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Pedersen, Johan

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The *way*-construction and cross-linguistic variation in syntax. Implications for typological theory. {1}

JOHAN PEDERSEN

13.1 Introduction

In addition to being a lexeme that encodes a specific spatial concept, *way* plays a constructional role in the idiomatic English *way*-construction, which has its own spatial meaning. This construction has only direct parallels in some other languages. There is, for instance, no Spanish parallel to this construction type. The aim of this paper is to present a cross-linguistic analysis of the *way*-construction and other English argument structure constructions, and assess the implications for typological theory. As exemplified in (1), the *way*-construction represents a characteristic expression of motion events in English:

(1) I negotiated my way around her preposterous little father (Banville 2005, p. 102)

Nevertheless, the significance of a cross-linguistic analysis of the *way*-construction is not explicitly considered in the Talmian typology of motion events. Such an analysis, I believe, could be a valuable contribution to the on-going discussion of Talmy's typology (e.g., Aske, 1989; Berman & Slobin, 1994; Gennari *et al*, 2002; Ibarretxe-Antuñano, 2004a, 2004b; Pedersen 2009a; Sinha & Kuteva, 1995; Slobin & Hoiting, 1994; Slobin, 1996a, 1997, 2000, 2004; Talmy, 1985, 1991, 2000; Zlatev & Yangklang, 2004).

The *way*-construction, exemplified in (1), has often been used as evidence for the existence of schematic form-meaning pairs in grammar (e.g., Goldberg, 1995). The *way*-construction is highly productive, and almost all of its individual words can be exchanged for others. Nevertheless, the number and order of constituents are fixed, the word *way* and a possessive pronoun are obligatory constituents and only verbs that fulfill certain constraints can be used (e.g., Goldberg, 1995, 1996; Israel, 1996; Jackendoff 1990, 1992, 1997; Levin & Rappaport Hovav, 1995). {2} Moreover, the core meaning of the construction involves directed motion, though typically it does not involve a motion verb (e.g. *negotiate* in (1)). These characteristics have led Jackendoff (1990) and Goldberg (1995), among others, to analyze the *way*-construction as a CONSTRUCTIONAL IDIOM, that is, a syntactic construction with a specific meaning contributed by the construction itself, in which only a subset of the terminal elements is fixed. Recent research has shown that parallel constructions exist in other Germanic languages as well (Toivonen *et al*, 2006), though these constructions may not necessarily involve a possessive pronoun and a fixed word equivalent to the English *way*. {3} In fact, the typical cross-linguistic counterpart to the *way*-construction is a reflexive construction, exemplified in (2), which is a characteristic Danish version:

- (2) Han kæmpede sig gennem mængden Danish
he fight-PST REFL through the crowd
'He fought his way through the crowd'

In the literature on Talmian typology of motion events, the *way*-construction is only referred to very peripherally (see, e.g., Callies & Szczesniak, 2008; Mateu Fontanals, 2000; Mateu Fontanals & Rigau, 2002). This paper aims to include the implications of a cross-linguistic analysis of the *way*-construction in this typology discussion.

In his seminal work on expressions of motion events, Talmy (1985, 1991, 2000) reports on characteristic typological differences of lexicalization between SATELLITE-FRAMED (e.g., Germanic) languages and VERB-FRAMED (e.g., Romance) languages. (3) and (4) are often cited examples from Talmy's work:

- (3) The bottle floated into the cave (Talmy, 1985)
 Flasken flød ind i hulen (Danish)
 La botella entró en la cueva flot-ando (Spanish)
 the bottle enter-PST.3SG in the cave float-GERUND
- (4) I kicked the ball into the box (Talmy, 2000)
 Jeg sparkede bolden ind i kassen (Danish)
 Met-í la pelota en la caja de una patada (Spanish)
 place-PST.1SG the ball in the box with a kick

Talmy claims that in expressions of motion events, some languages, e.g. Germanic languages, tend to lexicalize the path of motion (main event) in a satellite, and the manner of motion (co-event) by the verb. {4} Other languages, e.g., Romance languages, tend to lexicalize the main event by the verb, and may express the co-event outside the verb, typically by adding an adverbial.

Talmy's typology has been elaborated and criticized in an extensive literature. The main shortcoming of his typology is that some languages do not seem to fit in his binary typology (see, e.g., Slobin & Hoiting, 1994, Slobin, 2004, Zlatev & Yangklang, 2004) and that almost all languages show substantial amounts of data that do not fit the model (see, e.g., Aske, 1989; Berman & Slobin, 1994; Gennari *et al.*, 2002; Ibarretxe-Antuñano, 2004a, 2004b;

Pedersen, 2009a; Slobin & Hoiting, 1994; Slobin, 1996a, 1997, 2000, 2004; Zlatev & Yangklang, 2004. See also Talmy, 2005, or Beavers *et al.*, 2010 for an overview). In addition, the Talmian typology and later elaborated versions seem to ignore the insights provided by the CONSTRUCTIONAL VIEW, as represented particularly in Goldberg's and Jackendoff's work (see e.g., Goldberg, 1995, 2006; Jackendoff, 1990, 1997; Goldberg & Jackendoff, 2004). They argue that the core meaning of clausal argument structure cannot be attributed to one single constituent, though they do not explicitly discuss the theoretical status of Talmy's typology. Pedersen (2009a) elaborates in detail a construction grammar account of Talmy's typology. They argue that the determination of whether lexical constituents, mostly the verb, are determinative of the argument structure relies on typological differences. In English, a Germanic language, a schematic argument structure construction plays a crucial role in the encoding of the basic meaning of complex events; e.g., the motion path of a motion event. In Spanish, a Romance language, the verb organizes the core meaning in a lexical construction. They also propose that the most fruitful research strategy is to develop a TYPOLOGY OF CONSTRUCTIONS, rather than a typology of languages. A similar point is made in Croft *et al.* (2010) and Beavers *et al.* (2010).

This constructional interpretation of Talmy's descriptive typology may concern more than expressions of the type of complex events, e.g., motion events, discussed in the literature on Talmian typology. Perhaps it is a manifestation of a GENERAL TYPOLOGY OF ORGANIZATIONAL PRINCIPLES in grammar. The contours of a general typology of clausal organization, formulated within the construction grammar framework, are outlined in Pedersen (2009b). According to a general typology of clausal organization, some languages, e.g. English, tend to organize the principal clausal information, the argument structure, by means of complex, schematic constructions, complementing this information by substantial, lexically encoded information; whereas other languages, e.g. Spanish, tend to organize the

argument structure by lexical means around the verb, complementing this principal information by means of secondary, schematically organized, constructions. The principal aim of the present paper is to provide evidence for this proposal, and to discuss the implications for the typology of motion events. The strategy is to analyze, cross-linguistically, English expressions whose argument structure, according to a construction grammar analysis, must be ascribed a schematic form-meaning construction – not predictable from lexical constituents. The cross-linguistic counterparts are then analyzed, with focus on strategies for the encoding of argument structure. The *way*-construction is the case-study, though its analysis will be brought into perspective by discussing similar contrastive analyses of a number of comparable English expressions, such as ditransitive, resultative and communicative expressions, and telic expressions of directed motion.

