narrative texts from the three groups of participants. The focus of this article's examination is on the first few paragraphs of the narrative texts to look at how the subjects use verbs to finish the beginning they were given, verbalising the narrative scene represented in Figure 1 of the protagonist's pet frog fleeing from confinement.

Figure 1. The frog's 'journey from the jar' (Mayer, 1969)


There was once a boy who had a dog and a pet frog. He kept the frog in a large jar in his bedroom. One night, while he and his dog were sleeping, ...

### 3.2.2 Drawing-description task: Participants and procedure

The second set of data came from 13 Ladin speakers, 40 Italian speakers, and 40 German speakers, all of whom attended university. As seen in Table 3, English was regarded as a fourth language by all Ladin speakers, a second language by most Italian speakers, and a third language by German speakers.

Table 3. Drawing-description task: Number of participants and English as an L2/L3/L4

| Number of participants | L1 | English L2/L3/L4 |
| :---: | :--- | :--- |
| 13 | Ladin | L4 $(\mathrm{n}=13)$ |
| 40 | Italian | L2 $(\mathrm{n}=27), \mathrm{L} 3(\mathrm{n}=12), \mathrm{L} 4(\mathrm{n}=1)$ |
| 40 | German | L2 $(\mathrm{n}=1), \mathrm{L} 3(\mathrm{n}=39)$ |

According to the participants' reports and as shown in Table 4, the three groups levels of English ranged from B1 to B2. Given that all participants had had

English classes at school for ten years and that undergraduates must be certified at B2 level or above during their university studies, which some participants had not done yet, missing information can reasonably be interpreted as ranging between B1 and B2.

Table 4. Level of English in the drawing-description task

| Levels | Ladin speakers (13) | Italian speakers (40) | German speakers (40) |
| :--- | :---: | :---: | :---: |
| B1 | $15 \%$ | $\mathbf{1 7 . 5 \%}$ | $5 \%$ |
| B1-B2 | - | $2.5 \%$ | - |
| B2 | $38 \%$ | $65 \%$ | $55 \%$ |
| B2-C1 | - | $5 \%$ | - |
| C1 | - | $5 \%$ | $2.5 \%$ |
| C1-C2 | - | - | - |
| C2 | - | - | - |
| Not stated | $46 \%$ | $5 \%$ | $37.5 \%$ |

These three sets of participants described the twelve drawings in Figure 2 (overleaf), which portray a human travelling in various directions on several terrains. All the scenes might be described using the English verb climb. ${ }^{10}$

### 3.3.3 Video-description task: Participants and procedure

The third data set was acquired from 57 Ladin speakers at upper secondary school (average age 19), 45 Italian-speaking undergraduates (average age 23), and 45 Ger-man-speaking undergraduates (age average 24), as shown in Table 5. English was an L4 for most Ladin speakers, an L2 for most Italian speakers, and an L3 for practically all German speakers, just as it was in the drawing-description task. ${ }^{11}$

Table 5. Video-description task: Number of participants and English as an L2/L3/L4

| Number of participants | L1 | Age average | English L2/L3 |
| :---: | :--- | :---: | :---: |
| 57 | Ladin | 19 | L3 $(\mathrm{n}=21), \mathrm{L4}(\mathrm{n}=35)$, other $(\mathrm{n}=1)$ |
| 45 | Italian | 23 | L2 $(\mathrm{n}=28), \mathrm{L3}(\mathrm{n}=16), \mathrm{L4}(\mathrm{n}=1)$ |
| 45 | German | 24 | L2 $(\mathrm{n}=1), \mathrm{L3}(\mathrm{n}=43), \mathrm{L} 4(\mathrm{n}=1)$ |

As shown in Table 6, the Italian and German groups had a level of English competence ranging from B2 to C1, which was somewhat greater than the Ladin group's competence and higher than the groups' reported competence in the drawing-description task.

