

Motion and location events in German, French and English: A typological, contrastive and pedagogical approach

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Abstract

A pedagogical grammar – in the cognitive sense – considers language as a component of overall cognition and attempts to apply this insight to the processes of foreign language learning, especially in the preparation of instruction materials and their exploitation in the classroom. The starting point for any type of pedagogical grammar is a fairly exhaustive repertory of all the patterns or constructions of a language, either previously recognized or else recently discovered or still to be discovered. For the stock-taking of different patterns, the role of language typology and contrastive linguistics is primordial. This paper first concentrates on typological distinctions concerning the manner and path of motion between Germanic and Romance languages in the conceptual fields of motion and location. The study further covers the extensions of the prototypical concept of spatial motion into reduced motion of instrumental body parts, fictive motion and metaphorical motion. The examples are meant to concretize the challenges for the learning tasks of foreign language learners in their mastering of the variation in the conceptualization of motion and location in various types of languages, especially those in German as a target language for speakers of French or English.

Keywords: language typology; contrastive study; motion schema; location schema; trajectory; path of motion; manner of motion; reduced motion; fictive motion; metaphorical motion; Germanic languages; Romance languages

1. Different languages – different categorizations

1.1. Foreign language learning as conceptual learning

Building on a broad cognitive foundation, cognitive linguistics approaches language as an integrated system of lexical and grammatical concepts and of communicative interaction patterns. As Danesi (this volume) shows, it is common experience in foreign language teaching that grammatical patterns

which reflect foreign conceptual categories and foreign schemas of categorization will cause greater learning difficulties to foreign language learners. This paper therefore addresses the central question of pedagogical grammar: how can foreign language learners better manage to acquire these more abstract foreign language categories. To put it in Lantolf's terms, the real issue is this: "to what extent is it possible for people to become cognitively like members of other cultures; that is, can adults learn to construct and see the world through culturally different eyes?" (Lantolf 1999: 29–30). In this paper we will restrict ourselves to the domain of spatial conceptualization, more particularly to the conceptualization of motion and location in both the physical and non-physical, e.g., metaphorical dimensions. We will do so against the background of the typological and contrastive studies by Talmy (1985), Slobin (1996, 2000, 2006), Cadierno (2004; this volume), Cadierno and Lund (2004), Levinson (2003), Özçaliskan (2003, 2004, 2005a, 2005b), Croft et al. (in preparation), and still others.

1.2. Components of motion events

The conceptual unit in which motion and location are framed is an EVENT SCHEMA (see Heine 1993, Dirven and Radden 2004) which is the abstract representation of the participants in an event, here a motion or location event. According to Talmy (1978, 1985) a motion event contains the five basic components of figure (the "thing" moving), the verb action of motion, the trajectory or ground of the motion, itself consisting of a source or point of departure, a path followed by the moving object and the goal, as in *She ran out of the kitchen down the stairs into the garden*. Let us present this event schema in the following diagram. We will spell out "ground" in all its elements separately, as shown below in (1).

(1) MOTION SCHEMA

FIGURE	MOTION	GROUND			MANNER
		SOURCE	PATH	GOAL	
<i>She</i>	<i>ran</i>	<i>out of the kitchen</i>	<i>down the stairs</i>	<i>into the garden</i>	<i>(ran)</i>

Roughly speaking, the figure is constituted by the subject of the sentence, and the ground by all the further nominal phrases (direct object,

complement, adjunct, etc.). Moreover, this sentence does not only contain the trajectory but also the manner of motion encapsulated in the lexical item *ran* (see also Talmy 1985: 61). As stated already, source, path and goal form the conceptual trajectory of any motion event, to which further also the direction of the motion is to be assigned.

Len Talmy (1985) discovered strongly different linguistic patterns in the conceptualization of motion events across typologically different, or even related, languages, e.g., between Romance and Germanic languages. These differ especially in the expression of the path and the manner of motion. In Romance languages the manner of motion is far less – or not at all – focused upon, but in Germanic languages it is almost obligatorily differentiated:

- (2) a. Elle alla dans le jardin. ‘She went into the garden.’
- b. She went/walked/ran/rushed into the garden.
- c. Sie ging/lief/rannte/stürmte in den Garten.

Here we witness a differentiation in the expression of auto-motion. But the difference is still more fundamental. While French uses the verb *aller* (‘to go’) in a schematic or abstract sense for any form of motion or change to another position, German and English must further differentiate between the means causing the motion; such that different verbs *must* be used: *gehen* (on foot), *fahren* (using a means of transport: car, lorry, ship, train), *fliegen* (in an aeroplane), etc. Of course in French there are similar verbs such as *marcher* ‘to walk,’ *rouler* ‘to drive,’ *voler* ‘to fly,’ but they are not obligatorily used like in German, where the speaker has no choice when he wants to express a motion event; s/he will have to conceive the manner of and/or the means of motion before speaking and choose the appropriate verb.

As for the path of motion, Romance languages preferably express this by full verbs such as French *entrer* ‘to go/come in,’ *sortir* ‘to go/come out,’ *aller* ‘to go,’ *traverser* ‘to cross,’ whereas Germanic languages denote the ground elements by grammatical forms. These elements are called by Talmy “satellites:” a satellite is “the grammatical category of any constituent other than a nominal complement that is in a sister relation to the verb root” (Talmy 1991: 486). Satellites are either particles (*come out*) or prepositions introducing nominal groups and accompanying full verbs (e.g., *dans*, *into*, *in*) in (2)). Talmy therefore calls Romance languages

“verb-framed” languages and Germanic languages “satellite-framed” languages.

Taking Talmy’s observation as our starting point, we will compare examples from French (a Romance language) with corresponding ones from German and English (Germanic languages), whereby English, due to its historical French influence, is somewhere in between the two others, though basically much closer to German. This may also entail that, more generally, we cannot simply speak of two clear-cut types of verb-framed and satellite-framed languages, but that these are rather two extreme points on a continuum with many intermediate stages and mixed cases such as Korean (see Bowerman 1996).