In the next section, I introduce some principles of the construction grammar framework that are particularly relevant for the analysis of the manner in which clausal information is organized. Secondly, I present results from a cross-linguistic study of the *way*-construction (Section 13.3). Following this (Section 13.4), I put this analysis into perspective by discussing cross-linguistic evidence from other semantic domains, as reflected in both typical and less typical expressions. In Section 13.5, I formulate a hypothesis that enables us to make some cross-linguistic generalizations about the manner in which clausal information may be organized in parallel versions of the *way*-construction, and other construction types. Finally, I draw a link back to Talmy's typology of motion events and discuss some important implications of the analyses presented in this paper (Section 13.6). Wherever examples in Sections 4 and 6 are not provided with references, they are made-up or translated examples, checked by native speakers.

13.2 The construction grammar framework

A construction grammar approach to clausal argument structure is partly in conflict with a lexical approach, according to which argument structure is licensed and organized by the verb (e.g., Grimshaw, 1990; Levin & Rappaport Hovav, 1995; Pinker, 1989). In construction grammar, argument structure is encoded by means of schematic form-meaning pairs, that is, schematic constructions, and specified lexically by the verb. Schematic constructions thus play a crucial role in expressions of argument structure, though it is recognized that a semantic specification of the event, or situation, is provided by the verb, in what is understood as a lexical construction.

In Goldberg's version of construction grammar, CONSTRUCTIONS are non-derived form-meaning pairs of different specificity (Goldberg, 1995, 2006). Substantial information is encoded as LEXICAL CONSTRUCTIONS, e.g., Spanish [casa] / 'house', or idioms, e.g., Spanish [más vale tarde que nunca] / 'better late than never'. Schematic, more general information is encoded at a taxonomically higher level. ARGUMENT STRUCTURE CONSTRUCTIONS are the most important type, such as the English ditransitive construction, which may be formalized as [SUBJ, V, OBJ₁, OBJ₂] / 'X causes Y to receive Z'. Grammatical rules are stored in users' grammar as constructions of even more schematic information, for instance the rule of conjunction reduction, which may be formally represented as [SUBJ, V₁, AND, Ø, V₂] / 'Conjunction reduction'. Language users constantly analyze and categorize input in different construction types. Therefore, identification is basically a matter of users' categorization (e.g., Croft, 2001; Tomasello, 2003). A subject is a form-meaning pair, {S} though from a strict theoretical point of view, it is not a construction since the subject can be derived from the more complex argument structure constructions, for instance, the transitive construction. Nevertheless, if a derived form-meaning pair, such as the subject, is used with very high frequency, it is also stored as a construction. So, even synchronically derived form-meaning

pairs may count as constructions in the grammar (Goldberg & Jackendoff, 2004, Goldberg, 2006).

13.2.1 Organizing argument structure - a contrastive perspective

In the early 1990s, when linguists started addressing issues of the origin of language and its evolution, a near consensus was being shaped on one important issue associated with the relation between grammar and human conceptual representations (Newmeyer, 2003). The basic idea is that grammatical form, i.e. syntax, is anchored in conceptual structure. Syntax, from this perspective, is grounded in predicate-argument structure, that is, conceptual representations of events, actors and entities acted upon (e.g. Jackendoff, 1990; Newmeyer, 1991; Pinker & Bloom, 1990). The implication of this insight is that a simple clause, e.g. with subject, verb and object, is basically built upon the formation of an argument structure, which represents the core information of the clause. This information is complemented by lexically and morphologically encoded information, e.g., modal, temporal or aspectual information. In a construction grammar framework (e.g., Goldberg, 1995, 2006), a typical clausal expression contains in its internal structure, at different levels of specificity, a range of different constructions. In general terms, clausal information is organized by means of two construction types:

- SCHEMATIC CONSTRUCTIONS (SC) that organize information at an abstract level.
- LEXICAL CONSTRUCTIONS (LC) that organize information around a lexical nucleus.

There are, thus, organizing devices in language at different levels of schematicity.

SCHEMATIC SKELETONS and LEXICAL GOVERNMENT are the most important mechanisms. {6}

Almost all languages seem to make use of both organizational devices, though in different manners. Croft (2003), nevertheless, argues that it is misleading to think about lexical rules versus constructions as a dichotomy of grammatical organization. Croft states that verbs

appear to change their meaning when put into particular constructions, for instance, *bake* appears to mean ‘A bake B and give B to C’ in the ditransitive construction. From one point of view, he argues, this meaning may be derived by a lexical rule, i.e. by means of lexical government. Another possibility is that the meaning of *bake* is predictable from the semantics of the construction. According to Croft, there are indications that both analyses are partly right, and that the simplest way to capture these facts is to represent verb-specific constructions in the grammar of English. However, an essential point in Goldberg’s and Jackendoff’s framework is that ultimately the argument structure is determined by the composite effects of the verb and the construction. The verb does not change its meaning so as to license unexpected arguments of the construction (Goldberg & Jackendoff, 2004). For instance, in the ditransitive construction, *bake* is not converted into a transfer-verb in the lexicon. Its contribution to meaning in a ditransitive construction is the same as its contribution to meaning in a transitive construction. In both cases it is ‘A bake B’. We will follow Goldberg and Jackendoff (2004) in this matter.

Some construction grammar frameworks emphasize that constructions are LANGUAGE SPECIFIC (e.g., Croft, 2001). From this point of view, the following questions are particularly interesting for a contrastive study of clausal organization:

- How is clausal information organized in a specific language, and on the basis of which construction types?
- How is argument structure organized?

A preliminary assumption is that languages may differ systematically according to the level of constructional specificity at which the argument structure is organized.

13.3 The *way*-construction

According to Goldberg (1995), basic clausal information in English is encoded in SCHEMATIC ARGUMENT STRUCTURE CONSTRUCTIONS (SC). This core information is specified in LEXICAL ARGUMENT STRUCTURE CONSTRUCTIONS (LC), particularly by the verb. The *way*-construction is a convincing example:

(5) [Peter [fought] his way out of the restaurant]

SC: [SUBJ_i V POSS_i *way* OBL] / ‘X moves Y by creating a path’

LC: [SUBJ V] / ‘A in activity of fighting’

In the *way*-construction, whose basic meaning may be paraphrased as ‘X moves somewhere (Y) with difficulty by creating a path’ (cf., e.g., Goldberg, 1995), none of the lexical items have *per se* a central, organizing role in the encoding of this core meaning. Particularly, the core meaning is not predictable from the lexical meaning of *fought*, but it may not be attributed to the lexical structure of *way* or *out of* either. {7} We have to recognize, instead, that a schematic form, the *way*-construction: [SUBJ_i V POSS_i *way* OBL], carries its characteristic meaning, which cannot be derived from its component constituents. The verb *fought* specifies the means by which this motion event is carried out, i.e. the activity of fighting. {8} Notice that given this very specific meaning predicated by the verb, there are strong restrictions on the subject. {9}

The objective of the current study is to analyze, cross-linguistically, counterparts of English expressions, principally the *way*-construction as exemplified in (5), whose basic form-meaning structure can only be accounted for as encoding by means of schematic form and meaning. Example (6), which is parallel to (5), indicates that Spanish may differ systematically from English in this respect:

(6) Pedro se [abrió/hizo] camino [a codazos] para salir...

Pedro REFL.DAT open/make-PRS.3SG way by elbows to get out

LC: [SUBJ, REFL/DAT, abrió/hizo, OBJ] / 'X creates himself Y (a path)'

SC: [ADV- construction] / 'specifying information'.