Figure 2. Drawings 1-12


Table 6. Level of English in the video-description task

| Levels | Ladin speakers (57) | Italian speakers (45) | German speakers (45) |
| :--- | :---: | :---: | :---: |
| B1 | $\mathbf{1 9 \%}$ | $7 \%$ | $7 \%$ |
| B1-B2 | $2 \%$ | - | - |
| B2 | $65 \%$ | $\mathbf{6 2 \%}$ | $\mathbf{7 1 \%}$ |
| B2-C1 | $3 \%$ | $2 \%$ | - |
| C1 | $9 \%$ | $\mathbf{2 7 \%}$ | $\mathbf{2 2 \%}$ |
| C1-C2 | $2 \%$ | - | - |
| C2 | - | $2 \%$ | - |

Unlike the previous groups, these 147 participants described twelve brief video clips of a girl climbing in various directions and situations, which corresponded to the drawings described by the other groups. The drawing-description task was completed on paper and on location, whereas the video-description work was conducted online using Google Forms.

## 4. Results

Using Mayer's (1969) Frog, Where Are You?, an examination of student narratives of the frog's voyage from the jar reveals that Italian-speaking English learners might be more reluctant to utilise climb in certain situations than Ladin and German speakers. Table 7 demonstrates that the Italian group preferred the verbs jump, get, and go, while no Italian speakers used the term climb. Jump, escape, and climb were chosen by the Ladin and German groups, which accounted for 13 percent and 18 percent of the verb phrases in the two groups, respectively. ${ }^{12}$ The Italian and German groups show substantial disparities in how they use climb for this task.

Table 7. Verb-phrases in the frog-leaves-jar scene in the Ladin, Italian, and German groups ( $100 \%$ = total number of verb-phrases)

| Frog + Verb-Phrase + <br> Jar-Noun-Phrase | Ladin <br> speakers (41) | Italian <br> speakers (21) | German <br> speakers (33) |
| :--- | :---: | :---: | :---: |
| jump out of/out/from/outside | $24 \%$ | $33 \%$ | $36 \%$ |
| escape from/out of | $34 \%$ | - | $21 \%$ |
| go out of/from | $7 \%$ | $24 \%$ | $9 \%$ |
| climb out of/from | $\mathbf{1 3 \%}$ | - | $\mathbf{1 8 \%}$ |
| get out of/from | - | $29 \%$ | - |
| come out of/from | $10 \%$ | $5 \%$ | $3 \%$ |
| leave | $5 \%$ | - | $6 \%$ |


| Frog + Verb-Phrase + <br> Jar-Noun-Phrase | Ladin <br> speakers (41) | Italian <br> speakers (21) | German <br> speakers (33) |
| :--- | :---: | :---: | :---: |
| run outside | - | $5 \%$ | - |
| open | - | $5 \%$ | - |
| walk out of | - | - | $3 \%$ |
| fly by the open top of | - | - | $3 \%$ |
| sneak out of | $2 \%$ | - | - |
| slip out of | $2 \%$ | - | - |
| drop out from | $2 \%$ | - | - |

In the drawing-description task, which provides a larger amount of data, the results gained from this initial and somewhat limited collection of data are confirmed. Table 8 shows that climb appears in 43 percent of the Ladin group's descriptions, 31 percent of the Italian group's descriptions, and 58 percent of the German group's descriptions, confirming the Italians' tendency to use climb less frequently than Ladin and German speakers. The most significant difference, as in the description of the frog-leaves-jar scene, is between the Italian and German groups of participants.

Table 8. The most frequent verbs in the drawing-description task ( $100 \%$ = total number of descriptions)

| Verbs | 13 Ladin speakers <br> (156 descriptions) | 40 Italian speakers <br> (480 descriptions) | 40 German speakers <br> (480 descriptions) |
| :--- | :---: | :---: | :---: |
| climb | $43 \%$ | $31 \%$ | $58 \%$ |
| go | $34 \%$ | $41 \%$ | $27 \%$ |
| get | $2 \%$ | $7 \%$ | $2 \%$ |
| jump | $4 \%$ | $4 \%$ | $2 \%$ |
| -pass | $1 \%$ | $2 \%$ | $2 \%$ |

In the video-description exercise, the Italian group of learners used climb more sparingly than the German group. Table 9 shows that climb-instances account for the greatest percentage in the German group, amounting to 62 percent of the total number of descriptions returned by this group (543). Climb is used in 49 percent and 50 percent of the descriptions offered by the Ladin and Italian groups, respectively ( 685 and 546). The Ladin and Italian groups of participants fared similarly in the video-description task.

