Endocentric and Exocentric Verb Typology
Talmy Revisited – On Good Grounds
Korzen, Iørn

Link to publication in CBS Research Portal

Endocentric and Exocentric Verb Typology: Talmy Revisited – On Good Grounds

Iørn Korzen

Journal article (Postprint version)

Endocentric and Exocentric Verb Typology

Talmy Revisited – on Good Grounds

Iørn Korzen

Abstract

This paper presents the so-called ENDO- and EXOCENTRIC VERB TYPOLOGY advanced by the Danish research group TYPOlex. The typology is partly based on Talmy's lexicalisation patterns for motion verbs with some elaboration and refinement of the MANNER – PATH distinction, and it is generalised to comprise Germanic and Romance verbs (and nouns) as a whole. The Danish findings point to a relatively high lexical precision and concreteness in Germanic verbs (and Romance nouns) and a relatively high lexical abstractness and genericity in Romance verbs (and Germanic nouns). Furthermore, the paper investigates Talmy's two semantic components GROUND and FIGURE and argues that they are far more generalised in Romance (secondary) lexicalisation patterns – parasynthetic derivation – than normally assumed.

keywords: lexicalisation patterns, manner-path distinction, motion verbs, parasynthetic derivation.

Introduction[*]

Motion is a crucial element in human consciousness, and in most languages motion verbs play a fundamental role just as motion is a constituent part of the lexical content of many other verbs. A lexical analysis of motion verbs is therefore an appropriate starting point for an investigation of verb lexicalisation in the various languages and language families and groups, cf. Herslund (ed.) (1997: 16). Leonard Talmy's work on motion verb typology – especially Talmy (1985) and (2000) – remains a cornerstone for research on motion verb lexicalisation, and the Talmyan framework has also greatly inspired a Danish research group, TYPOlex, in its taxonomic distinction between the so-called ENDOCENTRIC and EXOCENTRIC languages. The former are languages whose verbs (seen as the "centre" of the proposition) are characteristic of a high lexical and therefore informative weight ('endocentric' = inside the centre), and the latter are languages whose nouns carry a high lexical and informative weight ('exocen-

tric' = outside the centre). This paper presents some of the most important results of the Danish scholars' comparative work on Germanic and Romance languages as well as some specifications and additions to Talmy's Cognitive Semantics.

The paper is structured as follows: After a quick review of Talmy's lexicalisation patterns for motion verbs, I introduce a theoretical supplement and refinement of the cognitive distinction between the semantic components MANNER and PATH. I then present TYPOlex's generalisations of verb (and, briefly, noun) lexicalisation in Romance and Germanic languages with the main focus on Italian, French, English and Danish, after which the component GROUND is examined more closely with special reference to productive parasynthetic derivation in the Romance languages. Before the concluding remarks, I give a brief overview of parasynthetic Romance derivation based on the component FIGURE.

Talmy (briefly) revisited

It is well known that Talmy (1985: 62-76), (2000: 25-67) operates with a MOTION-SENTENCE PATTERN consisting of a BASIC MOTION EVENT, which contains the four semantic components, FIGURE, GROUND, PATH, and MOTION, and possibly a CO-EVENT, which conveys the MANNER or the CAUSE of the motion. This pattern gives rise to "three typologically principal lexicalization types" (Talmy 2000: 27) for motion verbs across the languages:

A. MOTION + MANNER/CAUSE, found for instance in the Germanic languages,

B. MOTION + PATH, found for instance in the Romance languages,

C. MOTION + FIGURE, found especially in some North American Indian languages.

Talmy considers the verb root alone, and languages that tend to lexicalise the basic motion event in the verb itself, such as the Romance languages, are termed VERB-FRAMED LANGUAGES, whereas languages that generally need a satellite to express PATH, such as e.g. the Germanic languages, cf. *run **out**, walk **back**, fly **up**,* are named SATELLITE-FRAMED (ibid.: 222).

Regarding the three principal lexicalization types, Talmy adds (ibid.: 27): "In most cases, a language uses only one of these types for the verb in its most characteristic expression of Motion". I shall return to this claim and to the fact that for instance Romance motion verbs may be either unaccusative telic verbs expressing PATH, cf. the examples in (1), or unergative atelic verbs expressing MANNER, cf. the examples in (2):

(1)   Italian: *andare, venire, arrivare, entrare, uscire, partire…*
        French: *aller, venir, arriver, entrer, sortir, partir...*

'go/move, come, arrive, enter, exit, leave'

(2)   Italian: *camminare, nuotare, rollare, danzare…*
        French: *marcher, nager, rouler, danser...* [1]
        'walk, swim, roll, dance'

According to Talmy, the three patterns are also "apparently the main ones found across languages" (ibid.: 60), leaving the semantic component GROUND generally unlexicalised:

> It can be seen that one Motion-event component, the Ground, does not by itself conflate with the motion verb to form any language's core system for expressing Motion. Conflations of this sort may not even form any minor systems. (ibid.).[2]

Rare cases such as the English *emplane* (to board or put on board an aeroplane) and *deplane* (to disembark from an aeroplane) are called "sporadic instances" of GROUND conflations, which "can provide an idea of what a larger system might be like." (ibid.: 61). However, according to Talmy, "such [larger] systems are not to be found" (ibid.).

Talmy was not the first scholar to distinguish between *the way* an object moves or is moved and the fact that it moves or is moved *from one location to another*. In his important work on structural syntax, Tesnière (1982 [1959]: 307-310)[3] distinguished between MOUVEMENT and DÉPLACEMENT, and characterised German as a language whose verbs express 'mouvement' – defined as "la «nature» ou le «caractère» de l'action" – in contrast to French verbs that express 'déplacement' (ibid.: 309).

What is new in Talmy's framework is his overall cognitive approach. His distinction between motion with and without the component PATH is summarised in the terms TRANSLATIONAL MOTION (or TRANSLOCATION) vs. SELF-CONTAINED MOTION, of which the latter "generally consists of oscillation, rotation, dilation (expansion or contraction), wiggle, local wander, or rest" (Talmy 2000: 35-36, cf. also ibid.: 25-26).[4] However, a cognitive treatment of these terms and the related real-life situations is not developed any further in his framework. In fact, according to Smith (esp. 2005a and 2005b), and in spite of the very numerous contributions to motion event research, even with a specific cognitive approach, Talmy's cognitive categories MANNER and PATH still need further elaboration and refinement. The following sections represent a modest (and, due to space limitations, brief) attempt of such further analysis and are largely based on Smith's (2005a/b) proposal for a synthesis between Talmy's original analyses, the verb typology of Durst-Andersen (e.g. 1992 and 2000)

and insights from non-linguistic research into motion perception. The idea is taken further for a somewhat different theoretical purpose in Durst-Andersen, Smith & Thomsen (2013).

Looking more closely into MANNER and PATH

Non-linguistic cognitive literature

In non-linguistic cognitive research, e.g. Borst and Egelhaaf (1989) and Borst (2000), visual motion detection is seen as a DELAY-AND-COMPARE MECHANISM, i.e. a comparison of successive images with conflicting visual information;[5] see also Dellen and Wessel (2009). In the same vein, Dodge and Lakoff (2005) quote neuro-scientific research revealing that the same brain structures are used when imagining or talking about an action and when actually executing the same action (ibid.: 15-16). The scholars also talk about the probability that processing PATH and MANNER of a movement may involve different parts of the brain:

> [A]s we've shown in this paper, these path- and manner-related schemas may each be computed by the neural circuitry of different functional brain networks. Consequently, "manner-predominant" and "path-predominant" languages may differ not only in their utilization of the "basic image schema inventory", but also in the terms of their underlying neural substrates. (ibid.: 25).

Blaser and Sperling (2007) distinguish between PERCEPTUAL (or VISUAL) and CONCEPTUAL MOTION. Perceptual motion is a direct "first-order" observable movement, "a mechanism that yields a conscious sensation of motion" (ibid.: 627). Conceptual motion implies a different kind of processing, called a "cognitive simulation" (ibid.). Such processing is of a much more abstract nature and "has little restriction on the visual tokens that may be displaced" (ibid.). In a psychophysical experiment, the authors contrast luminance-based perceptual motion (a displaced pattern of luminance over time) with semantic-based conceptual motion (a shifting pattern of words and non-words). Based on the processing time of the observers, the authors conclude that whereas perceptual motion has "access to special-purpose motion mechanisms of the visual system" (ibid.), conceptual motion "would seem to be distinctly second-class" (ibid.) and dependent on the mentioned cognitive simulation of perceptual motion.

Durst-Andersen and Smith

Within the linguistic cognitive research, Durst-Andersen (1992: 53-63), (2000: 59-66) takes his starting point in "the perceptual notion of picture" (2000: 59) and argues that humans generally distinguish between two kinds of real-world phenomena or situations, both of which can be described in terms of the relationship between FIGURE and GROUND:

a. STATES, which are perceived as a stable figure on a stable ground, providing a stable picture; 'states' are referred to by STATE VERBS such as *be, have, sit, lie, stand,* etc.

b. ACTIVITIES, which are perceived either as an unstable figure on a stable ground or as a stable figure on an unstable ground, providing an unstable picture; 'activities' are referred to by ACTIVITY VERBS such as *carry, drive, walk, swim, crawl,* etc.