In the Spanish version of the *way*-construction, the basic meaning of 'X creates himself a path' is predictable from the inherent meaning and argument structure of the verb: *abrirse camino para salir...* 'open for himself a way in order to move somewhere'; or *hacerse camino para salir...* 'make for himself a way in order to move somewhere'. Specifying information about the means of motion may be added as an adverbial construction (*a codazos*). A verbal expression of the means of motion, as used in English, is not acceptable:

(6') * Pedro [pele-ó] su camino fuera del restaurante

Pedro fight-PST.3SG his way out of the restaurant

There are, thus, indications that the Spanish version of the *way*-construction differs systematically from the English source version, when it comes to how the core information and the specifying information are organized. Examples like (6) suggest that Spanish tends to organize the basic meaning of the *way*-construction in LEXICAL ARGUMENT STRUCTURE CONSTRUCTIONS (LC), by means of valence structure and subcategorization. Supplementary information may be provided by means of an added, SCHEMATICALLY ORGANIZED CONSTRUCTION (SC).

13.3.1 Data and methodology

The discussion of the *way*-construction in this section is based on a corpus study. Searches in a parallel corpus have provided different versions of the *way*-construction: the original English version, and Spanish, German and French versions. The parallel corpus has been constructed by using original English texts and their translations into the three languages. The texts stem from the electronic publications of Project Syndicate (Project Syndicate, 2008), which is an international association of 392 newspapers in 146 countries. Project Syndicate delivers commentaries to the world's foremost newspapers on topics ranging from economics and international affairs to science, culture and philosophy.

The current study can be characterized as semasiological and onomasiological at the same time, in the sense that our objective is to determine how a specific semantic structure ('X moves somewhere with difficulty by creating a path') identified in a specific expression type of one language (the *way*-construction in English) is expressed in other languages. For this purpose, particularly the parallel corpus is a suitable data source. Large monolingual corpora are available on the Internet – regarding Spanish, for example, CREA (approximately 200 million words) – but this corpus type is not suitable for the present study since searches in monolingual corpora require a search string, like '*way*' for English, that we do not have for Spanish and the other non-English languages. The parallel corpus allows us not only to identify the *way*-construction in English, by means of a simple search string, but it also provides us with expressions of the same meaning structure in other languages. There are disadvantages to using parallel corpora as well. Particularly, their relatively limited size rules out the possibility of making use of statistical calculations. Moreover, when using parallel corpora, we have to take into account that the translation process, including individual preferences of the translators, may influence the choices made in the production of the parallel versions.

Our parallel corpus contains relatively short texts (max. two pages), which are divided into clearly marked paragraphs for each version. This enables us to shift easily from one language to another. The actual size of the corpus is 618 texts, available in the four languages. From the corpus, we have extracted a sample of 20 *way*-expressions, each of which is available in four versions. The searches have been relatively time-consuming tasks. They were carried out manually as simple lexical searches. We searched for the word *way*, sorting out all irrelevant occurrences, in order to find source expressions of the *way*-construction in English. Moreover, a newspaper corpus is admittedly not the ideal data source since the *way*-construction is probably more frequent in spoken than in written discourse. However, the easy accessibility of parallel versions of the *way*-construction in different languages has been decisive for the choice of corpus. {10}

13.3.2 Parallel versions of the *way*-construction

In this section, parallel versions of the *way*-construction in English, German, Spanish and French are analyzed. In (7), the core meaning ‘X moves Y with difficulty by creating a path’ is not clearly predictable from the lexical meaning of *making* or the prepositional phrase, though the verb does not provide a specification of the means of motion either:

(7) a *making* its way into the heartland of civil society

b ihren Weg in die Mitte der Zivilgesellschaft *antritt*.

its way in the middle of civil society compete-INF

c se *est-á* integr-ando al corazón de la sociedad civil.

REFL be.PROG-PRS.3SG integrate-GER to the heart of the society civil

The core meaning must be mapped onto the schematic form: [SUBJ_i V POSS_i *way* OBL], which carries the characteristic meaning of the *way*-construction, as argued in the analysis of (5). Regarding the lexical specification of the means by which this metaphoric motion event is realized, the semantic contribution of the verb *making* is relatively neutral. The German version (7b) is a direct parallel to the English *way*-construction. The core meaning cannot be derived from the verb (*antritt* = ‘compete’) nor from the satellite (= prepositional phrase). It must be attributed to a German counterpart to the *way*-construction. The verb *antritt* provides a lexical specification of the means by which this figurative event of ‘moving with difficulty by creating a path’ is carried out. In (7c), the corresponding Spanish version is centered in the complex verbal predicate *se está integrando*, which via its valence structure predicts the principal event: ‘X creates himself a path’. This event is not specified by a schematically organized, adverbial construction, as it is in (6). This analysis suggests that in the Spanish version, the core information is organized as a lexical, verbal construction, which is also what is found in (6). There is no French version available in the corpus.

In (8), the skeletal argument structure associated with the *way*-marker must also be organized schematically as a *way*-construction: [SUBJ_i V POSS_i *way* OBL] / ‘X moves Y with difficulty by creating a path’:

(8) a he *barged* his way past Hillary Clinton

b konn-te er sich an Hillary Clinton, ..., vorbei-*drängeln*
 can-PST.3SG he REFL Hillary Clinton past-push-INF

c logr-ó super-ar a los *tumbos* a Hillary Clinton

(he) manage-PST.3SG do better-INF in a clumsy way than Hillary Clinton

d il a pu dépass-er Hillary Clinton

he can-PRF.3SG pass-INF Hillary Clinton

The verb *barged* specifies lexically the means by which the subject passed Hillary Clinton. He may have acted in an unceremonious and threatening way, paying little respect, and thereby made his way past H. C. In this case, the German version is not a direct copy of the English *way*-construction; though, interestingly, when it comes to clausal organization, it has the same schematic characteristics. The core meaning cannot be derived from either the verb (*drängeln* = ‘pushed’) or the satellite (*vorbei* = ‘past’). It can only be accounted for by positing the existence of a German reflexive counterpart to the schematic *way*-construction in English. The German version may be formalized as [SUBJ, V_{aux}, REFL, OBL, V] / ‘X moves Y with difficulty by creating a path’. {11} This schematic construction is complemented with a causal specification lexically by the verb *drängeln*. {12} In (8c), the complex verbal predicate *logró superar* organizes lexically, in a valence structure, the encoding of the core meaning (‘he managed to do better’). This core meaning is therefore predictable from the verbal predicate. Like (7c), example (8c) suggests that the Spanish version is basically organized as a lexical, verbal construction. In this case, the core meaning is further specified by a schematically organized construction, as suggested in the discussion of (6): *a los tumbos*, indicating that he did it in a clumsy way. The French version appears to be organized as the Spanish, though it has no secondary constructional specification.