We will now see in more detail how all this applies first to the manner of motion and next to the path of motion.

2. Motion events: Manner of motion and path of motion

2.1. Manner of motion

Psycholinguistic evidence for the different conceptualization of the manner of motion in Romance and Germanic languages is provided in various research experiments by Slobin and by Özçaliskan. Starting from “The frog stories,” (Berman and Slobin 1994), in which English and Spanish speakers have to tell the picture stories verbally, Slobin shows that the “diversity of English verb + satellite constructions is impressive” (1996: 199) and that Spanish narrators devote less explicit attention to movement and ground than do English narrators: “Speakers of S-languages [i.e., satellite-framed languages] have been trained, by their language, to make more distinctions of motor pattern, rate, effect, and evaluation of movement, in comparison with speakers of V-languages [i.e., verb-framed languages] ... V-languages seem to have far fewer expressive manner verbs than S-languages” (Slobin 2000: 113). In her comparison of English and Turkish, Özçaliskan (2003: 218) comes to a similar conclusion: “English pays more attention to the manner dimension of motion events than Turkish, using a greater amount and variety of motion event types that encode manner.” Looking for motion verbs in novels and newspapers in the two languages she describes, she finds 138 types of English motion verbs expressing manner against only 39 types in Turkish (Özçaliskan 2003: 219). Also (Pourcel in press: 3) confirms this tendency for French, which “tends to background the element

of manner to the extent that it is often left unsaid altogether.” She uses the example *L’oiseau est sorti de sa cage*, which in a literal translation would yield the un-English sentence *The bird exited its cage*. Here English requires a verb expressing the manner of motion like *fly*, *jump*, etc.

Comparing the three languages, French, German and English, we see that French uses, just like *aller* in (2), the very abstract motion verb *sortir*, and that German and English use the same manner of motion verbs as in (2).

(3) MOTION SCHEMA

FIGURE	MOTION	SOURCE	MANNER
<i>Il</i>	<i>sortit</i>	<i>de la cuisine</i>	O
<i>Er</i>	<i>ging/lief/ rannte</i>	<i>aus der Küche</i>	(<i>ging/lief/ rannte</i>)
<i>He</i>	<i>went/walked/ ran</i>	<i>out of the kitchen</i>	(<i>walked/ran</i>)

While French speakers abstract away from manner, German and English speakers, for each specific motion event, transmit the information of neutral, slower or quicker pace. If French speakers feel the wish or urgent need to express the manner of motion, they will rather use a construction with the present participle or with an adverb. Therefore a literal translation of one of the German and English examples in (3) could be: *Il sortit de la cuisine en courant*, lit. ‘He exited the kitchen, running,’ containing a general verb plus a present participle construction. But such constructions, though possible and grammatically correct, are not commonly used in French. Other possibilities are the use of an adverb ending in *–ment*, adverbial expressions like those with *pas* (‘pace’) or still others.¹

Using a long list of English verbs expressing manner of motion, Pourcel (2005) shows that their translation into French is often only possible when using a construction with *marcher* + adverbial phrase; some of her examples are: *to drudge* – *marcher péniblement*; *to march* – *marcher au pas*; *to plod* – *marcher d’un pas lent*; *to stomp* – *marcher d’un pas lourd, bruyant*; *to tiptoe* – *marcher sur la pointe des pieds*. Her conclusion is clear: “the concept of manner ... is highly codable in satellite-framing languages only” (Pourcel 2005: 3).²

2.2. Path of motion

Also for the different coding of the path of motion in typologically different languages, Slobin and Özçalışkan provide evidence. In his comparative study of English and Spanish, Slobin (1996) stresses that English speakers pay more attention to path details than Spanish speakers (Slobin 1996: 201). In Özçalışkan's cross-linguistic study of Turkish and English (2003) it becomes clear that Turkish "typically encodes direction of motion in the main verb of a clause (e.g., *He enters, exits, ascends, descends*), whereas English prefers to encode direction of motion by using particles or prepositions, making the main verb slot available for a manner verb (e.g., *He walks, runs, crawls in/out/across*)" (Özçalışkan 2003: 221).

Like these two verb-framed languages, Spanish and Turkish, also French uses full verbs like *traverser* ('cross'), *sortir* ('go out'), *entrer* ('come in'), etc. German and English prefer, though with remarkable differences, to express the path of motion at the level of the satellite. Typical German satellites are separable particles in so-called particle verbs: *Wir gehen hinaus* 'we go out,' *Wir kommen herein* 'we come in,' *Gehen wir rüber?* 'shall we go across (the road)?,' as may be seen in the following example:

- (4) a. Les athlètes traversent le fleuve (à la nage).
- b. The athletes cross the river/swim across (to the other bank).
- c. Die Athleten schwimmen ans andere Ufer.

Again the French full verb³ *traverser* 'to cross' is much more general in meaning than the German or English equivalents. English in (4b) has both patterns at its disposal here, a fact which Talmy (1985: 72) was fully aware of. Although German has the equivalent verb *überqueren* 'to cross,' it is also a fact that this grammatically correct form is not actually used. The justification can be found in the preference of German to use satellites to express the path of motion. Thus in German only the expression in (5) is really authentic and idiomatic.

- (5) Lass uns rübergehen.
 'Let's go across (to the other side of the road).'

In such idiomatic language use in a concrete context of situation, the ground need not even be evoked, because it is visibly given in the speech situation. In French it is totally absent, in English only the deictic location (*here* in *Let's cross here*) is given and in German the path is expressed by the particle *rüber* 'over/across.'

The conceptual differences between verb-framed and satellite-framed languages are even bigger if we have several ground elements of the trajectory SOURCE-PATH-GOAL. It does not surprise that French as a verb-framed language cannot take several ground satellites, but expresses part of this trajectory by a different verb each time, which can take one satellite only as in (6a), whereas English and German can specify the complex ground trajectory with one verb and several satellites:

- (6)
- a. Il sortit de la salle de séjour, traversa la cuisine pour aller au jardin.
 - b. Er ging/lief/rannte aus dem Wohnzimmer durch die Küche in den Garten.
 - c. He went/walked/ran out of the living-room through the kitchen into the garden.