Only these two (atelic) situation types can be perceived via direct observation, but in addition hereto, real-world experience has taught us that some activities can result in certain states, and some states can be the result of certain activities. This provides us with a third (telic) situation type:

c. ACTIONS, which are mental constructs combining a particular activity with a particular state. When an 'activity' is conceived as part of an 'action', it is classified as a PROCESS, and the 'state' is classified as an EVENT.[6] ACTION VERBS are verbs such as *give, sell, buy, leave, kill,* etc.

Smith (e.g. 2005a/b; 2009) uses the observations of Durst-Andersen and Blaser and Sterling mentioned above to distinguish between SIMPLE and COMPLEX SITUATIONS. 'Simple situations' include Figure, Ground and "simple Motion or Locatedness", termed ACTIVITIES and STATES respectively. 'Complex situations' consist of "observed or expected interdependencies between simple ones" (Smith 2005a: 2.2) and are labelled ACTIONS or RELOCATIONS. These are mental constructs that relate 'activities' and 'states' to each other "not on a first-order perceptual level, but on a higher-order conceptual level" (ibid.).

The research group TYPOlex and the Endo-/Exocentric Typology

There are very clear similarities between the above-mentioned approaches and results and those of the Danish research project group TYPOlex (of which Smith is a member). The group is based at the Copenhagen Business School and was initiated in 1997 with the aim to study typological differences in lexicon and text structure between Germanic and Romance languages.[7] The overall starting point of the TYPOlex project is the well-established fact that languages subdivide the world in different ways according to their lexicalisation

patterns (e.g. Herslund & Baron, 2003; Hjelmslev, 1993 [1943]: 50; Humboldt, 1997 [1822]; Sapir, 1964 [1929]; Whorf, 1956 [1940]) and essentially differ in "what they *must* convey and not in what they *may* convey", as Jakobson (1959: 236) so aptly puts it. In their efforts to work out a general typological description of lexicalisation patterns in different language families and groups, the scholars were particularly inspired by Talmy's framework regarding motion verb lexicalisation and by elements of Pustejovsky's (e.g. 1995: 76-104) QUALIA STRUCTURE regarding noun lexicalisation.

Comparing the Germanic and the Romance languages, the TYPOlex scholars were able to ascertain an over-all difference in what they label as CONCRETENESS vs. ABSTRACTNESS in the lexicalisation of verbs and nouns. By 'concreteness' the group refers to the denotation of an exterior, visible aspect or "picture" in a lexical item, and by 'abstractness' to the lack of such a "picture" and to a more conceptual notion of an "idea" expressed by the lexeme.

Germanic and Romance lexicalisation of verbs

Regarding verb lexicalisation, the distinction between a "picture" and an "idea" is a consistent extension of Talmy's MANNER vs. PATH distinction. On the one hand, motion verbs containing the MANNER component denote a visibly specifiable activity that can be represented as a picture, as is seen in Figure 1.

Figure 1. Representations of motion expressed by MANNER verbs

On the other hand, PATH verbs convey an abstract idea of a movement from one location to another. Here, information is given about the relation between the figure that moves and the point of departure, traversal, or arrival, of the motion.[8] The way or manner in which the movement takes place is not rendered explicit but is so to say cognitively assumed or "simulated", as Blaser & Sperling (2007: 627) put it.

Blaser and Sperling's description of 'conceptual motion' as a "cognitive simulation [which] has little restriction on the visual tokens that may be dis-

placed" can be applied to the selectional restrictions of the Romance motion verbs in comparison with the Germanic ones. For instance, the Italian verb *entrare* 'enter' may select any kind of subject that can move or be moved, whereas Danish verbs denoting a movement-into-something are much more particular in their selection of the subject, as shown in Table 1.

Table 1. Equivalent lexicalisation of motion-into-something in Italian, Danish, and English

Italian		Danish		English	
(PATH: idea)		(MANNER: picture)		(MANNER / PATH)	
il cane	***entra***	*hunden*	***går ind***	*the dog*	***walks in / enters***
il pesce	***entra***	*fisken*	***svømmer ind***	*the fish*	***swims in / enters***
l'uccello	***entra***	*fuglen*	***flyver ind***	*the bird*	***flies in / enters***
l'automobile	***entra***	*bilen*	***kører ind***	*the car*	***drives in / enters***
la nave	***entra***	*skibet*	***sejler ind***	*the ship*	***sails in / enters***
l'uomo	***entra*** *(a piedi)*	*manden*	***går ind***	*the man*	***walks in / enters*** *(walking)*
l'uomo	***entra*** *(correndo)*	*manden*	***løber ind***	*the man*	***runs in / enters*** *(running)*
l'uomo	***entra*** *(in macchina)*	*manden*	***kører ind*** *(i bil)*	*the man*	***drives in / enters*** *(driving a car)*

Unlike the Italian verb *entrare*, but like the English MANNER verbs (the first ones mentioned in the right hand column), all the Danish verbs require a subject that is congruous with the denoted MANNER. Thus, there is a strict correspondence, or congruence, between the MANNER component and the FIGURE. Entities, animate as well as inanimate, must have specific physical features to be able to perform or undergo particular movements (as well as other actions or activities, as we shall see below). Thus, in such cases the FIGURE component could be defined as a resulting and secondary consequence rather than a direct and primary lexicalisation such as the one found in English verbs like *rain* and *spit*, cf. Talmy (2000: 57-58).[9] Other cases of primary FIGURE lexicalisation are verbs such as (non-metaphorical) *flow, stream, gush, spout,* etc., which indicate that the entities involved are fluid.

As seen in the last three examples of Table 1, an Italian sentence may indicate the MANNER in an independent, typically adverbial constituent, often a prepositional group or a gerund as in the cases cited here. Generally, however, such specification is only added if deemed particularly necessary, and it may be established elsewhere in the co- or context. On the other hand, the Danish and

the English MANNER verbs cannot **avoid** expressing this specification, cf. the quote of Jakobson above.[10]

The right hand column of Table 1 shows the "double set" of English verbs denoting motion-into-something: one equivalent to the Danish verbs lexicalising the MANNER component and one equivalent to the Italian lexicalisation of PATH, "inherited" from Latin and French. Such examples of mixed Germanic-Romance heritage have prompted scholars such as e.g. Roberts (1939: 23) to define English as "the standard example of a hybrid language".

What kind of MANNER?

Even with the specifications cited above, it may be argued that the component MANNER could cover more semantic grounds than those described by Talmy's 'self-contained motion', and that MANNER verbs could be divided into different subtypes, as suggested e.g. by Alonge (1997) and Korzen (2008). Where Talmy's 'self-contained motion', as well as most of the verbs mentioned in the preceding subsection denote MANNER in terms of what could be defined as the "FORM" of the movement (as depicted in Figure 1), a verb like *sail* listed in Table 1 denotes MANNER in terms of *means of transportation*. Such verbs, denoting the "MEANS OF MOTION", are – just like the "FORM MANNER verbs" mentioned the preceding subsection – very common in the Germanic languages, especially in English, cf. e.g.:

(3)   *travel, drive, motor, fly, ski, skate, parachute, (bi)cycle, ride, sail/boat, bus, canoe, balloon, sleigh ...*

Of the verbs mentioned in (3), *travel* can be considered as a hyperonym merely indicating that a means of transportation has been used but not which sort.[11] Of these verbs, only *travel, fly, skate, drive, (bi)cycle, ride, sail/boat* have equivalent (non-phrasal) verbs in Danish:

(4)   *rejse, flyve, skøjte, køre, cykle, ride, sejle*[12]

Like the "FORM MANNER verbs", verbs denoting MANNER in the sense of "MEANS OF MOTION" are (more or less felicitously) depictable, see Figure 2.

Figure 2. Representations of "MEANS OF MOTION verbs"

It is characteristic that such verbs are very rare in the Romance languages:

(5)   Italian: *viaggiare* 'travel', *pedalare* 'bicycle', *sciare* 'ski', *pattinare* 'skate', *paracadutarsi* 'parachute'.
           French: *voyager* 'travel', *patiner* 'skate', *se parachuter* 'parachute'.

Yet another kind of MANNER is lexicalised in some motion verbs across the languages, such as the following Italian and English cases:

(6)   *accasciarsi / stramazzare* 'collapse, fall heavily', *fuggire / scappare* 'flee, escape', *sgattaiolare* 'sneak out'

Here, MANNER is not seen as FORM or MEANS, but rather as the INTENSITY of the movement, in *accasciarsi / stramazzare* describable with the adverb *pesantemente* 'heavily', in *fuggire / scappare* with the adverb *velocemente* 'quickly', and in *sgattaiolare* with the adverbs *velocemente* and/or *silenziosamente* 'silently'. In these cases, and unlike verbs denoting FORM or MEANS, the particular MANNER component is not representable as a picture, and like the verbs cited in (1), the verbs in (6) are all unaccusative and telic.[13]

Thus, whereas the verbs in (3) and (4), illustrated in Figure 2, are very similar to other MANNER verbs, both syntactically and in the frequency in the two language families, the verbs in (6) should be analysed as PATH verbs with an additional semantic component of INTENSITY – and *fuggire, scappare,* 'flee, escape' also with a component of PURPOSE, i.e. 'to get away (typically) from a dangerous situation'.