Also in (9b) and (10b), the German versions of the *way*-construction, the organization of the core meaning may be represented schematically as a reflexive construction [SUBJ, V, ..., REFL, OBL, V] / ‘X moves Y with difficulty by creating a path’, cf. (8b):

(9) a if you try to *bob and weave* your way... towards an end game

b wenn man versuch-t, sich... auf ein Endspiel *zuzuschlängeln*
if you try-PRS.3SG REFL.3 to an end game to snake-INF

c si se intenta abrir camino ... hacia el final del juego.
if you try-PRS.3SG to open way toward the end of the game

d si vous tent-ez de louvoy-er ... vers une solution
if you try-2PL to squeeze-INF toward a solution

(10) a We may be able to *manage* our way through it

b sind wir vielleicht in der Lage, uns hindurchzumanövrier-en
be-1PL we maybe in a position REFL.1PL around-to-manoeuvre-INF

c tal vez pod-amos sorte-ar-la
maybe (we) may-1PL be able to sort-INF-ACC out

d nous allons peut-être nous en sort-ir
we go-PRS.1PL perhaps we find-INF a way out

In the English as well as the German version, the verbal lexemes provide more specific information on the means by which these motion events take place (*bob and weave* /

zuzuschlängeln and *manage* / *manövrieren* respectively). In the Spanish versions – see (9c) and (10c) – the core meaning, ‘X create a path’, is predictable from the complex predicate and its argument structure (*se intenta abrir camino* / *podamos sortearla*). This is also true in the French version in (9d) (*vous tentez de louvoyer*), while the core meaning of the *way*-construction is not captured in the French translation in (10d) (*nous allons peut-être nous en sortir*). Neither the Spanish nor the French versions of (9) and (10) have further specifications of the core meaning. (11b) appears to be a direct German parallel to the English *way*-construction in (11a):

(11) a we have tried to *inch* our way to a settlement ...

b hab-en wir versuch-t, uns *Zentimeter um Zentimeter* auf unserem Weg zu
 AUX-PRS.1PL we try-PART us centimetre by centimetre on our way to
 einer Regelung *vorwärts* zu *beweg-en*, ...
 a settlement forward to move-INF

c hemos intent-ado *arduamente* lleg-ar a un arreglo ...
 (we) try-PRF.1PL hard reach-INF to a settlement

d nous avons tenté de nous rapproch-er *pas à pas* d’un accord ...
 we try-PRF.1PL we get close-INF step by step to a settlement

Interestingly, the core meaning of the German version in (11b) (‘reach, with difficulty, a settlement by creating a path’) is not centred in a *Weg*-construction that is parallel to the original English *way*-construction (11a). The core meaning is centered in the reflexive

construction: ‘...versucht uns vorwärts zu bewegen’. The verbal specification (*bewegen*) is rather neutral, as compared to the English version (*inch*). Instead, the remainder of the clause provides the details (*Zentimeter um Zentimeter ... auf unserem Weg zu einer Regelung*). The core meaning, ‘X tries to reach Y’, is provided by lexical constructions in the Spanish and the French versions. It is organized around the complex predicates *hemos intentado llegar* and *avons tenté de rapprocher*. The verbal valence structure makes predictions about the core meaning, which is similar to the core meaning that characterizes the *way*-construction. In both versions, the core meaning is further specified by schematically organized adverbial constructions (*arduamente, pas à pas*). In (12b), a combination of the reflexive construction and the [...POSS way...] construction characterizes the schematic construction of the core meaning in the German version (*die Bulldozer können sich ihren Weg bahnen*). The core meaning, ‘X pulls down Y’ and ‘X not take into account Y’, is organized around, and predicted by, the verbal predicate in the Spanish version (12c) (*puede derribar cualquier aldea*) and in the French version (12d) (*n'a nullement besoin de tenir aucun compte*) respectively:

(12) a it can *bulldoze* its way through any village in its path.

b *könn-en sich die Bulldozer ihren Weg,..., durch jedes Dorf bahn-en.*
 could-PRS.3PL REFL the bulldozers their way,..., through everyvillage pave-INF

c *pued-e derribar con maquinaria pesada cualquier aldea que*
 (it) could-PRS.3SG topple with machinery heavy every village that
 le estorb-e
 DAT obstruct-PRS.3SG

d elle n'a nullement besoin de tenir aucun compte des villages
 there is no need to take-INF into account the villages
 qui se trouvent sur le tracé prévu
 that REFL find-PRS.3PL on the route plan-PART

In (13c), (14c) and (15c), the core meaning, 'X find Y in Z', seems in Spanish, again, to be organized lexically in verbal predicate-argument structure on the basis of valence relations (*buscó en Google la manera de llegar / él pudo encontrar la manera de llegar / esta liquidez encontrará su destino en el exterior*):

(13) a he Googled his way to the only lawyer in Russia

b fand er über Google den einzigen Anwalt in Russland
 find-PST.3SG he in Google the only lawyer in Russia

c busc-ó en Google la manera de llegar al único abogado (he)
 search-PST.3SG in Google the manner of reach-INF the only lawyer
 en Rusia
 in Russia

d (il) a trouvé sur Google les coordonnées du seul avocat de Russie
 he find-PRF.3SG in Google the address of the only lawyer in Russia

(14) a he was able to find his way to a lawyer

b es ihm gelang, einen Anwalt zu find-en.

it DAT succeed-PST.3SG a lawyer to find-INF

c él pudo encontr-ar la manera de lleg-ar a un abogado

he could-PST.PFV.3SG find-INF the manner to reach-INF to a lawyer

d il a réussi à contact-er un avocat.

he succeed-PRF.3SG to contact-INF a lawyer

(15) a much of it will find its way abroad

b wird ein großer Teil ins Ausland abfließ-en

will-PRS.3SG a larger part abroad drain-INF

c gran parte de esta liquidez encontr-ará su destino en el exterior.

large part of this liquidity find-FUT.3SG its destiny abroad

d elles iront en grande partie à l'étranger.

they go-FUT.3PL in large part abroad

It cannot be properly translated in the German version (*fand er den einzigen Anwalt... / einen Anwalt zu finden / wird ins Ausland abfließen*), nor in the French version (*a trouvé les coordonnées .../ il a réussi à contacter un avocat / elles iront partie à l'étranger*). {13}

The contrastive analysis of the *way*-construction indicates that Spanish, as opposed to English, tend to organize the basic clausal meaning lexically by the verb, while

supplementary information may be provided by means of schematically organized adverbial constructions. German follows the English pattern, as observed in previous studies (e.g., Toivonen *et al*, 2006), in the sense that the core skeletal meaning and the secondary specification are mapped onto a schematic construction and the verb respectively. German, though, typically makes use of a reflexive construction as a counterpart to the *way*-construction in English. French appears to behave like Spanish.

It may be objected, nevertheless, that the contrastive perspective on the *way*-construction only shows that some languages (e.g. Spanish and French) do not have expressions, as do other Germanic languages, that are comparable with the *way*-construction in English. Cross-linguistically, different expression types may provide a similar meaning. This difference, though, is not necessarily due to a difference in the way this meaning is organized in the clause. The problem is that verb-predicted core meaning, as we have observed for Spanish, does not prove that the clausal information is lexically organized by the verb. The expression might be built upon another schematic construction, e.g. the transitive construction, while the meaning that is comparable with the *way*-construction may be provided by the verbal lexeme. Analyses of the Spanish texts, for example, might be interpreted as simply indicating that Spanish does not have an expression equivalent with the characteristic meaning of the English *way*-construction, but that it has other (schematically or lexically organized?) expressions with similar meanings. Nothing would then be indicated about the potential in Spanish grammar of organizing clausal argument structure in schematic or lexical argument structure constructions. Moreover, in some cases, for example in (13)-(15), we found that the translations into German and French do not capture the core meaning of the *way*-construction. In these cases, nothing is indicated about the organizing devices (schematic or lexical) of the language in question, as compared to English.

The data do seem to show formal regularity in equivalent expressions of the English *way*-construction. Nevertheless, we may preferably want to extend our contrastive analysis to include a range of semantic domains in which we know that English and Spanish, for example, have common comparable expressions. Such an analysis is conducted in the next section.

13.4 Evidence from other semantic domains

In this section, we examine Spanish expressions of argument structure that have direct counterparts in English. When these Spanish expressions are characterized by having VERB-PREDICTED ARGUMENT STRUCTURE, e.g., *le dio una tarta* ‘she gave him a cake’, the question is whether the same core meaning, i.e. volitional transfer, may be expressed in a NON-VERB-PREDICTED CONSTRUCTION, as in English examples such as *she baked him a cake* (Goldberg, 1995). If only verb-predicted core meaning is acceptable, this is an indication that Spanish, as opposed to English, organizes argument structure lexically, by means of lexical constructions.