In French the path of motion is expressed by the verb and consequently each phase in this motion trajectory must be expressed by a different verb. In German and English the path is expressed in the satellites so that the various phases of the trajectory or path can be concatenated as prepositional phrases.

Within the ground trajectory, a further distinction is made between the source element on the one hand, and the path and goal elements, on the other. In German the former, fixed point of departure takes the dative declension, the latter, more mobile parts take the accusative. This aspect of the opposition between location and motion will be gone into in Section 3.

3. Motion and location: Lexical, morphosyntactic and figurative challenges

As discussed so far, the different conceptualizations of motion events in Romance and Germanic languages are characterized by their preferential realizations of elements in the event schemas for motion, and in the use of general vs. differentiated motion verbs. In addition, the conceptual

opposition between motion and location is marked in German by related verb pairs and the accusative vs. dative case system, and in English by the choice between some prepositions. We will successively look at the combined choices of lexical and case expressions in the motion schema vs. the location schema (3.1), at motion to a goal vs. motion at a location (3.2), at reduced motion schemas for body parts (3.3), at fictive motion (3.4) and finally at abstract or metaphorical motion (3.5).

3.1. Motion schema and location schema

The use of generalized verbs in French holds in many domains. In English, the domain of motion requires differentiated verbs, but the domain of location does not. In contrast to this, German obliges its speakers to use differentiated verbs both for motion and for location. A location schema consists of the relatively simple combination of FIGURE + LOCATION (verb) + GROUND. Thus French and English use the generalized verbs *mettre/to put* for the manual motion of objects, and *être/to be* for location, whereas German speakers must obligatorily express the orientational position of the object being moved or of the located object. On top of this, German also exploits its case system, using the accusative for dynamic motion to a goal and the dative for static motion at a given point and for location. These differences are obligatorily combined in every construal of a motion event as in the (c) examples of (7), (9), (11) and (13) or a location event as in (8), (10), (12) and (14) – see below. Note that the examples in (7) and (8) denote horizontal positions, those in (9) and (10) vertical positions.

Because of the complexity of the German conceptualization in these event schemas, we will first go into the lexical specifications, and after that, into the case system. While French and English, though the latter with more variation, express the location of both animate beings or inanimate objects by means of generalized verbs, German almost always specifies the orientation of the object's position, i.e., it spells out whether the object is in a horizontal, i.e., lying position (*legen/liegen*) or in a vertical, i.e., upright (*stellen/steht*) position⁴ (see also Serra-Borneto 1996: 377). The same applies to sitting and hanging entities by means of the verb pairs *setzen/sitzen* and *hängen/hängen* respectively:

(7) HORIZONTAL MOTION

- a. Papa met le journal sur la table.
- b. Dad puts the paper on the table.
- c. Vati *legt* die Zeitung auf *den* Tisch. [ACC]

(8) HORIZONTAL LOCATION

- a. Le journal est sur la table.
- b. The paper is on the table.
- c. Die Zeitung *liegt* auf *dem* Tisch. [DAT]

(9) VERTICAL MOTION

- a. Papa met le vase sur la table.
- b. Dad puts the vase on the table.
- c. Vati *stellt* die Vase auf *den* Tisch. [ACC]

(10) VERTICAL LOCATION

- a. Le vase est sur la table.
- b. The vase is on the table.
- c. Die Vase *steht* auf *dem* Tisch. [DAT]

(11) MOTION EVENT
SITTING UP

- a. Papa met le bébé dans la chaise.
- b. Dad puts the baby in the high chair.
- c. Vati *setzt* das Baby in *den* Kinderstuhl. [ACC]

(12) LOCATION EVENT
SITTING

- a. Le bébé est dans la chaise.
- b. The baby is in the high chair.
- c. Das Baby *sitzt* in *dem* Kinderstuhl. [DAT]

(13) MOTION EVENT
HANGING UP

- a. Papa met le cadre au mur.
- b. Dad puts/hangs the picture on the wall.
- c. Vati *hängt* das Bild an *die* Wand. [ACC]

(14) LOCATION EVENT
HANGING

- a. Le cadre est au mur.
- b. The picture is on the wall.
- c. Das Bild *hängt* an *der* Wand. [DAT]

The difficulty for French and English speakers learning German is precisely and primarily this differentiation of the location of objects or persons. Serra-Borneto (1995: 462) defines the problem as follows:

... locative verbs like *stehen* and *liegen* are simply devices the speaker uses to convey information about the orientation of the object(s) he is referring to in discourse. Thus, in order to decide how to characterize the position of an object, the speaker first has to set his attention on the most relevant dimension of the object and then must match it with one of the abstract spatial axes. These cognitive operations of course imply a certain amount of “schematization,” which is ‘a process that involves the systematic selection of certain aspects of the referent scene to represent the whole, while disregarding the remaining aspects.’ (Talmy 1983: 225), because one particular feature of the overall shape of the object is isolated in order to determine its orientation.

In colloquial German one sometimes hears sentences with the more general verb *tun* ‘do’ corresponding to French *mettre* or English *put* as in (15):

- (15) a. *Vati hat die Zeitung auf den Stuhl getan.*
‘Dad has put the newspaper on the chair.’
b. *Ich tue die Vase auf den großen Tisch.*
‘I put the vase on the big table.’
c. *Er hat meine Tasse in den Schrank getan.*
‘He has put my cup into the cupboard.’

Sentence (15a) is acceptable because the speaker does not know exactly “in what position” the newspaper is (In German restaurants, newspapers are even fixed to a stick and can be hung up). Sentences (15b) and (15c), on the other hand, are very informal and would probably be rejected by purists as “bad German.” So, the use of *tun* is not much comfort to the learner, since this is below the general standard-variety level of the foreign language to be aimed for.