Extensions of the motion verb lexicalisation pattern

The distinction between concrete and relatively precise "picture verbs", applicable to a limited number of entity categories and typical of the Germanic languages, and abstract and more generic "idea verbs", applicable to a much larger number of categories and typical of the Romance languages, is not limited to motion verbs but can be extended to many other verb groups (albeit, obviously,

not without exceptions). In this subsection, I cite a few Italian – Danish examples; many more French – Danish examples can be found in Herslund (ed.) (1997: 18-30).

In parallel to motion verbs we find – also in Talmy's framework – position verbs, and similarly to the Italian motion verb *andare,* which just means *to move*, the Italian verb *stare* 'to be' can correspond to all five Danish / English position verbs, *sidde* 'sit', *ligge* 'lie', *stå* 'stand', *knæle* 'kneel' and *hænge* 'hang'. Again, it is characteristic that the states denoted by these five verbs can all be represented as pictures, unlike *stare;* see Figure 3. As in the last three cases of Table 1, a specification may be added to the Italian verb: *stare seduto* 'be sitting/seated', *stare sdraiato* 'lying down', *stare in piedi* 'on foot', *stare in ginocchio* 'on knee', *stare appeso* 'hanging', but as before, this will only happen if strictly necessary.[14]

Figure 3. Representations of position expressed by MANNER verbs

Also in other cases, Danish usually specifies the position of an entity. Table 2 shows how either the position or the shape of the object is decisive for the choice between the mentioned position verbs in Danish. In all cases, the Italian verb, "V", can be *essere, stare* or *trovarsi* 'be (located)'.[15]

Table 2. Examples of position verbs in Italian and Danish

Italian			Danish
Lo zucchero 'the sugar'		*sul tavolo* 'on the table'	*stå* 'stand' (a packet)
Lo zucchero		*sul tavolo*	*ligge* 'lie' (a bag or loose)
Il libro 'the book'		*sullo scaffale* 'on the shelf'	*ligge* (horizontally)
Il libro		*sullo scaffale*	*stå* (vertically)
La radio 'the radio'		*sullo scaffale* 'on the shelf'	*stå*
L'arrosto 'the roast'	V	*al forno* 'in the oven'	*stå*
Il tumore 'the tumor'		*al seno* 'in the chest'	*sidde* 'sit'
La coperta 'the blanket'		*sul letto* 'on the bed'	*ligge*
La chiave 'the key'		*nella porta* 'in the door'	*sidde*
La chiave 'the key'		*sul muro* 'on the wall'	*hænge* 'hang'
La chiave 'the key'		*sul tavolo* 'on the table'	*ligge*

The difference between abstract and generic Italian verbs and concrete and precise Danish verbs is found in many other cases. Table 3 shows how the Italian verb "of destruction" *rompere,* which in most of its usages, according to *Lo Zingarelli 2010,* has the synonyms *spezzare* and *spaccare,* corresponds to no less than 15 different Danish verbs: *brække, knække, bryde, gennembryde, af-bryde, flække, knalde, knuse, mase, baldre, smadre, ødelægge, kløve, hugge, brænde* depending on the MANNER of the action and the FIGURE of the object destroyed.[16] The Italian examples in Table 3 all come from *Lo Zingarelli 2010.*[17]

Table 3. Italian and Danish "verbs of destruction"

Italian		Danish
rompere	*un braccio / una gamba* 'an arm, a leg'	*brække* 'break'
	un vetro / un piatto / un vaso 'a glass, a plate, a vase'	*knalde, smadre* 'break, smash'
	il pane / un accordo / una relazione / un'amicizia / il silenzio / il ghiaccio 'a bread, an appointment, a relation, a friendship, the quiet, the ice'	*bryde* 'break, end'
	un bastone / un ramo 'a stick, a branch'	*knække* 'break, crack'
	un orologio / una festa 'a clock, a party'	*ødelægge* 'destroy'
	il sonno / la conversazione / il digiuno 'the sleep, the conversation, the fast'	*afbryde* 'interrupt'
	il legno 'wood'	*hugge, kløve* 'cut, chop'
	una pietra 'a stone'	*knuse* 'smash'
	gli argini / le dighe 'banks, dams'	*gennembryde* 'break through'
	i ponti 'the bridges' (fig.)	*brænde* 'burn'

Table 4 cites some Italian and Danish (transitive and intransitive) kitchen verbs. Again, the Italian verbs are more abstract and denote what is, from the perspective of Danish, different types of activities. On the other hand, the Danish verbs are more precise. The more precise Italian verbs in parentheses at the bottom of the left hand column exist but generally belong to a special linguistic register and/or to special text genres such as cookbooks.

Table 4. Italian and Danish kitchen verbs

Italian	Danish
cucinare, cuocere, preparare 'cook, prepare'	*koge* 'boil', *simre* 'simmer', *stege* 'fry, roast', *bage* 'bake', *grille* 'grill', *brase* 'frizzle', *spejle (et æg)* 'fry (an egg)', *syde* 'sizzle', *smøre (madder)* 'butter (sandwiches)'
(*bollire* 'boil', *friggere* 'fry', *arrostire* 'roast', *imburrare* 'butter')	

And while we are in the kitchen regions: If food (or something else) is evaluated positively, in Italian the praise would sound: *è buono, che buono, che bello.* But in Danish, it is generally necessary to specify the MANNER in which it is "good", see Table 5.

Table 5. Italian and Danish evaluation expressions

Italian	Danish
è buono/bello, che buono/bello	*det smager / lugter / dufter[18] / lyder / ser godt (ud)*
'it's good'	'it tastes / smells / smells / sounds / looks good'

In all the cases cited in this subsection, the Italian verbs (and, in Table 5, adjectives) are more abstract and generic and may apply to many more action or activity types. On the other hand, the Danish verbs are more precise and concrete; unlike the Italian verbs, they express the MANNER of the verb situation and – as a consequence – often also the kind or FIGURE of the object that is involved in it.

Germanic and Romance lexicalisation of nouns

Extending the distinction between precise and concrete lexemes (which can denote relatively few instances) and generic and abstract lexemes (which can denote a larger number of instances) to nouns, we find exactly the opposite picture in the Germanic and Romance lexicalisation patterns. Compared with Romance lexicalisation of nouns, Germanic primary lexicalisation (i.e. of basic lexemes, not compounds or derivatives) occurs at a hyperonymic level covering more entity categories, i.e. having a larger extension. To achieve the same precise denotation (i.e. larger intension and smaller extension) of a Romance primary lexicalisation, a Germanic language will typically create a N+N compound, as is seen in Table 6.

Table 6. Two examples of nominal lexicalisation in Italian, Danish and English

Italian	Danish	English
veicolo	*vogn*	*vehicle*
automobile (macchina)	*personvogn* 'person-'	*car*
camion	*lastvogn* 'cargo-'	*lorry*
furgone	*varevogn* 'goods-'	*van*
autogrù	*kranvogn* 'crane-'	*breakdown **van***
taxi	*hyrevogn* 'hire-' (or *taxa*)	*taxi*
tram	*sporvogn* 'tracks-'	*tram*
vagone	*togvogn* 'train-'	*wagon, carriage*
carrozza	*hestevogn* 'horse-'	*carriage*
carrozzina / carrozzella	*barnevogn* 'child-'	*pram, baby **carriage***
carrello	*indkøbsvogn* 'shopping-'	*trolley*
–	*stol*	*chair*
sedia	*spisestuestol* 'dining room-'	*dining room **chair***
poltrona	*lænestol* 'lean-'	*arm**chair***
sdraio	*liggestol* 'lie-'	*deck **chair***
trono, seggio	*tronstol* 'throne-'	*throne*
pulpito, pergamo	*prædikestol* 'preach-'	*pulpit*
podio	*talerstol* 'speaker-'	*rostrum*
corte, tribunale	*domstol* 'sentence-'	*court (of law)*

The basic Danish lexeme *vogn* can be used for all the mentioned subtypes and *stol* for the first four instances of "chairs". In these cases, the specifying modifier (the first part of the compound) will only be added where necessary for the interpretation of the noun, which – as with the Romance verbs – may rely on other elements in the co- or context. On the other hand, the Italian lexemes in the left hand column cannot **avoid** expressing this specification. As the Table shows, Italian does not have a hyperonym equivalent to *stol*.[19]

Again, English appears as a mix of the Germanic system with N+N compounds (e.g. *breakdown van, baby carriage, deck chair*) and the Romance system with primary lexicalisation at a hyponymic level (e.g. *throne, pulpit, court*).