13.4.1 The ditransitive construction

The core meaning transmitted by the English ditransitive construction involves transfer between a volitional agent and a willing recipient (‘X caused Y to receive Z’) (Goldberg, 1995). The main content of (16), which is a prototypical ditransitive expression, is thus a meaning of transfer, which is reflected in the inherent ditransitive meaning of the verb *gave*. Regarding form as well as meaning, Spanish has a comparable, yet not identical, expression type, as exemplified in (17):

(16) She gave him a cake

(17) Le dio una tarta

DAT (she) give-PST.PFV.3SG a cake

Prototypical expressions of the ditransitive, however, as in (16)-(17), do not indicate whether the transfer-meaning is organized in a lexical argument structure, or whether it is organized in a schematic argument structure construction. In the latter interpretation, the schematic construction is redundantly supported by a verbal specification whose semantic contribution is mostly the same. The ‘confusion’ is due to the trivalent meaning of the verb. In (16) and (17), the transfer-meaning is perfectly predictable from the trivalent meaning of the verb: ‘X gives Y to Z’. On the other hand, more atypical examples, such as (18), in which the transfer-meaning is not predictable from the verb, suggest that this core meaning is determined independently in a schematic ditransitive argument structure construction (SC), and that the verb (LC) provides a specification of the involved activity:

(18) She baked him a cake

(Goldberg, 1995)

SC: [SUBJ,V,OBJ₁,OBJ₂] / ‘X causes Y to receive Z’

LC: [SUBJ,V,OBJ] / ‘A bakes B’

The principal argument for this analysis is that the transfer-meaning cannot plausibly be part of the lexical meaning of *bake* (Goldberg, 1995). If the core meaning were organized by the verb, the lexical meaning of *bake* should include a special sense of transfer, which is not plausible. The point here is that Spanish does normally not allow such atypical usage. {14}

Example (19) would be a typical Spanish version of (18):

(19) Le hizo una tarta

DAT make-PST.PFV.3SG a cake

‘She made him a cake’

LC: [SUBJ, V, OBJ, IOBJ] / ‘complex make-transfer-event’

The transfer-meaning is a frequent meaning pattern in Spanish, as exemplified in (17) and (19), though it does not occur in a non-verb predicted construction (Martínez Vázquez, 2003; Pedersen, 2009b). This observation indicates that the core meaning in (17) and (19), comparable with the English ditransitive, is a verb-predicted argument structure, and that it is organized in a lexical argument structure construction.

13.4.2 The resultative construction

The same argument applies for expressions of resultative argument structure. The examples (20) and (21) demonstrate that Spanish has resultative expressions comparable with the English resultative: {15}

(20) She painted the house red

(21) Pint-ó la casa roja

(she) paint-PST.PFV.3SG the house red

We cannot determine, though, whether the resultative meaning in the two versions is encoded in a lexical argument structure construction, or in a schematic argument structure construction. As for ditransitive expressions, English verbs that do not *per se* reflect the

resultative core meaning, may nevertheless instantiate a schematic argument structure construction that on an independent basis encodes the resultative core meaning (see e.g. Goldberg, 1995; Goldberg & Jackendoff, 2004). Spanish verbs do not allow such a use, which is exemplified in (22) and (23):

(22) She cried herself asleep (Goldberg, 1995)

(23) *Llor-ó a sí misma dorm-ida
 (she) cry-PST.PFV.3SG to REFL.3SG sleep-PART.FEM

(24) exemplifies a verbally organized expression in Spanish whose meaning is similar to the meaning of (22), but notice that the core meaning is not resultative as in (22):

(24) Se durm-ió llor-ando
 REFL (she) sleep-PST.PFV.3SG cry-GERUND
 ‘She felt asleep crying’

Unlike (24), the resultative meaning in (22) is transitive. Spanish allows a similar resultative construction, exemplified in (25), though it is not a typical Spanish expression:

(25) Se durm-ió a sí misma llor-ando
 REFL (she) sleep-PST.PFV.3SG to REFL.3SG cry-GERUND
 ‘She slept herself crying’

This expression type implies mismatch between a schematic argument structure ('X acts on Y = X') and the semantics of the verb ('X *dormir*'), but it is by no means unacceptable, since, unlike the English version in (22), the nucleus of the principal resultative meaning is centered in the verb. {16}

In (26)-(27), the English verb *to kiss* and the corresponding Spanish verb *besar* appear in expressions of a transitive argument structure, which is reflected in the verbal lexemes:

(26) She kissed him

(27) Le bes-ó

DAT (she) kiss-PST.PFR.3SG

In English, the same verb may also appear in a non-verb predicted resultative argument structure construction, whose meaning cannot be predicted by the verbal lexeme:

(28) She kissed him unconscious (Goldberg, 1995)

This kind of verbal alternation does not have an equivalent in Spanish:

(29) * Le bes-ó inconsciente

DAT (she) kiss-PST.PFR.3SG unconscious

A Spanish version of (28) would organize the resultative argument structure around the verb, in a lexical argument structure construction:

- (30) La desmay-ó con un beso
ACC he faint-PST.PFR.3SG with a kiss

The different ways of organizing the resultative core meaning in English and Spanish are formalized in the analyses of (31) and (32):

- (31) He licked the plate clean

SC: [SUBJ,V,OBJ, PRED] / 'X caused Y to become Z'

LC: [SUBJ V OBJ] / 'A lick B'

- (32) Limpi-ó el plato con la lengua
(she) clean-PST.PFR.3SG the plate with the tongue

LC: [SUBJ V OBJ] / 'X cleaned Y'

SC: [ADV- form] / 'specification (of causal activity)'

The findings from (20)-(32) indicate that schematic and lexical argument structure constructions have a privileged role in the clausal organization of resultative meaning in English and Spanish respectively. Resultative argument structure constructions do, thus, exist in Spanish, though it seems that they only combine with verbs that license and predict the resultative argument structure. Expressions of caused motion may be analyzed contrastively in a similar manner (see Pedersen, 2009a, b). {17}

13.4.3 Constructions of communication

We now turn to the skeletal argument structure of communicative meaning: ‘X communicates Y’. (33) and (34) exemplify comparable English and Spanish expressions of this core meaning:

(33) He said yes

(34) Dijo que sí
he say-PST.PFR.3SG that yes

Again, we cannot determine whether the communicative argument structure in the two languages is organized lexically by the verb, or whether it is organized skeletally as a schematic argument structure construction, and specified lexically by the verb. More atypical communicative expressions, however, like (35) for English, indicate that the communicative argument structure is organized in a schematic argument structure construction, and that the communicative act is specified by the verb:

(35) He nodded yes

(36) *Cabece-ó sí
he nodd-PST.PFR.3SG yes

The reason, also in this case, is that the core meaning of communicating something cannot plausibly be part of the lexical meaning of nodding, which is, presumably, the reason why a parallel Spanish version is not possible; see (36). Martínez Vázquez (2003) observed that such mismatches between the semantics of the verb and the communicative meaning, are very

productive in English, as opposed to in Spanish, which only allows them sporadically.