Table 9. Percentage of verbs in the video-description task (100\% = total number of descriptions)

|  | 57 Ladin speakers <br> (685 descriptions) | 45 Italian speakers <br> (546 descriptions) | 45 German speakers <br> (543 descriptions) |
| :--- | :---: | :---: | :---: |
| climb | $49 \%$ | $50 \%$ | $62 \%$ |
| other motion verbs | $48 \%$ | $47 \%$ | $38 \%$ |
| No-motion verbs | $2 \%$ | $0.5 \%$ | $0.9 \%$ |
| empty | $0.4 \%$ | $3 \%$ | - |

As shown in Table 10, a comparison of the climb-percentages received from the drawing-description work and the climb-percentages acquired from the video-description task provide a rise in each group of participants. The most significant gain is in the Italian group, which has increased by 19 percent, while the Ladin and German groups have increased by 6 percent and 4 percent, respectively.

Table 10. Percentages of climb in the drawing-description task and in the video-description task ( $100 \%$ = total number of descriptions)

| Groups | Drawing-description task | Video-description task | Difference |
| :--- | :---: | :---: | :---: |
| Ladin | $43 \%$ | $49 \%$ | $+6 \%$ |
| Italian | $31 \%$ | $50 \%$ | $+19 \%$ |
| German | $58 \%$ | $62 \%$ | $+4 \%$ |

Table 11 shows that only the first three drawings prompt the majority of the participants in the three groups to use climb, revealed by study of the 12 sketched situations. Only the depictions of a person climbing up a rock face (scene 1), a tree (scene 2), and a wall (scene 3) elicit the use of climb in more than half of the Italian participants. Four images persuade the majority of Ladin speakers to use the word climb, which they also use to describe a subject on a roof (scene 4). Over half of the German participants use climb after seeing nine drawings. The percentages of participants who used the verb climb in the three groups are the most disparate in the description of a newborn depicted on the rim of a cot (scene 10), in which just 5 percent of Italian speakers and 23 percent of Ladin speakers use climb, compared to 67 percent of the German speakers.

Table 11. Percentage of learners using climb in each drawing description

| Drawings | 13 Ladin speakers | 40 Italian speakers | 40 German speakers |
| :--- | :---: | :---: | :---: |
| 1 (mountain, up) | $\mathbf{1 0 0} \%$ | $\mathbf{9 7 \%}$ | $\mathbf{1 0 0 \%}$ |
| 2 (tree, up) | $85 \%$ | $85 \%$ | $\mathbf{9 0 \%}$ |
| 3 (wall, up) | $\mathbf{9 2 \%}$ | $\mathbf{7 0 \%}$ | $\mathbf{9 5 \%}$ |
| 4 (roof, up) | $77 \%$ | $45 \%$ | $\mathbf{8 2 \%}$ |


| Drawings | 13 Ladin speakers | 40 Italian speakers | 40 German speakers |
| :--- | :---: | :---: | :---: |
| 5 (wall, over) | $31 \%$ | $10 \%$ | $57 \%$ |
| 6 (window, out) | $23 \%$ | $5 \%$ | $55 \%$ |
| 7 (ladder, up) | $31 \%$ | $40 \%$ | $70 \%$ |
| 8 (stairs, up) | $8 \%$ | $2 \%$ | $10 \%$ |
| 9 (bed, into) | $8 \%$ | $2 \%$ | $5 \%$ |
| 10 (cot, out) | $23 \%$ | $5 \%$ | $67 \%$ |
| 11 (tree, down) | $23 \%$ | $12 \%$ | $50 \%$ |
| 12 (water, into) | $15 \%$ | - | $17 \%$ |

A comparable study of the 12 video segments yields the results shown in Table 12. It is worth noting that over half of the participants in all groups describe five video snippets as 'climbing'. In scene 7 (showing a girl climbing a ladder), climb is also used by over 50 percent of learners in all groups, unlike in the draw-ing-descriptions challenge. Nine films, in common with the drawing-description challenge, induce more than half of German speakers to use climb. With the exception of video 8 (stairs), in which Italians return a higher number of climb-instances, the climb-percentages in the German group are always higher than the climb-percentages in the Italian group.