The (primary) Germanic and Romance lexicalisation of artefacts can be seen in the light of the four semantic components, or "explanatory categories" (Müller 2005: 65), that Pustejovsky (1995: 76-104) includes in his 'qualia structure' of lexical items, viz. the CONSTITUTIVE, FORMAL, TELIC and AGENTIVE QUALIA. In Danish, it is the FUNCTION of the object (corresponding to the TELIC quale) that is the dominant and distinctive feature of the basic lexemes, the feature which all subtypes have in common and which distinguishes them from

other categories and subtypes; in Table 6: a vehicle used for transportation and a piece of furniture used to sit or stand on. In Italian, the lexicalisation is based on EXTERNAL, VISIBLE ASPECTS of the object (corresponding to the CONSTITU-TIVE and FORMAL QUALIA), and each subtype is morphemically unique. For more Italian and Danish examples, see e.g. Korzen (2000), (2005b); for more French and Danish examples, see Herslund & Baron (2003) and Herslund (ed.) (1997: 30-43); for Spanish examples, see Müller (2005).[20]

The complete picture: Endocentric and exocentric languages

Combining the above-mentioned tendencies for verb and noun lexicalization in Germanic and Romance languages, we obtain an interesting set of patterns. Typical Germanic lexicalisation produces concrete and precise verbs, based on the external PICTURE of the verb situation − including the figure of the entity involved − and abstract nouns based on the function of the artefact, i.e. on the IDEA of what purpose the object can serve. On the other hand, Romance lexical-isation tends to produce abstract verbs, based on a generalised and/or conceptu-alised IDEA of the verb situation, and precise nouns based on the external as-pects, the PICTURE, of the object. This can be illustrated as in Table 7.

Table 7. Typical lexicalisation patterns of Germanic and Romance verbs and nouns

	Verbs	**Nouns**
Germanic languages	picture (MANNER, FIGURE)	idea (FUNCTION)
Romance languages	idea (motion verbs: PATH)	picture (FIGURE)

The more precise lexical content (i.e. larger intension) entailing a more limited extension of applicable instances thus lies in the Germanic verbs and in the Romance nouns, and the conception of the verb as constituting the "centre" of the proposition and the noun(s) as placed outside this centre has prompted the TYPOlex group to use the terms ENDOCENTRIC (i.e. Germanic) vs. EXOCENTRIC (i.e. Romance) LANGUAGES. In 'endocentric languages' the informative weight is concentrated in the verb, which also selects the (abstract) nominal arguments linked to it. In 'exocentric languages' the informative weight lies in the nouns, whereas the verbs that link the nouns together are relatively abstract and generic and do not put as heavy selectional restrictions on the arguments.[21]

Motion verbs differing from these patterns

The lexicalisation patterns shown in Table 7 describe important tendencies, but not, however, rules without exceptions. Although Talmy has a point in stating (with respect to lexicalisation of motion) that a language uses only one lexicalisation type for the verb "in its most characteristic expression of Motion", endocentric PATH verbs and exocentric MANNER verbs, i.e. exceptions to the rules mentioned, are not difficult to find. As already stated, English may be defined as a "hybrid language" on this account, but also Danish, a more "genuinely endocentric" language, has PATH verbs, albeit fewer, cf. Table 8 (which does not pretend to be complete).

Table 8. Endocentric PATH verbs

English: *go, come, enter, exit, pass, advance, cross, rise, fall, escape, arrive, return, recede, ascend, mount, descend, circle, join, land...*[22]
Danish: *komme* 'come', *ankomme* 'arrive', *passere* 'pass', *forsvinde* 'disappear', *(be)stige* 'climb', *falde* 'fall', *flygte* 'escape', *krydse* 'cross', *lande* 'land', *lette* 'take off'...[23]

Most of the English verbs are inherited from Latin and French, exceptions are *go, come, fall* and *rise.* In some cases, e.g. *come, pass, disappear,* the PATH component is or can be deictic, cf. footnote 8.

French MANNER verbs are quite frequent and common, even if PATH verbs are more so, both in types and in tokens (Herslund & Baron 2003; Schøsler 2010).[24] Most French PATH verbs are unaccusative, telic and select the auxiliary verb *être* 'be', whereas the MANNER verbs are unergative, atelic and use the auxiliary *avoir* 'have', cf. Table 9.

Table 9. French motion verbs[25]

Unaccusative telic PATH verbs, aux. *être*	Unergative atelic MANNER verbs, aux. *avoir*
aller, venir, arriver, entrer, sortir, partir...	*marcher, courir, rouler, nager, sauter, danser...*

Nevertheless, there are differences also within the Romance languages. If the pattern illustrated in Table 9 could be defined as "typically" Romance, the Italian situation is somewhat more complex. Again, PATH verbs are more common both in types and tokens, see Table 11 in the following subsection, but regarding MANNER verbs, we find two groups: One is similar to the French MANNER verbs: unergative, atelic, selecting auxiliary *avere* 'have'; see the right hand column of Table 10 (which, like Tables 8-9, does not pretend to be complete). Another group consists of verbs that occur **either** with that same meaning and combination (i.e. unergative, atelic, expressing solely MANNER and selecting *avere*) **or** with an unaccusative, telic meaning, combining PATH and MANNER end selecting the auxiliary *essere* 'be', see the left hand column of Table 10. In this, the latter group is very similar to the equivalent Danish verbs (Herslund & Baron 2003; Korzen 2012).[26]

Table 10. Italian motion verbs with the MANNER component

Either unergative atelic MANNER verbs, aux. *avere,* or unaccusative telic verbs combining PATH and MANNER, aux. *essere*	Always unergative atelic MANNER verbs, aux. *avere*
correre 'run', *saltare* 'jump', *volare* 'fly', *rotolare* 'roll', *rimbalzare* 'bounce', *sgattaiolare* 'sneak out', *colare* 'drip', *gocciolare* 'drip', *fluire* 'flow, stream', *sgorgare* 'gush, spout'...	*camminare* / *passeggiare* 'walk', *nuotare* 'svim, *danzare* / *ballare* 'dance', *scivolare* 'slide', *dondolare* 'swing', *viaggiare* 'travel', *sciare* 'ski', *pattinare* 'skate'...
Examples of unergative usage: *Ho corso nel parco per due ore.* 'I have been running in the park for two hours'. *Ho volato tutta la notte.* 'I have been flying all night'. *Il bambino ha saltato per tutta la casa.* 'The child jumped all over the house'. *La palla ha rimbalzato 10 volte.* 'The ball bounced 10 times'. *L'acqua ha fluito per mezz'ora.* 'The water has flowed for half an hour'.	
Examples of unaccusative usage: *Sono corso a casa.* 'I have run home'. *L'uccello è volato nel nido.* 'The bird has flown into the nest'. *Il ragazzo è saltato giù.* 'The boy has jumped down'. *La palla è rimbalzata dietro il tavolo.* 'The ball has bounced behind the table'. *L'acqua è fluita da questa parte.* 'The water has flowed in this direction'.	

Like the MANNER verbs listed in Table 1 above, the verbs in Table 10 select specific subjects, and in cases like *colare, gocciolare* 'drip', *fluire* 'flow,

stream', and *sgorgare* 'gush, spout' we should probably talk about a primary lexicalisation of FIGURE and not "only" congruence. In non-metaphorical usages, the entities involved must be fluid. In the other cases, it would be more precise to say that the FIGURE must be congruous with the denoted MANNER.

In their unaccusative, telic usages, these verbs thus follow a fourth lexicalisation type, a type D, in addition to the three mentioned by Talmy (cf. the second section of this paper):

D. MOTION + PATH + MANNER (+ FIGURE)

where the component FIGURE is "primarily" lexicalised only in *colare, gocciolare, fluire, sgorgare.*

Referring to "a minor system" in Atsugewi, Talmy (2000: 63) mentions the rare case of verbs "expressing the 'MOVE' notion in isolation". However, it should be noted that the two Italian verbs *girare, circolare* may occur with the sole meaning of *muoversi* 'move', in cases such as

(7)   Ho girato tutta Roma per trovarlo. 'I have been all over Rome to find it'.
         Circolare, circolare! (said e.g. by a traffic policeman). 'Keep moving! Clear the street!'.

In such cases, these verbs do **not** convey a PATH meaning of 'circulate, move around in circles'.[27]

Conclusion: Italian and French as exocentric languages

Even if Italian does have a consistent number of both PATH and MANNER verbs, it is interesting to examine the differences in frequency. A count of all motion verbs in the spoken language corpus *LIP: Lessico di frequenza dell'italiano parlato* (De Mauro et al. 1993), consisting of 490,000 words gave the results shown in Table 11.