Martínez Báñez suggests that the low occurrence of this kind of mismatch in Spanish is due to a cognitive preference of Spanish speakers to avoid syntactic metonymies. {18} But why should Spanish speakers prefer to avoid awkward, non-predictable combinations of lexical and constructional meaning? Examples like (37) give us a hint. The expression in (37), in which the communicative core meaning is provided lexically by the verbal predicate, would be a typical Spanish version of (35):

- (37) Asint-ió con la cabeza
 (he) consent-PST.PFR.3SG with the head

The nodding-activity is specified by a schematically organized adverbial construction (*con la cabeza*). It seems that Spanish, basically, only allows the core meaning (the argument structure) to be organized by the verbal predicate; a principle for organizing clausal information in Spanish for which we have observed indications in a broad range of semantic domains (cf. previous sections of this paper).

13.5 Hypothesis of cross-linguistic variation in syntax

The cross-linguistic analyses in Sections 13.3 and 13.4 indicate that observed differences of clausal organization between English and Spanish are due to a general pattern. English tends to organize clausal core information, the argument structure, in schematic argument structure constructions, leaving more detailed information for lexical, and further constructional, specification. This explains the fact that mismatches between the semantics of the verb and the core semantics of, for example, the *way*-construction, the ditransitive, the resultative or the communicative construction are licensed, and productive in English. Spanish tends to

organize the argument structure lexically by the verb, leaving supportive information for constructionally organized specifications. This constructional specification may consist of schematic constructions of different kinds, with different functions. It may be specifying devices that is added to the lexically organized argument structure construction, or it may, e.g., be complementary modal, temporal or aspectual information.

Contrastive patterns are obviously not the same as typological differences. However, the cross-linguistic analysis of the *way*-construction indicates that this pattern not only concerns English and Spanish, but also German and French. Germanic languages seem to behave like English, whereas Romance languages in general seem to behave like Spanish. As pointed out by Schøsler (forthcoming, cited in Noël 2007, p. 75), in Latin, arguments were first of all identified by means of the lexicon, i.e. selectional restrictions imposed by the verb, supplemented with indications of the nominal morphology. In modern Romance languages, there is a larger variety of grammatical devices, i.e. schematic constructions, used as a supporting device for identifying the arguments, for instance, word order constructions, or prepositional phrases. {19} Also non- or less-related languages like Turkish and Hindi seem to behave like Spanish (Narasimhan, 1998). In many languages, in fact, the verbs are much more restrictive than they are in English, in the sense that they only appear in syntactic configurations that match their meanings (Goldberg, 2006). In spite of this observation, Goldberg maintains her position that schematic argument structure constructions have universal status as the basic encoding device by stating that *yet it seems unlikely that they fail to form argument structure constructions in such languages...* (Goldberg 2006, p. 120). It seems reasonable to assume that the formation of schematic constructions in grammar, on the basis of generalizations from usage, is universal. But our cross-linguistic analyses of the *way*-construction and other expression types in other semantic domains suggest that schematic

argument structure constructions are not universally the principal encoding devices in clausal organization of argument structure.

13.6 Implications for Talmy's typology of macro-events

In this section, I discuss some implications of the present proposal for Talmy's typology of MACRO EVENTS (Talmy 2000). {20} Our proposal argues that there must be some deeper principles operating behind the Talmian dichotomy of satellite- vs. verb-framed languages. Not only Spanish, but also other Romance languages, and languages like Turkish and Hindi, which, as we have seen, only allow clausal meaning that matches the verbal meaning, are all considered verb-framed languages in the Talmian typology. This apparent correlation between verb-predictive languages and verb-framed languages indicates a connection between the Talmian typology and principles of the organization of argument structure. The existence of such a connection is not a matter of course. In principle it is not difficult to imagine the existence of a Talmian verb-framed language in which some verbs may be used in non-verb-predictive constructions. Recall that, in fact, Talmy's typology only concerns five semantic domains: motion, state change, temporal contour (aspect), action correlation and events of realization/completion.

Nevertheless, by linking Talmy's typology to principles of clausal organization of argument structure, we may better understand common deviations from the basic patterns in Talmy's typology. For instance, the hypothesized schematic organization of argument structure in Germanic languages enables us in these languages to organize expressions on the basis of different schematic constructions. {21} As we shall see in this section, this may explain some usage patterns that are unpredicted in Talmy's typology. It will also be demonstrated that the hypothesized verbal organization of argument structure in Romance

languages may explain the constraints, which are unpredicted in Talmy's typology, on the use of manner of motion verbs with directional satellites in Spanish expressions of motion events.

In Talmy's generalized typology (Talmy, 1991, 2000), a change of state in Germanic languages should be mapped onto a satellite, and specified by the verb, as in (38):

- (38) Han puste-de stearinlyset ud Danish
he blow-PST the candle out
'He blew the candle out'

However, expressions like (39), in which the main event, the state change, apparently is mapped onto the verb, are acceptable as well:

- (39) Han slukke-de stearinlyset Danish
he put-PST out the candle

The acceptability of (39), but precedence of (38) as a macro-event, may be explained referring to basic principles of clausal organization, as outlined in Section 13.5. (39) may be analyzed as a schematic transitive argument structure construction: [SUBJ, V, OBJ] / 'X acts on Y', providing the core meaning, on the basis of which the verbal predication specifies the meaning of state change. This way of organizing the state change meaning, however, does not facilitate a specification of the manner (*pustede*) as in (38). Likewise, example (41) may be an alternative to (40):

- (40) Han sparke-de bolden tværs over banen Danish
he kick-PST the ball across the field

‘He kicked the ball across the field’

- (41) Han send-te bolden tværs over banen Danish
he send-PST the ball across the field
‘He sent the ball across the field’

In (41), a verb with the meaning of caused motion is used, redundantly, in a schematic caused motion construction (‘X caused Y to move Z’) impeding a substantial verbal specification of the cause (‘he kicked the ball...’). Thus, if we assess (38)-(41) as communicated information of specific complex events, the principles of clausal organization for Germanic languages will favor the variants in (38) and (40). The theory predicts that Danish, as well as English, organizes the argument structure of these complex events in a schematic construction, leaving the secondary information for verbal specification. This prediction is best fulfilled in (38) and (40), which are therefore prototypical Danish expressions of these macro-events. The prediction is also fulfilled for (39) and (41), though the verbal specification is in these variants schematic (‘A *slukkede* B’, ‘A *sendte* B...’), in the sense that it completes the basic resultative / caused motion argument structure; it is not substantial (as it is in ‘A *pustede* B...’, ‘A *sparkede* B...’). The analysis of (39) also applies for expressions like (42):

- (42) He entered the room

The use of PATH VERBS in English, as exemplified in (42), in Talmian typology, is usually explained with reference to the fact that verbs like *enter* are historically related to Romance languages (Latin) (e.g., Talmy, 2000, II: 228; Beavers *et al*, 2010). However, this does not explain why other verbs also may express the main event in Germanic languages, as

exemplified in (39) and (41) for expressions of ‘state change’ and ‘caused motion’ in Danish, and by English path verbs such as *rise*, *fall* and *sink* (Beavers *et al.*, 2010).