The learning problem is not a cultural one, since in most cultures, artefacts and people have canonical positions.⁵ Canonically, a baby is normally placed in its high chair in a sitting position, and a picture in a hanging position. Still, the learning problems remain immense, because learners must grow into the habit of focusing on these canonical orientational positions when talking about them instead of abstracting away from these physical aspects as they are accustomed to in their native language. Thus learning a foreign grammar is also learning to re-orientate one’s attention to different aspects in the visual scenery. In spite of the complexity of the German way of seeing things and expressing them, the set of oppositions above may offer a very concrete, visual and even tactile

way of experiencing the learning problem and associating the linguistic expressions with these bodily experiences. Here training in the sense of Lantolf and Thorne's (2006) activity theory can be applied in concrete activities creating the bodily experience for the learning process. As all teachers of German as a foreign language are well aware, the learning of spatial relationships as conceptualized in German and realized through different verbs cause major learning difficulties to French speakers. But, the most severe learning difficulties are caused by the subtle interaction of verb, preposition and case system. This will be investigated in the following section.

3.2. Motion to goal vs. motion at location

Though the previous presentation is correct for as far as it goes, the situation is in fact far more refined than that. There is not just a simple contrast between motion and location, but also, and equally frequently, a contrast between motion to a goal and motion at a fixed location. Here the problem is to learn to see the way the German language realizes the concept of "motion at a fixed location" as different from "motion to a goal." This different way of seeing is simultaneously to be associated with the alternation between dative and accusative as it appears with the so-called "two-way prepositions" (Smith 1995: 293): *an, auf, hinter, in, neben, über, unter, vor* and *zwischen* ('at,' 'on,' 'behind,' 'in,' 'next to,' 'over,' 'under,' 'in front of/before' and 'between.' The problem for French-speaking learners can perhaps be better understood if one takes into account the preferential conceptualizations of French, which privileges more abstract motion and location verbs and tends to incorporate the path in the verb itself, whereas German – and to some extent also English – tends towards a more concrete specification of motion and location events.

A traditional approach, thought to be helpful, has been the exploitation of the conceptual distinction between a "newly arising" relation of figure and ground and a "pre-existing" spatial relation between them, whereby it is necessary to distinguish between prototypical motion events as in (16) and (17) below, and the less prototypical cases in the later subsections, such as the more peripheral cases of reduced motion (Section 3.3), fictive motion (Section 3.4), and abstract or metaphorized motion (Section 3.5).

- (16) a. *Er geht auf die Straße.*
'He walks into the street.'

- [He was not in the street yet.]
- b. *Er geht auf der Straße.*
 ‘He is walking in the street.’
 [He was already in the street and starts walking there.]

Still, the use of the accusative and the dative is not merely one between a relationship coming into existence (16a) and one already existing before (16b) as suggested by the comments added between brackets in (16). As Taylor (this volume) points out, the use of “rules” in FLT is indispensable, but it all depends on the quality of the rule’s formulation. Thus rules of thumb – for the opposition in (16), one could suggest “new relationship = accusative; already existing relationship = dative” – are extremely helpful, hence useful, as long as one realizes their limited value in explanatory power, as we shall see in more detail below in Section 3.4.

In actual fact, the choice of the particular case depends most of all on the difference between the two event schemas under discussion, i.e., the motion schema and the location schema. The motion schema has as its ground the whole trajectory or any part(s) of it, i.e., SOURCE-PATH-GOAL. Thus we can see, as already discussed before in (6c), why a sentence such as *Er geht aus dem Laden auf die* [ACC] *Straße*, ‘He walks out of the shop into the street,’ is fully acceptable: *aus dem Laden* expresses the source, *auf* the path and *die Straße* the goal. But the location schema has no such trajectory and can merely express location, not any part of a trajectory. Hence German cannot say **Er geht aus dem Laden auf der* [DAT] *Straße* because this would entail a contradictory conflation of two entirely different event schemas.

The specification of location can be part of two different constructions: it can be part of the core or nucleus of an event schema as in (17a) or else it can function as a non-nuclear element with action verbs as in (17b) or (17c).

- (17) a. *Der Hausmeister wohnt in der Uni.*
 ‘The caretaker lives in the university.’
 b. *Seine Frau arbeitet in der Uni.*
 ‘His wife works in the university.’
 c. *Ihr Kind spielt herum in der Uni.*
 ‘Their child plays around in the university.’

In a location event as in (17a) the specification of the location *in the university* is an obligatory complement of the location verb *wohnen* ‘to live somewhere.’ But in (17b) and (17c) the action verbs *arbeiten* ‘to work’ and *spielen* ‘to play’ constitute an action schema and although the specification of the place of action is always possible, it is not a necessary element of the core of an action schema. This appears from the well-known test using the paraphrase “*and is doing so in X.*” This works for the action schemas in (17b) and (17c), *She works/plays and does so in the university*, but not for the location schema in (17a): **He lives and does so in the university*. It appears thus clearly that a motion schema, a location schema, and an action schema must be strictly discerned, because they determine the core elements of event schemas (for further discussion, see Chapter 11 in Radden and Dirven 2007).

Although the difference in the use of the accusative and dative in (16) has already been described in much detail in a number of other cognitive approaches (e.g., Leys 1989, 1995; Di Meola 1998; Draye 1996; Meex 2002; Meex and Mortelmans 2002; Serra-Borneto 1997; Smith 1987, 1993, 1995), it has – with the exception of Meex (2002) – almost never been explored in a systematic way along lines of event schemas. Only in Serra-Borneto’s (1997) study about prepositions and in Di Meola’s (1998) description of the use of the preposition *entlang* we can find some vague hints at the schemas we are describing in the following sections.

3.3. Reduced motion (of body parts)

In addition to these prototypical event types of motion, action or location there are a number of less prototypical or more peripheral types of motion events, particularly those involving parts of the body such as the hands, the fingers, the teeth, etc., which are more difficult cases and hence require an approach in terms of figure and trajectory as the ground of the motion event. Their less prototypical character is due to the fact that these motion events describe movements of inalienable body parts and therefore cannot have a source nor a path, but only a goal as their ground.