Table 11. Italian motion verbs, types and tokens in *Lessico di frequenza dell'italiano parlato*

MOTION + PATH: a total of 16 types, 6703 tokens

andare 'move' 3871	*partire* 'leave'191	*sparire* 'disappear' 19
venire 'come' 1013	*tornare* 'return' 185	*avanzare* 'advance' 12
arrivare 'arrive' 494	*cadere* 'fall' 64	*comparire* 'appear' 10
passare 'pass' 314	*scendere* 'descend' 44	*fuggire* 'flee' 3
entrare 'enter' 225	*salire* 'move up' 35	
uscire 'exit' 196	*scappare* 'escape' 27	

MOTION + MANNER: a total of 8 types, 108 tokens

correre 'run' 29	*volare* 'fly' 17	*passeggiare* 'walk' 2
saltare 'jump' 23	*scivolare* 'slide' 14	*sciare* 'ski' 2
camminare 'walk' 18	*viaggiare* 'travel' 3	

Considering that three of the cited MANNER verbs, *correre, saltare, volare,* can also express PATH, cf. Table 10, it seems more than fair to conclude that Italian – like French, cf. the preceding subsection – should be regarded as an exocentric language with a quite dominant occurrence of the abstract PATH component in motion verbs. However, more concrete and precise MANNER verbs are by no means excluded.

Further corroboration of this claim is found in a study carried out by the IMAGACT project (cf. Moneglia and Panunzi (2010) and footnote 16), which compared the frequency of verbs with and without the component MANNER, in their terminology *verbi di attività* and *verbi generali* respectively, in a corpus of spoken Italian of about 1.3 million words. The scholars found that the "general" verbs, those without the MANNER component, were about twice as frequent regarding types and almost three times as frequent regarding tokens.

The component GROUND

As anticipated in the second section of this paper, the component GROUND is by and large absent in Talmy's lexicalization patterns for motion verbs. In addition to the two English verbs *emplane, deplane,* Talmy (2000: 62 and 154) briefly mentions the verbs *shelve, box, berth* as "a minor system of agentive verbs in English". Larger systems such as e.g.:
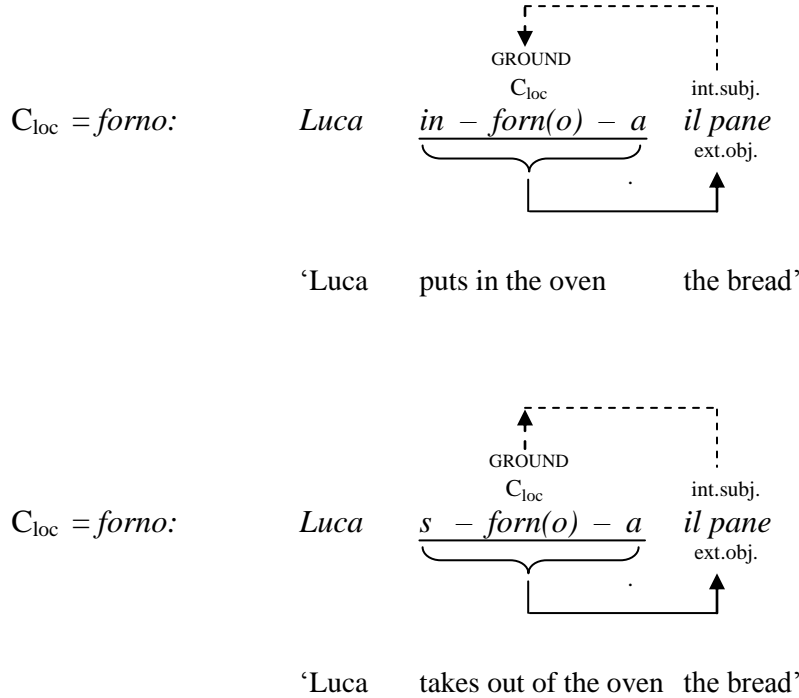
(8)   *enhouse/dehouse/circumhouse* 'move with respect to a house', *enliquid/deliquid/transliquid* 'move with respect to liquid' (by Talmy cited as fictitious cases ibid.: 61)

"are not to be found" (ibid.). Talmy suggests his own explanation for the lack of such systems across the languages: "The reason for such a prohibition seems straightforward for any system that would undertake to make relatively fine semantic distinctions: it would require an enormous lexicon." (ibid.: 62).[28]

Herslund (ed.) (1997: 18) suggests that the component GROUND could be considered as lexicalised in Danish verbs such as *soppe* 'paddle' and as a distinctive feature in cases such as *flyde* 'float in water' vs. *svæve* 'float in the air' and *svømme* 'swim' vs. *flyve* 'fly', but admits that this component is not dominant in the lexicalisation patterns of motion verbs. Baron (2007: 109-110; 2009: 235-236) argues that GROUND is in fact lexicalised in several Danish motion verbs such as e.g. *sejle* 'sail' but not in exocentric (Romance) verb roots that can be used in equivalent co-texts (cf. Table 1 above).

However, the assumption of the component GROUND as rare in exocentric motion verbs is only correct if confined strictly to primary lexicalisation. Cases equivalent to the "fictitious" Talmy-examples in (8) are not only frequent, they form an entirely productive derivation pattern, i.e. a secondary lexicalisation system in the Romance languages and have done so since the earliest written testimony.

The derived verbs are formed by means of parasynthesis with a nominal stem denoting the GROUND with respect to which the motion occurs. The derivatives consist of a DISCONTINUOUS VERB MORPHEME acting as "host predicate" (Herslund 2005: 93), in Italian consisting of a prefix, either *a- / in-* (when the GROUND is point of arrival) or *de- / dis- / s-* (when the GROUND is point of departure), and the suffix *-are* (in rare cases *-ire*).[29] Figure 4 shows the derivatives *infornare / sfornare* 'put in the oven' / 'take out of the oven' with the external object (ext.obj.) *il pane* 'the bread', where the solid arrow illustrates the connection between the derived parasynthetic verb and its (external) object. The host predicates *in…are / s…are* host the GROUND stem *forno* 'oven', and the external object can at the same time be seen as the internal subject (int.subj.) of the host predicate, which has the location complement (C_{loc}) GROUND as its second argument, illustrated by the dotted arrow which also indicates the direction of the motion with respect to the location complement, i.e. the GROUND.

$$\text{C}_{\text{loc}} = \textit{forno:} \qquad \textit{Luca} \qquad \underbrace{\textit{in} - \textit{forn(o)} - \textit{a}}_{\substack{\text{GROUND} \\ \text{C}_{\text{loc}}}} \quad \substack{\text{int.subj.} \\ \textit{il pane} \\ \text{ext.obj.}}$$

'Luca   puts in the oven   the bread'

$$\text{C}_{\text{loc}} = \textit{forno:} \qquad \textit{Luca} \qquad \underbrace{\textit{s} - \textit{forn(o)} - \textit{a}}_{\substack{\text{GROUND} \\ \text{C}_{\text{loc}}}} \quad \substack{\text{int.subj.} \\ \textit{il pane} \\ \text{ext.obj.}}$$

'Luca   takes out of the oven   the bread'

Figure 4. Italian parasynthetic structures with GROUND = *forno* 'oven' as stem and point of arrival and departure, respectively

The parasynthetic structures have features in common with causative structures: The external subject *"Luca"* causes the external object, *il pane* 'the bread', to move with respect to the GROUND *il forno* 'the oven'. Therefore, the component PATH is lexicalized in the parasynthetic verb as well as GROUND (in non-metaphorical senses, cf. below and Table 12).

In the appendix, I list a number of Italian examples, more precisely 174 derivatives of 115 stems, and the equivalent French examples, and the lists are by no means complete. In many cases, the same stem is the basis of one derivative denoting motion with the GROUND as arrival point and another with the GROUND as departure point, but it is interesting to see that the first type is the most frequent one. The same is true of French – although as a whole, these parasynthetic structures seem more frequent in Italian than in French (and probably Spanish, see Korzen 2012), and the fairly frequent lack of equivalent French derivatives seems to indicate language specific derivation patterns. According to *Lo Zingarelli 2010,* the vast majority of the Italian cases are known as early

as in the 14th and 15th century, i.e. in the very earliest written Italian texts. An exception is the verb *allunare* 'land on the moon' with the stem *luna* 'moon', dating back to 1961.

Numerous parasynthetic derivatives denote motion in a metaphorical sense, viz. a change in physical or mental form or position, and in such cases the "GROUND" stem can be both nominal and adjectival, as can be seen in Table 12, which cites just a few cases. Many more can be found in Korzen (2008). Also metaphorically, most verbs denote the GROUND (C_{loc}) as their "arrival point".