According to the Talmian typology, a typical Romance (Spanish) counterpart of (38) would be (43):

- (43) *Apag-ó* *la vela* *de un soplido*
 put-PST.PFR.3SG out the candle with a blow

in which the main event, the state change, and the co-event, the causal specification, are mapped onto the verb and outside the verb respectively. Spanish, however, has another variant – exemplified in (44) – that maps the causal specification onto the verb, which runs counter to the Talmian theory:

- (44) *Sopl-ó* *la vela* *(*fuera)*
 blow-PST.PFR.3SG the candle (out)

If we follow the organizational principles for Spanish suggested in this paper, the argument structure is organized by the verb and the clausal arguments have to be licensed by the semantic structure of the verb. First of all, the verb provides a substantial specification of the activity of blowing (*sopló* = ‘blew’). The skeletal transitive structure of (44) is, however, also licensed lexically by the verb: ‘X transferring energy to Y’. In addition, the substantial lexical meaning of the verb implies a potential, though marginal, associative reading of state change: ‘X caused Y to become Z’, which enables this construction type to be an alternative to the prototypical one exemplified in (43). The possibility of adding a directional satellite, as in the Germanic type, is ruled out, since the directional meaning of the satellite is not licensed by the

lexical structure of the verb (*soplar*); see also below. Assessed as an expression of state change, the corresponding resultative reading is licensed by the verb, though it is not prominently expressed, neither as the core meaning of the verb, nor as an added subcategorized satellite. The secondary information, the substantial causal specification, is unusually encoded as the core meaning of the verb. The basic prediction for clausal organization in Spanish, that the skeletal argument structure has to be licensed by the verb, is therefore fulfilled for (44); though it is an atypical encoding option since the skeletal argument structure is not provided as the core meaning of the verb. This explains the acceptability of (44), but precedence of (43), assessed as expressions of state change.

According to Slobin and Hoiting (1994), Spanish expressions of motion with atelic manner verbs and a satellite are only acceptable as long as the motion event does not implicate a process in which a boundary is crossed (e.g., a goal or an endpoint; see Aske 1989). This condition is fulfilled in (45), but not in (46):

(45) La botella flot-ó hacia la cueva (Aske, 1989)
 the bottle float-PST.PFR.3SG toward the cave
 ‘The bottle floated toward the cave’

(46) * La botella flot-ó a la cueva (Aske, 1989)
 the bottle float-PST.PFR.3SG to the cave
 ‘the bottle floated to the cave’

The verb *bailar* makes another good example:

(47) Bail-ó hacia la puerta

(she) dance-PST.PFR.3SG toward the door

‘She danced toward the door’

(48) * Bail-ó a la puerta

(she) dance-PST.PFR.3SG to the door

‘She danced to the door’

Considered as a matter of principles for clausal organization in Spanish, cf. the current hypothesis, the essence of the unacceptability of (46) and (48) is that the meaning of *flotar/bailar* (‘float’/‘dance’) does not predict, and thereby not license, a telic action. These verbs may combine with a directional PP, as in (45) and (47), because the activity of *bailar* may have a specific direction. The result, though, is not a telic action. The same principles may explain why (49) and (50) seem to be acceptable in the right context:

(49) La botella flot-ó hasta la cueva

the bottle float-PST.PFR.3SG to the cave

‘The bottle floated to (it reached) the cave’

(50) Bail-ó hasta la puerta

(she) dance-PST.PFR.3SG to the door

‘She danced to (she reached) the door’

The meaning of the verbs (*flotó/bailó*) excludes a reading of a telic action with a goal, but it may license that the atelic activity takes place until an endpoint, marked by a PP. It is unclear

Interestingly, if we choose atelic manner verbs like *nadar* or *correr*, the principles suggested by Aske and Slobin and Hoiting cannot account for the acceptability of (51) as well as (52): {22}

- In (52), the atelic manner verbs are used in a ‘telic action with a goal’ context. The reason is that even though the meaning of the verbs *nadar/correr* is atelic, it is still an activity that typically involves directed motion toward a goal (e.g., *he swam across the bay, he ran to the beach*). Therefore, although these verbs in isolation have an atelic meaning, they do license a telic context. Accordingly, they may organize expressions of telic actions marked by a PP, as opposed to other atelic verbs such as *flotar* and *bailar* that may not. The examples (53)-(55), extracted from the corpus CREA, are for the same reason perfectly acceptable:

- (53) Corr-ió a-l lavabo (CREA)
 (he) run- PST.PFR.3SG to-the toilet
 ‘He ran to the toilet’

- (54) Nad-ó a tierra (CREA)
 (he) swim-PST.PFR.3SG to land
 ‘He swam to the shore’
- (55) Nad-ó de Dover a Calais (CREA)
 (he) swim-PST.PFR.3SG from Dover to Calais
 ‘He swam from Dover to Calais’

Even though examples like (53)-(55) are acceptable, they are relatively rare (see Pedersen to appear b for quantitative evidence). The reason seems to be that the lexical basis for the verbal organization of the directed motion event is largely inhomogeneous. The meaning of goal-oriented motion is not represented as the verbal core meaning, it is rather marginal and associative, unlike the expression of directed motion in (56):

- (56) Pedro sali-ó fuera
Pedro go-PST.PFR.3SG out out
‘Pedro went out’

Comparing (44) with (56), the latter is a completely normal expression, in which the directional meaning is redundantly marked by a satellite, in spite of what is predicted by Talmy's typology (see e.g. Aske, 1989). The core meaning of direction and endpoint (telicity) is mapped onto the verb (as predicted in the present framework), but reinforced by the satellite (*fuera*). The reinforcement is in this case licensed by the lexical meaning of the verb, while the meaning of the satellite in (44) is not licensed by the meaning of the verb.

If we adopt the principles for clausal organization, as outlined in Section 13.5, as the typological fundamentals, instead of the more rigid categorization of languages in terms of patterns of lexicalization, as suggested by Talmy (among many others that follow his typology), it is apparent from this section that a broader range of variation may be accounted for in a systematic way. In addition, the proposal makes predictions about which construction types are prototypical as expressions of complex events. In other words, the proposal makes predictions about the typical patterns, but it also accounts for, in a systematic manner, the substantial variation that can be observed.

13.7 Conclusion and perspectives

In this study, we have explored how the meaning of the *way*-construction, and of other complex predicate constructions, may be expressed in a Romance language, with particular focus on Spanish. We found that Spanish versions of, for instance, the *way*-construction and the resultative do exist, though with the restriction that they have to be licensed and predicted by the verbal predicate. We suggest that this restriction is attributable to a fundamental organizing role of the verbal lexeme in Romance languages, as opposed to Germanic languages, for which a central role of CONSTRUCTIONS has recently been proposed (e.g. Goldberg, 1995, 2006; Goldberg & Jackendoff, 2004).

The cross-linguistic analysis has thus indicated that there may be typological differences regarding the way clausal argument structure is organized. This insight has led to a new interpretation of Talmy's descriptive typology of macro-events. It accounts, in a systematic manner, for the typical patterns as well as the variation that can be observed. Given the validity of this analysis, the huge amount of data originally meant for attesting or refining Talmy's typology of lexicalization, may potentially be converted into evidence for a typology of clausal organization of argument structure.

Such a general typology of organizational principles may prove to be a challenge to the principles of parametric variation in syntax as envisioned in Chomsky (1981) and defended by Snyder (2001), among others, in his important study of parametric variation in syntax. Snyder's principal claim, based on converging evidence from child language acquisition and comparative syntax, is that the theory of parameter setting, in the classical sense of Chomsky (1981), is correct. In some languages, he claims, the compounding parameter is activated, while in other languages it is not. An important implication of Snyder's analysis is that the availability of complex-predicate constructions, such as the English resultatives and the telic expressions of directed motion discussed in this paper, varies across languages. A Romance language like Spanish, for example, appears, in this approach, to be a strong candidate for a language in which complex predicates of the English type are systematically excluded since the compounding parameter in Spanish is not activated.