The inter-group disparities in participants employing climb in each scenario are fewer in the video-description task than in the drawing-description test, but they are nonetheless noteworthy. Table 12 shows that the percentages of Ladin and German participants using climb are farthest apart in the sixth video, in which the girl climbs out a window ( 33 percent vs. 64 percent), whereas the greatest percentage difference between the Italian and German groups is in the tenth video, in which the girl climbs out a cot (31 percent vs. 69 percent). ${ }^{13}$

Table 12. Percentage of learners using climb in each video description

| Videos | 57 Ladin speakers | 45 Italian speakers | 45 German speakers |
| :--- | :---: | :---: | :---: |
| 1 (rock, up) | $95 \%$ | $\mathbf{1 0 0 \%}$ | $\mathbf{1 0 0 \%}$ |
| 2 (tree, up) | $98 \%$ | $98 \%$ | $98 \%$ |
| 3 (wall, up) | $93 \%$ | $96 \%$ | $100 \%$ |
| 4 (roof, up) | $75 \%$ | $76 \%$ | $84 \%$ |
| 5 (wall, over) | $46 \%$ | $42 \%$ | $53 \%$ |
| 6 (window, out) | $33 \%$ | $29 \%$ | $64 \%$ |
| 7 (ladder, up) | $54 \%$ | $62 \%$ | $67 \%$ |
| 8 (stairs, up) | $7 \%$ | $27 \%$ | $11 \%$ |
| 9 (bed, into) | $10 \%$ | $11 \%$ | $20 \%$ |
| 10 (cot, out) | $42 \%$ | $31 \%$ | $69 \%$ |


| Videos | 57 Ladin speakers | 45 Italian speakers | 45 German speakers |
| :--- | :---: | :---: | :---: |
| 11 (tree, down) | $39 \%$ | $29 \%$ | $64 \%$ |
| 12 (water, into) | $2 \%$ | $2 \%$ | $11 \%$ |

The video-description task has many different climb-patterns, the most common of which are listed in Table 13. In Table 13, I show that climb with a direct object are the most prevalent collocations in the Ladin and Italian groups, accounting for 35 percent and 47 percent of the total number of climb-collocations respectively (339 and 271). The most common collocation in the German group is 'climb on something', which accounts for 27 percent of the climb-collocations (334). ${ }^{14}$ Finally, the Italians use climb as a bare verb more frequently than the Ladin and German groupings. ${ }^{15}$

Table 13. Climb-collocations in the video-description task (100\% = total number of climb-phrases)

|  | Ladin speakers | Italian speakers | German speakers |
| :--- | :---: | :---: | :---: |
| climb (bare verb) | $6 \%$ | $15 \%$ | $2 \%$ |
| climb + direct obj. | $35 \%$ | $47 \%$ | $14 \%$ |
| climb on sth | $26 \%$ | $10 \%$ | $27 \%$ |
| climb up sth | $6 \%$ | $5 \%$ | $14 \%$ |
| climb over sth | $9 \%$ | $10 \%$ | $5 \%$ |
| TOTAL | $100 \%(339)$ | $100 \%(271)$ | $100 \%(334)$ |

## 5. Discussion and conclusions

The major goal of this project is to contribute to ongoing research on motion events as lexicalised by English learners from various languages backgrounds. The goal of the study is to see how much inter-group variation can be identified amongst subject groups studying in similar multilingual settings within a common geographical region. The study takes a contrastive approach and the overall goal of determining how alike three groups of learners are when dealing with their task-based assignments. The participants are divided into three groups based on their first language: Ladin (Group 1), Italian (Group 2), and German (Group 3). English is studied as an L2, L3, and L4 by all the participants. The primary aim of the study is to look into the main typological characteristics of motion-event descriptions in the languages spoken by the participants, and then to narrow down the vast domain of motion verbs by focusing on the English verb climb, with human subjects and its main corresponding verbs in the other languages under consideration.