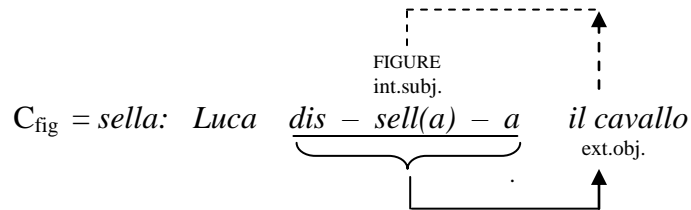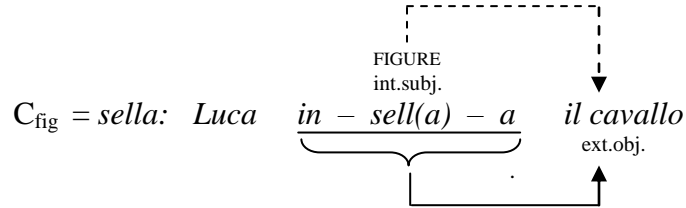**Table 12.** Italian parasynthetic GROUND verbs with a metaphorical meaning

C_{loc} (noun)	C_{loc} is arrival point	C_{loc} is departure point
anello 'ring'	*inanellare* 'curl' (hair)	
forma 'form'		*deformare / sformare / trasformare* 'deform,
arco 'arc'	*inarcare* 'bend, curve'	transform'
C_{loc} (adjective)		
piano 'flat, even'	*appianare* 'level'	
leggero 'light'	*alleggerire* 'lighten'	
sodo 'hard, uncultivated'	*assodare* 'strengthen'	*dissodare* 'cultivate'

Many of the Italian derivatives are highly frequent; for instance *infornare* and *sfornare,* limited to Italian web pages and to the infinitive verb form alone, yielded 709,000 and 863,000 Google hits, respectively.[30] Other derivatives are more rare and/or archaic, in some cases limited to specialised text genres or metaphorical usages.

Parasynthetic verbs lexicalising the component FIGURE

Another quite substantial group of parasynthetic verbs have stem nouns that denote the FIGURE that moves. For instance, from the nominal stem *sella* 'saddle' two verbs are derived: *insellare* 'saddle (a horse)' and *dissellare* 'unsaddle (a horse)'. The affixes are the same as those of the parasynthetic GROUND verbs, and the only difference is that in these cases it is the denotatum of the stem, the FIGURE, that moves – as internal subject of the host predicate – in relation to the external object.

FIGURE
int.subj.

C_{fig} = *sella:* *Luca* *in – sell(a) – a* *il cavallo*
ext.obj.

FIGURE
int.subj.

C_{fig} = *sella:* *Luca* *dis – sell(a) – a* *il cavallo*
ext.obj.

Figure 5. Italian parasynthetic structures with FIGURE as stem and moving object

In such cases, it is normal (perhaps most evidently when the external object is the arrival point of the motion, as in *insellare*) that the FIGURE assumes the semantic role of INSTRUMENT.

As with the parasynthetic GROUND derivatives, many FIGURE nouns function as stems for two parasynthetic derivatives, one denoting motion with the external object as arrival point and another with the external object as departure point, see Table 13. Due to space limitations, I confine myself to a few other cases in this context; a list 100 examples of such derivatives can be found in Korzen (2008).

Table 13. Italian parasynthetic FIGURE verbs

The external object is the arrival point of the motion	*acqua* 'water' → *annacquare* 'dilute' *cappotto* '(over)coat' → *incappottare* 'cover (with a coat)' *chiodo* 'nail' → *inchiodare* 'nail, tack' *colla* 'glue' → *incollare* 'glue' *coltello* 'knife' → *accoltellare* 'stab' *lago* 'lake' → *allagare* 'flood, inundate' *veleno* 'poison' → *avvelenare* 'poison' *zucchero* 'sugar' → *inzuccherare* 'sugar, sprinkle with sugar'
The external object is the departure point of the motion	*buccia* 'skin, peel' → *sbucciare* 'peel, pare' *budella* 'bowels' → *sbudellare* 'disembowel' *caffeina* 'caffeine' → *decaffeinare* 'decaffeinate' *chiodo* 'nail' → *schiodare* 'unnail' *crema* 'cream' → *scremare* 'skim' *nocciolo* 'fruit stone' → *denocciolare* 'take the stone(s) out of' *paglia* 'straw' → *spagliare* 'remove the straw from' *veleno* 'poison' → *svelenire* 'remove the poison from'

Conclusions

Talmy's motion verb typology, supplemented with some cognitive elaboration and refinement, has served as a solid basis for an investigation of the general lexicalisation patterns for Germanic and Romance verbs. The Danish TYPOlex project has revealed clear tendencies of a more concrete and precise lexical content in Germanic verbs explained by the frequent lexicalisation of the semantic component MANNER. Often, this component renders the verb content depictable as a PICTURE and implies relatively heavy selectional restrictions on the arguments of the verb. In other words: Germanic verbs have a larger lexical intension and a smaller extralinguistic extension. On the other hand, Romance verbs are generally more abstract and generic, expressing an abstract IDEA of a generalised action or situation, which typically covers more types of instances. The most frequent Romance motion verbs express the component PATH, but the motion itself is reduced to what could be defined as a "cognitive simulation".

The reverse phenomenon is found in the nouns. Here, the Romance languages are more precise and concrete in that they tend to lexicalise the CONFIGURATION of artefacts,[31] i.e. a lexicalisation that depends on the externally visible PICTURE of the object, whereas Germanic lexicalisation depends more abstractly on the FUNCTION of the object, i.e. on the IDEA of the purpose that the object can serve.

This paper has also exposed a perfectly productive Romance derivation pattern in which parasynthetic motion verbs are derived from stems that denote either the GROUND with respect to which a motion occurs or the FIGURE that moves. With reference to such secondary lexicalisation patterns, it must be concluded that these two components very much conflate with Romance motion verbs to form specialised systems for expressing motion.

The component GROUND can be seen as a sort of "specialised PATH component". Therefore, it is not surprising that we find this lexicalisation pattern in the Romance languages and **not** in the Germanic ones. In English and Danish, we are forced to use more lengthy constructions such as *put [something] in the oven* for the very precise Italian verb *infornare [qualcosa]*.[32]

Also regarding the FIGURE component in parasynthetic derivatives, we could say that the Romance languages have ways of "making up" for the more abstract and generic verb content. A verb such as e.g. *accoltellare* 'stab' expresses precisely the semantic content of both the English *stab* and the equivalent Danish *stikke,* i.e. an action of "piercing or injuring with a sharp pointed instrument" (*Collins English Dictionary*), i.e. an instrument such as *un coltello* 'a knife'.

All in all, there are many good grounds for including both GROUND and FIGURE in (secondary) lexicalisation patterns of the Romance languages.

References

Alonge, A. (1997). Semantica lessicale e proprietà sintattiche dei verbi di movimento italiani: analisi di dati acquisiti da dizionari di macchina e da un corpus testuale computerizzato. In L. Agostiniani (ed.), *Atti del III Convegno Internazionale della SILFI (Perugia, 27-29 giugno 1994)* (pp. 31–63). Napoli: Edizioni Scientifiche Italiane.

Alonge, A. (1998). Verbi italiani e inaccusatività: una proposta basata su dati estratti da ampie risposte lessicali computerizzate. In M. T. Navarro Salazar (ed.), Italica Matritensia. *Atti del IV Convegno SILFI (Madrid, 27-29 giugno 1996)* (pp. 61–75). Firenze: Franco Cesati.

Baron, I. (2007). Attention! Surveillance vidéo. La linguistique à l'intersection des langues et du droit. In I. Korzen, M. Lammert & H. Vassiliadou (eds.) (2007: pp. 105–123).

Baron, I. (2009). Les notions de liberté et de démocratie au Danemark et en France: valeurs universelles ou culturelles? In I. Korzen & C. Lavinio (eds.) (2009: pp. 231–252).

Baron, I. (ed.) (2003). *Language and Culture. Copenhagen Studies in Language* **29**. Copenaghen: Samfundslitteratur.

Baron, I. & Herslund, M. (2005). Leksikon. In I. Korzen & L. Lundquist (eds.), *Sprogtypologi og oversættelse. Endocentriske og exocentriske sprog* (pp. 18–39). Copenhagen: Copenhagen Business School.

Blaser, E. & Sperling, G. (2007). When is motion motion? *Perception* **37**, 624–627.

Bloomfield, L. (1933). *Language*. London: Allen & Unwin.

Borst, A. (2000). Models of motion detection. *Nature Neuroscience* **3**, 1168.

Borst, A. & Egelhaaf, M. (1989). Principles of visual motion detection. *Trends Neurosci* **12**, 297–306.

Collins English Dictionary. 21st Century Edition. 2000. Glasgow: HarperCollins.

Cresti, E. & Korzen, I. (eds.) (2010). *Language, Cognition and Identity. Extensions of the endo-centric/exocentric language typology.* Firenze: Firenze University Press.

Dellen, B. K. & Wessel R. (2009). Visual motion detection. In L. R. Squire (ed.), *Encyclopedia of Neuroscience* **10**, 291–295. Oxford: Academic Press.

De Mauro, T., Mancini, F., Vedovelli, M. & Voghera, M. (1993). *Lessico di frequenza dell'italiano parlato*. Milano: Etaslibri.

Dodge, E. & Lakoff, G. (2005). On the neural basis of image schemas. In B. Hampe (ed.), *From perception to meaning: Image schemas in cognitive linguistics*. Berlin: De Gruyter.

Durst-Andersen, P. (1992). *Mental Grammar. Russian Aspect and Related Issues.* Columbus & Ohio: Slavica Publishers.