A first group consists of cases where body parts, e.g., the teeth, the eyes’ looks or the fingers, penetrate into an object or other body part seen as a container. Here a pedagogical grammar could visualize the situation by presenting the idea of a goal in the shape of a container, which also holds for French, but far less systematically for English:

- (18) a. *in einen Apfel beißen*
 ‘to bite into an apple’/‘mordre dans une pomme’
 b. *tief in die Augen schauen*
 ‘to look deep in the eyes’/‘regarder profondément dans les yeux’
 c. *sich ins Gesicht kratzen*
 ‘to scratch one’s face’/‘se gratter au visage’

The following examples have a body part as a goal, but it is an object and not a body part which penetrates this goal:

- (18) d. *sich in den Finger schneiden*
 ‘to cut one’s finger’/‘se couper au doigt’
 e. *Schampoo in die Haare einmassieren*
 ‘to shampoo one’s hair’/‘appliquer du shampoing dans ses cheveux’

Several of these expressions are also used metaphorically, e.g., *sich ins Fleisch schneiden* lit. ‘to cut into one’s flesh,’ which is also used in the sense of ‘to do harm to oneself,’ or *ins Gras beißen*, ‘to bite the dust’ (lit. into grass), meaning ‘to die.’ But the motion itself is not, or not any more, metaphorized than other parts of the expression. In this respect, these metaphorizations are completely different from cases such as *sich an die Hoffnung klammern*, ‘to cling to hope’ (see Section 3.5 below), where precisely the motion verb is metaphorized and linked to an abstract ground.

A second group contains expressions conceptualizing a contact situation between a body part, especially the hand, and an object conceived as a vertical surface (19a) and (19b) or a horizontal surface (19c) and (19d):

- (19) a. *etwas an die Tafel schreiben*
 ‘to write something on the blackboard’
 ‘écrire quelque chose au tableau’
 b. *an die Tür klopfen*
 ‘to knock on the door’
 ‘frapper à la porte’
 c. *auf ein Blatt Papier schreiben*
 ‘to write on a sheet of paper’
 ‘écrire sur une feuille de papier’
 d. *Sonnenlotion auf die Haut gießen*
 ‘to pour sun lotion on the skin’

‘verser de la lotion solaire sur la peau’

In these examples German, and to some extent English as well, focuses on the slight dynamic aspect of the motion event, which motivates the accusative. Although the source cannot be expressed, it is part of the conceptual trajectory, of course, and can to some degree also be visualized, e.g., a motion from the teeth to the apple, from the hand to the board, from the hand to the door. To facilitate the learning of this German way of viewing things, these motions can be visualized by the graphic representations of these verbs. Such graphs may be highly suggestive to help associate such partial motion events. The arrow in the figures below represents the concrete movement of objects and/or parts of the body, which motivates the use of the accusative:

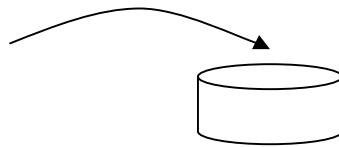


Figure 1. The goal is a container

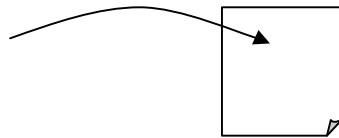


Figure 2. The goal is a vertical or horizontal surface

The learner of German may have to be taken to a point where s/he will take in such examples quite consciously, since the motion is not necessarily explicit, although it can usually be reconstructed on the basis of our experience of the world around us: you bite into an apple with your teeth, you look at someone’s eyes with your own eyes, you write on the blackboard with the chalk in your hand, you knock on the door with the knuckles of your fingers etc. An underlying metonymic relationship connects the activity expressed by the verb to the implicitly involved part

of the body (teeth or hand) or object (e.g., knife). If the teacher or learning materials create the conditions for a bodily activity so as to make the learners aware of the implicit metonymic relationship that motivates the use of the accusative, the learner may come to perceive such aspects of the experiential world in a more differentiated way and learn to “see” the formerly unspecified event as a motion event.

3.4. Fictive motion

The notion of fictive motion stems from Talmy (1991) and is also – under the name of ‘subjective’ or ‘mental motion’ – discussed by Langacker (1987: 171), Matsumoto (1996: 185) and Matlock (2004a, 2004b). It relates to the scanning motion we make in the mind when speaking about trajectories such as roads, rivers, mountain ranges, railways, etc. in the topological environment. While the phenomenon of fictive motion is found in many languages and does not, in this respect, constitute a specific feature of German, the interesting thing is that German uses the accusative for the path and goal elements. As shown in (20) and (21): it is only the path that is preferentially selected and the source or goal are less apt to become prominent, although it is always possible as (21) shows:

- (20) *Der Weg läuft durch ein Naturschutzgebiet.*
‘The road goes through a natural reserve.’

- (21) *Der Rhein fließt von der Schweiz durch drei Bundesländer bis in die Niederlande.*
‘The Rhine flows from Switzerland through three federal states up to the Netherlands.’

These cases of fictive motion start, like most cases discussed in the literature, from real motion verbs and relate to motion that is scanned in the mind only, not in reality and therefore is fictive, subjective and abstract. But in fact fictive motion covers a much wider conceptual area and can also take place in cases where no motion verb and no motion event seems to be involved, but where the fictive motion is realized as a satellite as in (22):

- (22) *Meine Freundin wohnt um die Ecke.*
‘My friend lives round the corner.’