The analysis reveals that the Italian and German groups of learners are the ones who differ most from one another, while the Ladin group's numbers are mostly
in between the other two. Speakers of minor varieties in border regions appear to take a middle ground between neighbouring people that speak the major languages. Ladin or Rhaeto-Romance speakers in the South-Tyrolean Dolomites have long been in contact with Tyrolean and German varieties, and exhibit conservative characteristics within the Romance region, as illustrated in Section 2.1.

The findings of this study support the contention that Italian speakers use the English verb climb less frequently than German speakers, because they are less familiar with the use of climb with non-canonical objects, and that they normally limit the use of climb to canonical objects such as mountains, trees, walls, and ladders. Most Italian learners use climb only to describe an individual's upward movement, as evidenced by descriptions of the onset scene in Mayer's (1969) Frog, where are you?, and in drawing-description and video-description tasks, in which most Italian learners use climb only to describe an individual's upward movement on rock faces, trees, walls, and ladders. I have shown that Italian speakers are more likely than German speakers to utilise climb in response to fewer stimulus pictures and video clips. The descriptions of scenarios 10 (cot) and 6 (window), which include an individual climbing out of a cot and out of a window, show the greatest disparity between the Ladin, Italian, and German groups. In the description of a film depicting a girl climbing down a tree, the percentages in the Italian and German groups are also wide apart (scene 11). This is likely due to cross-linguistic influence from their Italian L1, because arrampicarsi, 'climb up', normally conflates manner and upwards direction, in contrast to the English climb, which is broader, similar to the German klettern and steigen.

The most common climb-collocations in the video-descriptions returned by the Ladin, Italian, and German student groups are climb with a direct object in the Ladin and Italian groups, and 'climb on something' in the German group. Analysis of the climb-collocations in the video-descriptions shows that for the Italian group, climb with a direct object accounts for almost half of the total number of responses. While arrampicarsi, 'climb up', is intransitive, scalare, 'climb, ascend, scale', frequently takes a direct object, such as a rock, a tree, a wall, a roof, or a ladder; these are the settings in which most Italian speakers use climb. As a result, it is probable that when Italian speakers describe the videos, they are thinking about scalare rather than arrampicarsi.

The use of climb as a bare verb is more common in the Italian group of learners than in the groups of Ladin and particularly German, according to the climb-collocations in the video-description task. The higher percentage of climb used as a bare verb in the Italian group supports the notion that speakers of verb-framed L1s, who have a stronger preference for verbs without further locative addition, compared with speakers of satellite-framed languages, may use bare verbs in their English target language more frequently. The use of climb as a bare verb is more common in the Italian group than in the German group, which is likely due to distinct cross-linguistic impacts from their L1s.

The notion that video clips inspire a greater use of the verb climb than static images, which generally place less emphasis on the manner component of motion, is also verified. The fact that the three groups had a higher number of climb-instances in the video description task shows that video clips emphasise effortful
movement more than static drawings. However, the slightly higher verbal ability level in the three video-description groups, might also affect the outcome.

While the basic or unmarked meaning of the verb climb is taught at beginner level A1, other form-meaning correlations are learned at a later stage. The Italian group has the highest rise in employing climb in the video-description task and the strongest growth in competence level in the video-description task. In fact, in the drawing description task, 10 percent of Italian students and 2.5 percent of German speakers report a competence level higher than B2, in the video-description task, 31 percent of Italian students, 14 percent of Ladin speakers, and 22 percent of German speakers declare a competence level higher than B2.

Multilingual English learners who speak similar sets of languages, grow up, study in the same geographical area, and are at B2 level or above, make clear distinctions difficult, but this study shows that contrastive analyses that focus on specific lexico-syntactic patterns and frequencies, reveal differences that can feasibly be attributed to cross-linguistic influence as well as competence level. In future studies, a further analysis of the variability within the groups, and of the association with variables other than L1, such as age or exact proficiency level in all the languages spoken by the participants, will be useful to assess the generalisability of the results.

Finally, the absence of specific target-like expressions in learner texts, such as the verb climb in contexts that do not imply upwardness, raises the question of whether explicit teaching on the subject will help English learners notice opportunities and optimise their acquisition of non-prototypical uses of specific verbs, such as climb. Negative feedback and recasts are unlikely to be supplied when students overuse basic terms that are uncommon but not necessarily ungrammatical. However, English learners in educational settings are not always exposed to enough target-language input to rely on incidental learning, and targeted teaching is likely to be helpful in some situations. However, in the case of the English verb climb, there remains scope for further research.