Goldberg & Jackendoff (2004), among others, show convincingly that the CONSTRUCTIONAL VIEW must play an indispensable role in grammatical theory. By accepting this, they argue, the constructional view becomes a serious challenge to the parameter theory. They point out that because certain aspects of various construction types, for instance the *way*-construction, are so rare cross-linguistically, and on occasion peculiar to English, we must question an attempt to characterize them in terms of parameter settings in the sense of principles and parameters theory. As we have seen, several other Germanic languages, including Danish, Swedish, Norwegian, German and Dutch, have a construction with almost the same meaning as the English *way*-construction. However, the three former languages use a reflexive construction instead of the *way*-construction, and the two latter use specific reflexive constructions and different combinations of reflexive constructions and parallels to the *way*-construction (see van Egmond, 2006; Ludwig, 2005; Seland, 2001; Toivonen, 2002a, 2002b, Verhagen, 2003). According to Goldberg and Jackendoff, such cross-linguistic

differences are stipulations that speakers of each language must learn as schematic constructions. If schematic constructions, they argue, have appeared to be necessary in the theory of grammar to account for, for example, the *way*-construction and cross-linguistic variants of the *way*-construction, there can be no a priori objection to using them to present detailed accounts also for the resultative construction and many other constructions of complex events. This has turned out to be a challenge to the parameter theory since practitioners of this approach have not been able to come up with comparably detailed accounts (Goldberg & Jackendoff, 2004, p. 564).

In the present study, we have followed the CONSTRUCTIONAL VIEW, though recognizing that there are systematic typological differences of the kind pointed out by Snyder (2001). Our position is 1) that typological distinctions made on the basis of lexicalization patterns (Talmy, 1991, 2000) are superficial, and not fundamental; 2) that typological distinctions made on the basis of parameter setting (Chomsky, 1981; Snyder, 2001; among others) lack complexity and are too much focused on grammatical form; 3) that the CONSTRUCTIONAL VIEW (Goldberg & Jackendoff, 2004; among others) should recognize that in some languages, lexical constructions have a central role in clausal organization of argument structure, while schematic constructions correspondingly play a more secondary role; and 4) that we should make fundamental typological distinctions on the basis of the relative importance of constructional and lexical constraints in clausal organization of argument structure.

Notes

- 1 I am grateful to two anonymous referees for their comments on a previous version of this paper.
- 2 Nevertheless, as the *way*-construction becomes more productive, these constraints are becoming weaker.

- 3 See Toivonen (2002a, 2002b) for Swedish; Seland (2001) for Norwegian; Verhagen (2003) and van Egmond (2006) for Dutch; and Ludwig (2005) for German.
- 4 His observations are generalized to concern *macro events* in Talmy (1991, 2000).
- 5 On the one hand, a subject may be formally identified by means of, for instance, nominative case marking, agreement, or a specific word order; and on the other hand, it is a marker of prominence.
- 6 LEXICAL GOVERNMENT refers to the so called LEXICAL APPROACH (see e.g. Grimshaw, 1990; Levin and Rappaport Hovav, 1995; Pinker, 1989). It is an organizing device based on principles of lexical (verbal) projection, subcategorization and valence structure.
- 7 In a cognitive linguistic framework, the basic meaning of *out* may be understood as ‘leaving a container’ (Rudzka-Ostyn, 2003).
- 8 The verb may also denote the manner of motion: *Sam joked his way into the meeting* (‘Sam went into the meeting (while) joking’) (Jackendoff, 1990).
- 9 I.e., the subject has to be licensed by the substantial lexical meaning of the verb.
- 10 In future studies, we will hopefully have at our disposal a tagged source corpora and a digital alignment of the different versions.
- 11 In this formalisation, for the sake of simplicity, I have not taken into account constructional variation due to word order.
- 12 The German version of the *way*-construction has been discussed in more detail in Callies & Szczesniak (2008) and Ludwig (2005). In her study of the Dutch *way*-constructions, van Egmond (2006) suggests that all Germanic languages may have two different versions of the *way*-construction: one which denotes MOTION ALONG A PATH, as in (5), and one which denotes a TRANSITION TO A LOCATION as in (8a)-(8b). In Dutch, and maybe also in German, this distinction also implies a formal

distinction, as these languages seem to use two formally different constructions (*weg*-constructions versus reflexive constructions). Conversely, in English (the *way*-construction) and Swedish, Norwegian and Danish (reflexive constructions), this distinction is not visible in the syntax since the path-variant is formally identical to the transition-variant.

- 13 Notice that in the *way*-construction in (13a), the secondary specification of the core meaning is very precise (*googled*), while it is almost absent in (14a) and (15a) (*find*).
- 14 Expressions like *María le cocinó un asado* ('María cooked him a joint of meat') are, though, possible. But in this case, the use of the dative does not necessarily imply a volitional agent and a willing recipient, which is the central meaning of the ditransitive construction in English. See the analysis in Pedersen (2009b, p. 247f).
- 15 Some Spanish users reject examples like (21) and prefer a slightly different expression type: *pintó la casa de rojo* ('he painted the house with red'), in which the verbal activity is modified by an adverbial expression. Giró, (2003) argues, for instance, that the type of resultative expression in (21) is not a genuine resultative construction. Nevertheless, the existence of different types of resultatives in Spanish, such as *la dejó agotada* ('he left her exhausted') and *pinto la casa de rojo*, cannot be denied. The important observation is that the resultative form/meaning structure has to be licensed, and organized in a valence structure, by the verb.
- 16 This Spanish resultative is an instance of PARTIAL TYPE FRAMING, as defined in Pedersen (to appear a). When the argument structure is only partly organized by the basic device (schema or lexeme) of the language type in question, this is referred to as partial type framing. See also Section 13.6.

- 17 For a more detailed analysis of English resultatives, see, e.g., Goldberg & Jackendoff (2004) and Boas (2003). Resultative expressions in Spanish are discussed in more detail in, e.g., Mendiivil Giró (2003).
- 18 Usage is syntactically metonymic when a lexeme, e.g. a verb, is used in expressions whose meaning is not predictable from its lexical meaning.
- 19 Schøsler argues in another recent paper (Schøsler, 2007) that schematic argument structure constructions, or what she calls ‘specialized valency patterns’ (Schlösler, forthcoming), have developed in French as cases of ‘paradigmatisation of valency patterns’. In the present framework, this is a diachronic outcome motivated by constant generalizations from usage. The interesting question for the discussion in this paper that these data raise is whether schematic constructions in French, in some cases, and maybe progressively, are used as the principal encoding device in clausal organization.
- 20 MACRO-EVENTS are complex semantic structures comprising a MAIN EVENT, the framing event, and a CO-EVENT (Talmy, 2000). Bohnenmeyer *et al.* (2007) refers to what they call the MACRO-EVENT PROPERTY (MEP). MEP is a property of clausal expressions that assesses the tightness of packaging of subevents in the expression. An expression has the MEP if it packages event representations such that temporal operators (e.g. tense and time adverbial) necessarily have scope over all subevents.
- 21 Pedersen (to appear a) introduces the term VARIABLE TYPE FRAMING. It captures the idea that within one and the same language, the clausal argument structure may be organized on the basis of a skeleton (of a schematic or lexical kind) of varying complexity.
- 22 Turkmen, a Turkic language spoken primarily in Turkmenistan, also admits certain combinations of manner of motion verbs and goal-oriented satellites, which cannot be accounted for if we adopt the principles suggested by Aske (1989) and Slobin and

Hoiting (1994). Like Spanish and Turkish, Turkmen is a verb-framed language. See Word-Allbritton (2004).