Obviously, this utterance informs the hearer about the location of the friend's dwelling place, but it does so by tracing a path from where the speaker is at speech time or from his or her own dwelling place to the friend's place. This motion is not stated explicitly, but implied in the use of the motion event presupposed by the use of the path expression *um die Ecke* 'round the corner' in the location slot of the location schema, evoked by *wohnen* 'to live somewhere' (compare with (17a) discussed above). The meaning of sentence (22) could be spelled out in full as follows: "If you want to know where my friend lives, you have to go from here (or from my place) round the corner." What is involved here is a conceptual blending or integration of two event schemas: the location schema (expressed by the verb) and the motion schema (expressed by the satellite *um*). Here it may also become clear that an explanation in terms of the well-known rule of thumb for the dative/accusative alternation (an already existing relation = dative; a newly arising situation = accusative) is of little or no avail in such conceptually highly complex, but pragmatically fully justified and very frequently used blends of the location schema and the motion schema.

Especially in the following figurative uses of this blend of a fictive motion with a location construction, it may at first sight look as if only a location schema is involved, but on closer inspection the sentences in (23) cannot but mean that the dynamic path situations in the ground of the location schema are conceptualized as the final stage of an imagined or fictive trajectory belonging to a motion event. This also appears from the possibility of adding some motion verb, as exemplified in (23). It must be clear, however, that the verb form between square brackets is not part of the linguistic expression, but only of their underlying blended location and motion schemas.

- (23) a. *Wir sind endlich über den Berg [gelangt].*
 We are over the mountain [arrived]
 = 'We have overcome all obstacles.'
- b. *Er ist über alle Berge [gelangt].*
 He is over all mountains [gone]
 = 'He is far away.'
- c. *Wir sind über dass Schlimmste hinweg [gekommen].*
 We are over the worst [come]
 = 'We have left the worst behind us.'

Clearly, it is again the whole motion event that has served as the input of the metaphorical expression, not the verb or any other separate element of the motion event.

The first cognitive linguist to realize the contrastive relevance of the fictive motion schema for foreign language learning is Serra-Borneto (1997: 192). But he does not make any explicit distinction between the presence of a verb of motion or measure (24a) and its total absence (24b).

- (24) a. *Das Wasser reicht ihm bis über die Schenkel.*
'The water is above his thighs.'
b. *Er ist über seine besten Jahre hinweg.*
[He is over his best years]
'He has left the best years of his life behind him.'
(Serra-Borneto 1997: 192)

Although the situation in (24a) looks static, there is much more to it according to Serra-Borneto: "you can imagine the eyes of the speaker following a trajectory from the ground up to the thighs and beyond them." (Serra-Borneto 1997: 192). He goes one step further when he claims that "the situation (and the verb) is static but dynamism is subjectively added to the configuration" (1997: 192). At first sight this explanation may look a bit subjective, but it is certainly welcome and acceptable in language instruction, though it might require much more imagination for the metaphorical use in (24b).

There is very strong psycholinguistic evidence based on empirical experiments for the visual processing of fictive motion. Matlock (2004b: 227) speaks of the undeniable necessity of "visualization:" while reading examples like *The table goes from the kitchen wall to the sliding glass door*, "we automatically visualize a table that is long and narrow, perhaps a long oval table or a rectangular table." She comes to the conclusion that "Human experience with motion goes beyond actual movement and perceived movement – it also includes mentally simulated or imagined motion." (Matlock 2004b: 235). In our opinion, this psycholinguistic fact is a very strong hint to incorporate the notion of fictive motion into language instruction and to provide for explicit visualizations in learning materials.

However, we need to assume a further cognitive process in order to be able to understand the interpretation of a special type of abstract motion, i.e., metaphorical motion, which will be discussed in the next section.

3.5. Metaphorical motion

Whereas fictive motion as in *The road runs along the coast* requires mental scanning, this is not the case with metaphorical motion as in *The years run by*. What is expressed in this metaphor is that the years change quickly. As Lakoff and Johnson (1980) found out, the more abstract domains of time and of change are mapped onto the concrete domain of space. This is in the first place a conceptual process and linguistic metaphors like *years running by* are based on underlying conceptual metaphors like TIME IS MOTION and CHANGE IS MOTION (The use of upper case marks the conceptual status). Clearly, a metaphorical source domain like MOTION is not reserved for one target domain, but may serve several other and far more abstract target domains, e.g., that of mental activity as illustrated in the conceptual metaphor ABSTRACT MENTAL ACTIVITY IS MOTION.

The concept of “motion” itself can be linked to that of “location” since MOTION IS CHANGE OF LOCATION. As the input for the metaphorization process we may have, not just one single concept like “motion”, but the whole of the motion schema. This schema can therefore be metaphorically extended in its CHANGE IS MOTION component itself or in its (changed) location component, or in both. The final location is of course the goal component. If the goal is mapped onto abstract domains, the verb signaling the change may or may not be metaphorized. For speakers of French and English learning German it cannot be surprising to find that such general tendencies are also operative in German, just like in their native languages. Thus spatial distinctions such as those between containers and surfaces will also be extended to more abstract areas of experience, especially in the context of situations describing abstract changes. Here one of the main learning problems for the learner is to find out whether the abstract goal is conceptualized as a container, as a surface or as still some other basic spatial relation. In the abstract motion event, German uses expressions with the preposition *in* and exploits the CONTAINER metaphor⁶ for a great variety of contexts such as becoming member of a group, splitting a group into subgroups, concentrating on one’s work, falling in love, translating and many others :

- (25) a. *Er fügt sich in die Gruppe*
 Lit.: ‘He joins (himself in) the group,’ i.e.,
 ‘He becomes a member of the group.’
 b. *Die Lehrerin hat die Klasse in drei gleiche Gruppen eingeteilt/ unterteilt*

- ‘The teacher has split the class into three equal groups.’
- c. *Der Schüler vertieft sich in die Aufgaben*
‘The pupil goes deeper into, i.e., concentrates on, the study questions.’
- d. *Peter hat sich in seine Mitarbeiterin verliebt*
‘Peter has fallen in love with his colleague.’
- e. *in eine andere Sprache übersetzen*
‘to translate into another language.’