## Notes

1 An analysis of the use of climb with non-human figures goes beyond the scope of the present study.
2 The manner of climbing has been described as "moving with characteristic effortful grasping motions, for which a convenient term is clambering" (Jackendoff 1990: 35).
3 The lexical associations of the English verb climb have been the subject of debate, in particular in relation to the movement performed by humans as compared to animals and means of transport (Beavers - Koontz-Garboden 2017; Fillmore 1982; Jackendoff 1985).
4 Although thither 'to or towards that place' and hither 'to this place' are archaic English expressions, these more concise terms are preferred in this article for reasons of practicality.
${ }^{5}$ However, an analysis of the syntactic distribution of the particles in German and Ladin goes beyond the scope of this present article.
${ }^{6} \quad$ In Verkerk's (2015: 73) investigation, "if a manner verb encoded a transparent manner of motion and could be used with different paths, such as English run, roll or crawl, it was coded as a manner verb. If a path verb encoded a transparent path of
motion and could be used in different manner of motion contexts, such as English descend, enter and pass, it was coded as a path verb". Verbs that conflate path and manner have been taken to form a separate category and they have been defined as hybrid or mixed, such as the English verb escape, which describes quick and stealthy motion away from a ground (Spreafico 2009).
7 The root form of the Italian inerpicarsi 'clamber up' contains the term erpice 'harrow', a piece of equipment which advances clinging to the earth with its teeth in an arduous manner.
8 As suggested by the root of the Italian scavalcare < $s+$ caballicäre < cabăllus, this verb also means 'unseat / unhorse' in some contexts.
9 While klettern and steigen 'climb' occur in various adverbial and prefixal constructions, the prefixed forms erklettern and besteigen 'climb' take direct objects. Similarly, the prefixed erklimmen 'scale/crest' is transitive and lexicalises upward effortful movement. Although English as an L1 does not constitute the focus of this present article, the actual use of the verb climb by a group of L1 speakers of English was tested empirically in the video-description task described in 3.3.3.
${ }^{11}$ In addition, the video-description task was carried out by 13 speakers of English as an L1.
12 It can be noticed that the Latinate form escape is also missing in the Italian group, despite its formal similarity with the Italian scappare, 'escape', which suggests that positive transfer does not always take place and formal similarities are not necessarily exploited.
${ }^{13}$ The percentage of L1 speakers using climb in each video description is: video 1 ( $85 \%$ ); video 2 ( $100 \%$ ); video 3 ( $85 \%$ ), video 4 ( $77 \%$ ), video 5 ( $62 \%$ ), video 6 ( $100 \%$ ), video 7 ( $69 \%$ ), video $8(8 \%)$, video $9(46 \%)$, video $10(85 \%)$, video 11 ( $77 \%$ ), video 12 ( $23 \%$ ). The most common climb-collocations in the English L1 group are: climb + direct object $(30 \%)$, climb over something ( $10 \%$ ), and climb out of something $(10 \%)(100 \%=106)$.
15

## References

Alghamdi, Amani, Michael Helmut Daller and James Milton (2019) The persistence of L1 patterns in SLA: the boundary-crossing constraint and incidental learning. Vigo International Journal of Applied Linguistics 16, 81-106.
Ascoli, Graziadio Isaia (1873) Saggi ladini. Archivio Glottologico Italiano 1, 1-556.
Beavers, John and Andrew Koontz-Garboden (2017) Result verbs, scalar change, and the typology of motion verbs. Language 93 (4), 842-876.
Berman, Ruth A. and Dan Isaac Slobin (1994) Development of linguistic forms: English. In: Berman, Ruth A. and Dan Isaac Slobin (eds.) Relating Events in Narrative: A Crosslinguistic Developmental Study. London and New York: Routledge, 127-187.
Berthele, Raphael (2004) The typology of motion and posture verbs: a variationist account. In: Kortmann, Bernd (ed.) Dialectology Meets Typology: Dialect Grammar from a Cross-linguistic Perspective. Berlin and New York: Mouton de Gruyter, 93-126.
Berthele, Raphael (2006) Ort und Weg: Die Sprachliche Raumreferenz in Varietäten des Deutschen, Rätoromanischen und Französischen. Berlin and New York: Walter de Gruyter.
Cadierno, Teresa, and Lucas Ruiz (2006) Motion events in Spanish L2 acquisition. Annual Review of Cognitive Linguistics 4 (1), 183-216.
Cifuentes-Férez, Paula and Teresa Molés-Cases (2020) On the translation of bounda-ry-crossing events: evidence from an experiment with German and Spanish translation students. Vigo International Journal of Applied Linguistics 17, 87-111.
Cordin, Patrizia (2011) Le Costruzioni Verbo-locativo in Area Romanza: Dallo Spazio all'Aspetto. Berlin and Boston: Walter de Gruyter.