Durst-Andersen, P. (2000). The English progressive as picture description. *Acta Linguistica Hafniensia* **32**, 45–103.

Durst-Andersen P., Smith, V. & Thomsen, O. N (2013). Towards a Cognitive-Semiotic Typology of Motion Verbs. In C. Paradis, J.Hudson & U.Magnusson (eds.). *The Construal of Spatial Meaning: Windows into Conceptual Space*. Oxford : Oxford University Press, 118-143.

Gennari, S. P., Sloman, S. A. Malt, B. C. & Fitch, W. T. (2002). Motion events in language and cognition. *Cognition* **83** **(1)***,* 49–79.

Herslund, M. (2000). Tipologia grammaticale e tipologia lessicale. In I. Korzen & C. Marello (eds.), 2000: pp. 11–18.

Herslund, M. (2003). Pour une typologie lexicale. In Herslund, M. (ed.), 2003: pp. 13–28.

Herslund, M. (2005). Komplekse prædikater. In *Dansk Funktionel Lingvistik. En helhedsforståelse af forholdet mellem sprogstruktur, sprogbrug og kognition* (pp. 88–100). Copenhagen & Roskilde: Københavns Universitet, Handelshøjskolen i København & Roskilde Universitetscenter.

Herslund, M. (2014). Mouvement et déplacement. Typologie des verbes de mouvement en roman et en germanique. In Korzen, I., Ferrari, A. & De Cesare, A.-M. (eds.), 2014: pp. 75–93.

Herslund, M. (ed.) (1997). *Det franske sprog. Kapitel I. Grundlag.* Copenhagen: Copenhagen Business School.

Herslund, M. (ed.) (2003). *Aspects linguistiques de la traduction*. Bordeaux: Presses Universitaires de Bordeaux.

Herslund, M. & Baron, I. (2003). Language as world view. Endocentric and exocentric representations of reality. In I. Baron (ed.), 2003: pp. 29–42.

Herslund, M. & Baron, I. (eds.) (2005). *Le génie de la langue française. Perspectives typologiques et contrastives. Langue française* **145**. Paris: Larousse-Colin.

Hjelmslev, L. (1993 [1943]). *Omkring Sprogteoriens Grundlæggelse. Travaux du cercle linguistique de Copenhague* **XXV**. Copenhagen: Reitzel.

Humboldt, W. v. (1997 [1822]). On the national character of languages. In T. Harden & D. Farrelly (eds.), *W. v. Humboldt. Essays on Language* (pp. 52–67). Frankfurt am Main: Peter Lang.

Iacobini, C. (2004). Parasintesi. In M. Grossmann & F. Rainer (eds.), *La formazione delle parole in italiano* (pp. 165–188). Tübingen: Max Niemeyer.

Jakobson, R. (1959). On linguistic aspects of translation. In R.A. Brower (ed.), *On translation* (pp. 232–239). Cambridge, Mass.: Harvard University Press.

Kiparsky, P. (1997). Remarks on Denominal Verbs. In A. Alsina, J. Bresnan & P. Sells (eds.), *Argument Structure* (pp. 473–499). Stanford, CA: CSLI Publications.

Korzen, I. (2000). Pragmatica testuale e sintassi nominale. Sull'esplicitezza pragmatestuale del sistema nominale in italiano e in danese. In I. Korzen & C. Marello (eds.), 2000: pp. 81–109.

Korzen, I. (2005a). Struttura linguistica e schema cognitivo: tipologie a confronto. In I. Korzen (ed.), *Lingua, cultura e intercultura: l'italiano e le altre lingue. Atti dell'VIII Convegno SILFI. Copenhagen Studies in Language* **31**, 123–134.

Korzen, I. (2005b). Dalla microstruttura alla macrostruttura. In P. D'Achille (ed.), *Generi, architetture e forme testuali. Atti del VII Convegno SILFI* (pp. 363–376). Firenze: Franco Cesati.

Korzen, I. (2008). Strutture di lessicalizzazione: un approccio tipologico-comparativo. In E. Cresti (ed.), *Prospettive nello studio del lessico italiano. Atti del IX Congresso della Società Internazionale di Linguistica e Filologia Italiana* (pp. 341–349). Firenze: Firenze University Press.

Korzen, I. (2012). Endo- og exocentrisk verbaltypologi. En genlæsning af Talmy – nu med (god) Grund. In C. Bache, A. Holsting & U. Kjær Nissen (eds.), *Ny forskning i grammatik* **19** (pp. 129–152). Odense: Syddansk Universitet.

Korzen, I. & D'Achille, P. (eds.) (2005). *Tipologia linguistica e società. Considerazioni inter- e intralinguistiche*. Firenze: Franco Cesati.

Korzen, I., Ferrari, A. & De Cesare, A.-M. (eds.) (2014). *Tra romanistica e germanistica: lingua, testo, cognizione e cultura / Between Romance and Germanic: Language, text, cognition and culture*, Bern et al.: Peter Lang.

Korzen, I., Lammert, M. & Vassiliadou, H. (eds.) (2007). *Langues d'Europe, l'Europe des langues. Croisements linguistiques. Scolia* **22**. Strasbourg: Université Marc Bloch.

Korzen, I. & Lavinio, C. (eds.) (2009). *Lingue, culture e testi istituzionali*. Firenze: Franco Cesati.

Korzen, I. & Marello, C. (eds.) (2000). *Argomenti per una linguistica della traduzione. Gli argomenti umani* **4**. Alessandria: Edizioni dell'Orso.

Levin, B. & Rappaport Hovav, M. (1992). The lexical semantics of verbs of motion: the perspective from unaccusative. In I. M. Roca (ed.), *Thematic Structure: Its Role in Grammar* (pp. 247–269). Berlin & New York: De Gruyter

Majid, A., Gullberg, M., van Staden, M. & Bowerman, M. (2007). How similar are semantic categories in closely related languages? A comparison of cutting and breaking in four Germanic languages. *Cognitive Linguistics* **18–2**, 179–194.

Moneglia, M. & Panunzi, A. (2010). I verbi generali nei corpora di parlato. Un progetto di annotazione semantica cross-linguistica. In E. Cresti & I. Korzen, 2010: pp. 27–45.

Moneglia M., Gagliardi, G., Gregori, L., Panunzi, A., Paladini, S. & Williams, A. (2012). La variazione dei verbi generali nei corpora di parlato spontaneo. L'ontologia IMAGACT. In H. Mello, M. Pettorino, T. Raso (eds.), *Proceedings of the VIIth GSCP International Conference: Speech and Corpora* (pp. 406-411). Firenze: Firenze University Press.

Moneglia, M., Monachini, M., Calabrese, O., Panunzi, A., Frontini, F., Gagliardi, G. & Russo, I. (2012). The IMAGACT Cross-linguistic Ontology of Action. A new infrastructure for natural language disambiguation. In N. Calzolari, K. Choukri, T. Declerck, M. U. Doğan, B. Maegaard, J. Mariani, J. Odijk & S. Piperidis (eds), *Proceedings of the Eight International Conference on Language Resources and Evaluation* (LREC'12) (pp. 2606–2613). European Language Resources Association (ELRA), Paris.

Mora Gutiérrez, J. P. M. (2001). Directed motion in English and Spanish. *Estudios de Lingüística Española* **11**.

Müller, H. H. (2005). Meaning Construction Within Spanish Nominal Syntagmatic Compounds (NSCs). In I. Korzen & P. D'Achille, 2005: pp. 55–76.

Pascual Aransáez, C. (1999). A cognitive analysis of the cross-linguistic differences between English and Spanish motion verbs and the Spanish translator's task. *Cuadernos de investigación filológica* **25**, 127–136.

Pustejovsky, J. (1995). *The Generative Lexicon*. Cambridge, Mass. & London: The MIT Press.

Roberts, M.H. (1939). The problem of the hybrid language. *The Journal of English and Germanic philology* **XXXVIII**, 23–41.

Rousseau, A. (1995). À propos des préverbes du français. Pour une méthodologie d'approche syntaxique. In A. Rousseau (ed.), *Les préverbes dans les langues d'Europe. Introduction à l'étude de la préverbation* (pp. 197–223). Villeneuve d'Aasq: Presses Universitaires du Septentrion.

Rousseau, A. (1998). La double transitivité existe-t-elle ? Réflexions sur la nature de la transitivité. In A. Rousseau (ed.), *La transitivité* (pp. 85–112). Villeneuve d'Aasq: Presses Universitaires du Septentrion.

Sapir, E. (1964 [1929]). The status of linguistics as a science. In D. G. Mandelbaum (ed.), *Culture, Language and Personality. Selected essays* (pp. 160–166). Berkeley & Los Angeles: University of California Press.

Schøsler, L. (2010). Bevægelsesverber i et historisk og i et typologisk perspektiv. In M. Birkelund et al. (eds.), *Ny forskning i grammatik* **17** (pp. 129–148). Odense: Syddansk Universitet.