Here again, the path is not explicitly expressed but it can be imagined in our minds starting from our knowledge of physical and fictive motion events (See the arrow between the figure and the goal in Figure 1). Moreover, these examples differ from the examples of fictive motion because now the goal does not contain any features of a physical location, but only abstract locations such as a group of persons (25a) and (25b), mental entities like study questions (25c), an individual personality (25d), or some conceptual content laid down in words (25e).

Smith (1995: 313) offers an explanation for the verb *übersetzen* ‘to translate’ by appealing to a version of the rule of thumb for the accusative/dative alternation, i.e., that the choice of case marking depends on whether a change takes place (requiring the accusative) or not (requiring the dative). He illustrates this by *Hans hat den Brief ins Deutsche übersetzt* ‘Hans translated the letter into German.’ But this concept of “change” is far too general in that it is not clear what exactly gets changed here. In actual fact, no internal change or change of location takes place in translations, but at best there is a kind of abstract motion that might possibly be involved: the conceptual content of a text in one language is mentally re-created in a different language, thereby creating a new text. Of course, Smith’s explanation is not wrong, but it does not pertain to the psychological reality of the translation process, but only to its folk representation via the implicitly invoked conduit metaphor for communication. According to this folk metaphor of verbal communication, contents get packed into word containers in one language, carried across to a receiver and there unpacked or decoded, or – as in the case of translation – repacked by the translator into the word containers of a different language.

With the German preposition *an* ‘to/at/on,’ the abstract goal of the metaphorized verb is construed as a vertical surface:

- (26) a. *sich an die Hoffnung klammern*

- 'to cling to hope'
- b. *an einen Vertrag gebunden sein*
'to be tied, i.e., committed, to a contract'
- c. *sich an eine Entscheidung halten*
'to hold to = to stick to a decision'

In expressions with *auf*, the goal is shaped as a horizontal surface to land on:

- (27)
- a. *auf ein altes Problem eingehen*
'to enter into, i.e., to deal with, an old problem'
 - b. *auf andere Gedanken bringen*
'to take somebody to other thoughts, i.e., to get him to think of different things'
 - c. *Er geht mir auf die Nerven*
'He goes, i.e., works, on my nerves = he upsets me'

Again, these examples can be represented in a picture which as a didactic representation visualizes the motion from the figure to the vertical or horizontal goal (see Figure 2).

But language is not always such a clear-cut, neat system where all instances of usage are either in or outside a category. There are also many so-called fully idiomatic cases in every pattern of language. It is even the great merit of hundreds of cognitive linguists, e.g., Gibbs and O'Brien (1990) to have integrated the study of idiom into the core business of the science of language. Therefore, even if the following cases are more peripheral and used to be called (unexplainable) idiomatic uses, they belong to the real essence of language. On closer inspection, there is even a lot of systematicity in idioms, and there is no way of stopping the drive of abstract motion, nor its expression by means of the German accusative.

- (28)
- a. *jemandem etwas ins Gesicht sagen*
'to say something (straight) to someone's face'
 - b. *Er gehört ins Gefängnis*
'He belongs, i.e., ought to be, in prison'
 - c. *ins Gerede kommen*
'to get talked about'
 - d. *Komm mir nicht in die Quere*
'Don't cross my path' = 'Don't contradict me'
 - e. *Hämmere dir das in den Schädel*

- ‘Hammer this into your skull’ = ‘Memorize this’
- f. *jemandem ins Wort fallen*
‘to fall into someone’s word’ = ‘to interrupt someone’
 - g. *die Beine in die Hand nehmen*
‘to take the legs in the hand’ = ‘to run very quickly and disappear.’

Other idiomatic expressions conceptualize the goal as a surface and express the satellite by means of *auf*.

- (29)
- a. *auf einen grünen Zweig kommen*
‘to come onto a green branch’ = ‘to have no money problems’
 - b. *etwas auf die lange Bank schieben*
‘to shove (something) on the long bench’ = ‘to put something off.’

Other idiomatic expressions as in (30) exploit the conceptual metaphors KNOWING IS SEEING and INACCESSIBILITY IS A (BLOCKING) CONTAINER (see Morgan 1997). In order to “see” the truth or the real meaning of things, one must, in English, look “through” the blocking container or find things “out” of it by unblocking the container and thus making things accessible to sight and knowing. In German there is rather the image of a BLOCKING VERTICAL SURFACE, behind which one must look. To some important extent, the learning of foreign languages is learning which images a given language has chosen to express more universal experiences. In other words, learning foreign languages is learning to see how they see the world:

- (30)
- a. *hinter die Fassade schauen*
Lit. ‘to look behind the façade’ = ‘to see through something’
 - b. *Er ist hinter das Geheimnis gekommen*
Lit. ‘He has come behind the secret’ = ‘He has found out about it.’

Since no psycholinguistic confirmation of abstract motion in the case of figurative expressions has been found thus far, it may be speculative, though not unreasonable, to hypothesize that a kind of mental motion is the metaphorical interpretation of the examples above. If students of German are asked to describe the motion in the examples above they will often make a gesture representing this visualization. As it is a preferred learning

aid, teachers can exploit this possibility when teaching such constructions of abstract motion.

3.6. Consequences for the learning of German

The difficulties encountered in case marking with abstract verbs can be considerably reduced if FL teachers attempt a straightforward explanation by trying to visualize the abstract motion, taking into account the relevant conceptual metaphors. They might perhaps proceed as follows: Imagine the act of *klammern* ‘to cling to’ in example (26a). How do you perform the act of *klammern* ‘cling to?’ Which body part do you need in order to be able to *klammern*? Show how you can *klammern*. The learners will then probably suggest hands. Take another example, e.g., (30a) *hinter die Fassade schauen* as shown in Figure 3.