Filipović, Luna (2007) Talking about Motion: A Crosslinguistic Investigation of Lexicalization Patterns. Amsterdam and Philadelphia: John Benjamins.
Filipović, Luna (2013) Typology as a continuum: intratypological evidence from English and Serbo-Croatian. In: Goschler, Juliana and Anatol Stefanowitsch (eds.) Variation and Change in the Encoding of Motion Events. Amsterdam and Philadelphia: John Benjamins, 17-38.
Fillmore, Charles J. (1982) Toward a descriptive framework of spatial deixis. In: Jarvella, Robert J. and Wolfgang Klein (eds.) Speech, Place and Action. London: John Wiley, 31-59.
Goddard, Cliff (2020) Prototypes, polysemy and constructional semantics: the lexicogrammar of the English verb climb. In: Bromhead, Helen and Zhengdao Ye (eds.) Meaning, Life and Culture: In Conversation with Anna Wierzbicka. Acton, Australia: Australian National University Press, 13-32.
Hijazo-Gascón, Alberto and Iraide Ibarretxe-Antuñano (2013) Same family, different paths: intratypological differences in three Romance languages. In: Goschler, Juliana and Anatol Stefanovitsch (eds.) Variation and Change in the Encoding of Motion Events. Amsterdam and Philadelphia: John Benjamins, 39-54.
Iacobini, Claudio (2009) The role of dialects in the emergence of Italian phrasal verbs. Morphology 19 (1), 15-44.
Iacobini, Claudio and Francesca Masini (2006) The emergence of verb-particle constructions in Italian locative and actional meanings. Morphology 16 (2), 155-188.
Irsara, Martina (2015) Ladin. In: Jungbluth, Konstanze and Federica Da Milano (eds.) Manual of Deixis in Romance Languages. Berlin: Walter de Gruyter, 140-166.
Jackendoff, Ray (1985) Multiple subcategorization and the $\vartheta$-criterion: the case of climb. Natural Language and Linguistic Theory 3 (3), 271-295.
Jackendoff, Ray (1990) Semantic Structures. Cambridge, Massachusetts, and London: The MIT Press.
Kudrnáčová, Naděžda (2013) Caused Motion: Secondary Agent Constructions. Brno: Masaryk University.
Levin, Beth and Malka Rappaport Hovav (2011) Lexicalised meaning and manner/result complementarity. In: Rappaport Hovav, Malka, Edit Doron and Ivy Sichel (eds.) Syntax, Lexical Semantics, and Event Structure. Oxford: Oxford University Press, 21-38.
Mair, Walter N. (1984) Transferenz oder autonome Bildung? Bemerkungen zum Problem der Partikelverben im Ladinischen, Friulanischen, Italienischen und Französichen. Zeitschrift für romanische Philologie 100 (3-4), 408-432.
Martínez-Vázquez, Montserrat (2013) Intralinguistic variation in the expression of motion events in English and Spanish. Lingue e Linguaggi 9, 143-156.
Mayer, Mercer (1969) Frog, Where Are You? New York: Dial Books for Young Readers.
Özçalişkan, Şeyda and Dan Isaac Slobin (2000) Climb up vs. ascend climbing: lexicalisation choices in expressing motion events with manner and path components. In: Howell, S. Catherine, Sarah A. Fish and Thea Keith-Lucas (eds.) Proceedings of the 24th Annual Boston University Conference on Language Development, Boston, MA, USA, 1999. Somerwille, MA, USA: Cascadilla Press, 558-570.
Slobin, Dan Isaac (1996a) Two ways to travel: verbs of motion in English and Spanish. In: Shibatani, Masayoshi and Sandra A. Thompson (eds.) Grammatical Constructions: Their Form and Meaning. Oxford: Clarendon Press, 195-220.
Slobin, Dan Isaac (1996b) From 'thought and language' to 'thinking for speaking'. In: Gumperz, John J. and Stephen C. Levinson (eds.) Rethinking Linguistic Relativity. Cambridge: Cambridge University Press, 70-96.
Spreafico, Lorenzo (2009) Problemi di Tipologia Lessicale: I Verbi di Moto nello Standard Average European. Rome: Bulzoni Editore.
Stolova, Natalya I. (2011) Cognitive Linguistics and Lexical Change: Motion Verbs from Latin to Romance. Amsterdam: John Benjamins.
Talmy, Leonard (1985) Lexicalization patterns: semantic structure in lexical forms. In:

Shopen, Timothy (ed.) Language Typology and Syntactic Description, Vol. 3: Grammatical Categories and the Lexicon. Cambridge: Cambridge University Press, 57-149.
Talmy Leonard (1991) Path to realization: a typology of event conflation. In: Sutton, Laurel A., Christopher Johnson and Ruth Shields (eds.), Proceedings of the 17th Annual Meeting of the Berkeley Linguistics Society. Berkeley, CA: Berkeley Linguistics Society, 480-519.
Talmy, Leonard (2000) Toward a Cognitive Semantics, Vol. 2: Typology and Process in Concept Structuring. Cambridge, MA: MIT Press.
Treffers-Daller, Jeanine and Andreea S. Calude (2015) The role of statistical learning in the acquisition of motion event construal in a second language. International Journal of Bilingual Education and Bilingualism 18 (5), 602-623.
Treffers-Daller, Jeanine and Françoise Tidball (2015) Can L2 learners learn new ways to conceptualise events? A new approach to restructuring motion event construal. In: Gui-jarro-Fuentes, Pedro, Katrin Schmitz and Natascha Müller (eds.) The Acquisition of French in Multilingual Contexts. Bristol: Multilingual Matters, 145-184.
Verkerk, Annemarie (2015) Where do all the motion verbs come from? The speed of development of manner verbs and path verbs in Indo-European. Diachronica 32 (1), 69-104.
Zlatev, Jordan, Johan Blomberg and Caroline David (2010) Translocation, language and the categorization of experience. In: Evans, Vyvyan and Paul Chilton (eds.) Language, Cognition and Space: The State of the Art and New Directions. London: Equinox Publishing, 389-418.

## Corpora

British National Corpus (BNC) https:/ /app.sketchengine.eu/\#dashboard?corpname=preloaded\%2Fbnc2_tt21, accessed April 2022
Corpus dl ladin leterar (CLL) http://vll.ladintal.it/applications/textanalysis/search.jsp, accessed April 2022
German Web 2013 (deTenTen13) https://app.sketchengine.eu/\#dashboard?corpname=preloaded\%2Fdetenten13_rft3, accessed April 2022
Italian Web 2016 (itTenTen16) https:/ /app.sketchengine.eu/\#dashboard?corpname=preloaded\%2Fittenten16_2, accessed April 2022

Martina Irsara is a permanent researcher in English linguistics at the Faculty of Education of the Free University of Bozen-Bolzano, Italy. She holds an MA in Teaching English to Young Learners from the University of York, and a PhD in linguistics from the University of Bristol, UK. Her research interests are in the areas of contrastive applied linguistics with a focus on English. Publications authored by Martina Irsara include studies on motionevent lexicalisations, deixis, comparative constructions, and cross-linguistic awareness.

Address: Martina Irsara, Faculty of Education, Free University of Bozen-Bolzano, Regensburger Allee 16 - viale Ratisbona 16, 39042 Brixen-Bressanone (BZ), Italy. [email: martina. irsara@unibz.it] does not apply to works or elements (such as image or photographs) that are used in the work under a contractual license or exception or limitation to relevant rights.