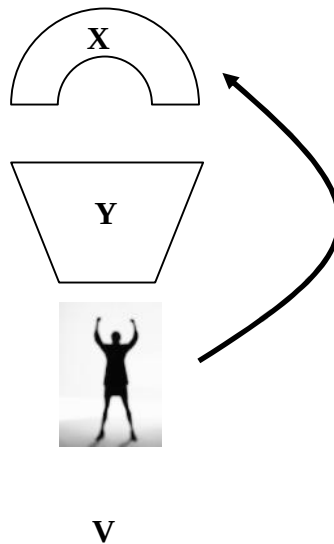


Figure 3. The goal is behind a blocking surface

If something (X) is hidden behind something else (Y) from the viewer’s viewpoint (V), then it is hidden from sight and knowledge. The question the teacher can ask to start with is why it is necessary to look “behind” something. The students will probably answer that it is because some object

or person is hidden behind something else. After that he can ask what is happening when you look behind something. Which body part do you use to do so? The students will again visualize the abstract motion by means of a gesture and often try to represent an implicit trajectory or path from a viewer towards an object which is hidden behind something else. Alternatively the teacher can ask the students to draw a little picture. The next step in the teacher-student dialogue could be to show that the underlying conceptual metaphor in all our examples, i.e., ABSTRACT MENTAL ACTIVITY IS MOTION, is usually realized by means of the accusative in German.

4. Conclusions

At the descriptive and explanatory level, the present event-schema-based analysis of the German conceptualization of motion and location events in contrast to those in French and English has revealed the rich potential of a more comprehensive conceptual approach to the various frames and event schemas underlying the lexicon and grammar in a given conceptual domain. Indeed, it looks as if the whole German spatial prepositional system and its case marking system may find a natural explanation in terms of the event schemas for motion and location. Both schemas can nicely show the motivation for the two-way prepositions taking either the accusative or dative, as shown in the above sections. But it looks to us that there is more to it. The location schema could possibly also account for the exclusive dative use with the prepositions *aus*, *bei*, *mit*, *seit* and *von*,⁷ which all express the SOURCE in the motion schema as a fixed location in space. Similarly, the motivation for the exclusive accusative use with the prepositions *bis*, *durch*, *für*, *gegen*, *um*, and *wider* is likely to reside in the element PATH (*durch*, *für*, *um*) or GOAL (*bis*, *gegen*) of the trajectory in the motion schema or the integrated location and fictive-motion schema, either in a concrete or in a more abstract sense. Evidently such hypotheses are to be tested in empirical research and consequently can be confirmed or rejected.

It will also have become clear from the conceptual fields of motion and location that the numerous differences between French, English and German can be systematically explained – and incorporated into teaching materials on this basis – only by taking into account the way in which these languages have realized their conceptualizations. These insights may offer

important chances for FLT. Language teachers often react to sentences produced by learners by simply remarking: “You don’t say that in German,” without any further explanation why this might be so. On the basis of the explanations about the differences between Romance and Germanic languages as offered in various cognitive-linguistic studies, learners can become aware of the deeper conceptual differences by means of simple contrastive examples. This means not only that learners must acquire the lexical items, e.g., the specific verbs expressing the type of motion and location, but also, and most importantly, that they must learn to approach and experience lexical and grammatical concepts in the source and target languages differently. In this learning process they will also have to consider the satellite constructions of a verb, which cannot be used freely but are an obligatory component of the German, and partly also of the English, way of seeing and expressing things and events. Finally, students will grasp the abstract regularities through the use of schemas or pictures.

Up to now in foreign language instruction, learners have at best been advised very vaguely to “learn to think in the foreign language.” As we have seen, this can only be achieved with a teaching method which aims for an understanding of the foreign language and culture based on bodily experiences in the form of activities, visual representations and cognitive insight. Thus we are now in a better position to understand the underlying meaning of this motto.

Notes

1. Pourcel and Kopecka (2005) show that there is much more variability in the expression of motion events in French than generally accepted from Talmy’s typology. They suggest that the above pattern is not the only one available in French. For more details, see Pourcel and Kopecka 2005.
2. If manner, though, is expressed in the main verb in French, it is the result of being the expression of a “motion activity” and not of a “motion event.” To quote Pourcel and Kopecka (2005: 5), “[the] semantic emphasis in an activity consists of the Manner of motion as an end in itself, further specifying a motion in progress. We suggest that it is relevant, therefore, to make a distinction between ‘motion activity’ and ‘motion event.’ Unlike motion events, activities are essentially concerned with conveying information relating to the Manner of motion.” So, consequently, in their example “Marc (F) court (M) dans la rue (G),” we have a motion activity and not an event.
3. In her investigation of French motion verbs Kopecka (2006) shows that French can also express the path of motion in a prefix revealing a satellite-

framed pattern attributed to Germanic and Slavic languages, e.g., “L’oiseau s’est envolé (P + M) du nid” (Pourcel and Kopecka 2005: 11). It seems that the expression of path in a prefix is widely spread in French. For more examples see Kopecka (2006).

4. Newman (2004) postulates that “sitting, standing, and lying would appear to be the three main positions which humans assume, though admittedly with some cultural variations. We typically experience all three in any 24 hour cycle, ...” (205).
5. Interestingly enough, this three-way distinction between sitting, standing and lying must also be expressed in a number of African languages like in Kxoé or Mbay, in which “existential constructions and predicative adjective constructions require one of the three verbs *ndì* ‘sit,’ *dà* ‘stand’ and *tò* ‘lie’” (Newman 2004: 206). Some more examples of languages from all over the world (like Amerindian, Caucasian or Oceanic languages) which make this difference in postures can be found in Newman (2004).
6. Serra-Borneto (1997) uses the CONTAINER schema to rather justify the use of the dative, and indeed he brings examples where the dative is the correct form, e.g., “Die Mutter konnte ihr Kind vor diesen Gefahren nicht behüten.” (1997: 196). The CONTAINER schema is composed of “entailments,” like protection or resistance, limitation or restriction of forces, the relative fixity of location, ... (1997: 196–202) This further subdivision is not relevant for our examples. For more details see Serra-Borneto (1997).
7. Here the two prepositions *nach* ‘to’ and *zu* ‘to’ seem to contradict the generalization proposed for German dative prepositions. However, only detailed corpus research can falsify or confirm the proposed generalization.

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