Sen, S. & Janowicz, K. (2005) Semantics of motion verbs. In *Proceedings of Workshop on Spatial Language and Dialogue (WOSLAD),* Delmenhorst, Germany.

Slobin, D. I. (1996). Two Ways to Travel. Verbs of Motion in English and Spanish. In M. Shibatani & S. A. Thompson (eds.), *Grammatical Constructions. Their Form and Meaning* (pp. 195–219). Oxford: Oxford University Press.

Smith, V. (2005a). Towards a Typology of Situations and Verbs Involving Motion. Paper presented at "New directions in cognitive linguistics", Brighton, October 23rd – 25th 2005. www.sugartexts.dk/oxford_pd_vs.pdf.

Smith, V. 2005b. Modeling the semantics of relocation: For SugarTexts and beyond. In . N, Madsen & H.E. Thomsen, Hanne (eds.). *Terminology and concept development*. *Proceedings of the 7th international conference on terminology and knowledge engineering*. Copenhagen: Litera, 226-236.

Smith, V. (2009). Telling the sugarstory in seven Indo-European languages. What may and what must be conveyed? In I. Korzen & C. Lavinio (eds.), *Lingue, culture e testi istituzionali* (pp. 61–76). Firenze: Franco Cesati.

Talmy, L. (1985). Lexicalization patterns: semantic structure in lexical forms. In T. Shopen (ed.), *Language typology and syntactic description, Vol. III. Grammatical categories and the lexicon* (pp. 57–149). Cambridge: Cambridge University Press.

Talmy, L. (2000). *Towards a cognitive semantics: Volume 2: Typology and process in concept structuring*. Cambridge, Mass. & London: The MIT Press.

Tesnière, L. (1982[4] [1959]). *Éléments de syntaxe structurale*. Paris: Klincksieck.

Whorf, B. L. (1956 [1940]). Science and Linguistics. In J. B. Carroll (ed.), *Language, Thought and Reality. Selected Writings of Benjamin Lee Whorf* (pp. 207–219). Cambridge, Mass.: The MIT Press.

Lo Zingarelli 2010. Vocabolario della lingua italiana. Bologna: Zanichelli.

Zlatev, J. (2007). Spatial semantics. In Geeraerts, D., Cuyckens, H. (eds.), *The Oxford Handbook of cognitive linguistics, Chapter 13* (pp. 318–350). Oxford: Oxford University Press.

APPENDIX

Italian and French parasynthetic verbs that lexicalise GROUND in concrete motion, subdivided according to the type of GROUND

In some cases, the French examples do not correspond etymologically to the Italian but are placed where they are semantically closest to these.

GROUND (C_{loc})	C_{loc} arrival point	C_{loc} departure point	Parallel French cases [33]
Body parts (human and animal):			
becco 'beak'	*imbeccare*		
bocca 'mouth'	*imboccare*	*sboccare – traboccare*	*emboucher*
braccio 'arm'	*im/abbracciare*	*sbracciare*	*embrasser*
gozzo 'craw, stomach'	*ingozzare*		
piede 'foot'	*appiedare*		
Home, buildings, etc.:			
casa 'home'	*accasarsi*		
caserma 'barracks'	*accasermare*		*encaserner*
covo 'cave'		*scovare*	
finestra 'window'		*defenestrare*	*défénestrer*
letto 'bed'	*allettare*		*aliter*
muro 'wall'	*immurare*	*smurare*	*emmurer*
nido 'nest'	*annidare*	*snidare*	*dénicher*
tana 'cave'	*(r)intanarsi*	*stanare*	
tavola 'table'	*intavolare*		
Kitchen, cooking:			
busecchia 'gut'	*imbusecchiare*		
farina 'flour'	*infarinare*		*enfariner*
forno 'oven'	*infornare*	*sfornare*	*enfourner – défourner*
fuoco 'fire'	*infuocare*		*enflammer*
guscio 'shell'		*degusciare, sgusciare*	
padella 'frying pan'		*spadellare*	
pane 'bread'	*impanare*		*paner*
viscere 'guts'	*inviscerare*		
Liquids, substances, and materials:			
amido 'starch'	*inamidare*		
gesso 'plaster'	*ingessare*		*plâtre* 'plaster' → *plâtrer*
gomma 'rubber'	*ingommare*	*sgommare*	*(en)gommer – dégommer*
pania 'birdlime'	*impaniare*	*spaniare*	

pece 'pitch'	*impeciare*		
pegola 'pitch'	*impegolare*		*goudron* 'tjære' → *goudronner*

Tools etc.:

asta 'pole'	*inastare*		*embrocher – débrocher*
canna 'pipe, tube'	*incannare*	*tracannare*	*embobiner – débobiner*
cocca 'nock'	*incoccare*	*scoccare (una freccia)*	
manette 'handcuffs'	*ammanettare*		*menotter*
palo 'pole'	*impalare*	*spalare*	*empaler*

Containers, boxes, etc.:

borsa 'bag'	*(r)imborsare*	*(di)sborsare*	*(r)embourser – débourser*
botte 'barrel'	*imbottare*		*tonne* → *entonner*
			caque → *encaquer*
bottiglia 'bottle'	*imbottigliare*		*embouteiller*
buca 'hole, mailbox'	*imbucare*	*sbucare*	*poster*
casella 'room (in box)'	*incasellare*		
cassa 'box'	*incassare*	*scassare*	*encaisser – décaisser*
			châsse → *enchâsser*
fiasco 'flask'	*infiascare*		
magazzino 'stock (room)'	*immagazzinare*		*emmagasiner*
sacco 'sack'	*insaccare*		*ensacher*
scatola 'box'	*inscatolare*		*emboîter*
silo 'silo'	*insilare*		*ensiler*
vaso 'vase'		*svasare, travasare*	

Packaging, cases etc.:

bozzolo 'cocoon'		*(s)bozzolare*	
carta 'paper'	*incartare*	*scartare*	
fagotto 'bundle'	*infagottare*		
fascia 'wrap'	*fasciare*	*sfasciare*	
fodero 'cover', 'case'	*(r)infoderare*	*sfoderare*	
guaina 'sheath'	*inguainare*	*sguainare*	*engainer – dégainer*
pacchetto 'small package'	*impacchettare*		*empaqueter*
pacco 'package'	*impaccare*		*emballer – déballer*
tasca 'pocket'	*intascare*		*poche* → *empocher*

Collections, frames, groups, etc.:

cornice 'frame'	*incorniciare*	*scorniciare*	
corpus 'corpus'	*incorporare*	*scorporare*	*incorporer*
filo 'string, thread'	*infilare*	*sfilare*	*enfiler*
filza 'string'	*infilzare*	*sfilzare*	
matricola 'register'	*immatricolare*		*immatriculer*
pila 'pile'	*impilare*		*empiler*

quadro 'frame'	*inquadrare*		*encadrer*
scena 'scene'	*inscenare*		
telaio 'loom'	*intelaiare*		*entoiler*

Loops, lines, brakes, etc.:

bottone 'button'	*abbottonare*	*sbottonare*	*boutonner – déboutonner*
briglia 'bridle'	*imbrigliare*	*sbrigliare*	*brider – débrider*
cardine 'hinge'		*scardinare*	
catena 'chain'	*incatenare*	*scatenare*	*enchaîner – déchaîner*
freno 'brake'		*sfrenare*	
gancio 'hook'	*agganciare*	*sganciare*	
ganghero 'hinge, buckle'	*aggangherare*	*sgangherare*	
graffa 'staple'	*aggraffare*		*agrafer – dégrafer*
guinzaglio 'leash'		*sguinzagliare*	
laccio 'lace'	*allacciare*	*slacciare*	*lacer – délacer*
pastoia 'hobble'	*impastoiare*	*spastoiare*	
vincolo 'bond, constraint'		*svincolare*	

Traps, cages, prisons:

carcere 'prison'	*incarcerare*	*scarcerare*	*incarcérer*
gabbia 'cage'	*ingabbiare*	*sgabbiare*	*encager*
prigione 'prison'	*imprigionare*	*sprigionare*	*emprisonner*
rete 'net'	*irretire*		
trappola 'trap'	*intrappolare*		*piège → piéger*

Nature, landscapes, sea (also metaphorically):

abisso 'abyss'	*inabissare*		*abîmer*
alveo 'riverbed'	*inalveare*		
campo 'field, battlefield'	*accampare*	*scampare*	*camper – décamper*
canale 'channel'	*incanalare*		*canaliser*
centro 'centre'	*incentrare*	*decentrare*	*centrer – décentrer*
cerchio 'circle'	*accerchiare*		*encercler*
croda 'crag'	*incrodarsi*		
fango 'mud'	*infangare*	*sfangare*	*encrasser − décrasser*
fogna 'sewer'	*infognarsi* [34]	*sfognare*	
fondo 'bottom'	*affondare*		
fossa 'ditch, pit'	*infossare*	*sfossare*	
luna 'moon'	*allunare* [35]		*alunir*
mare 'sea'	*ammarare*		*amerrir*
pantano 'swamp, bog'	*impantanarsi*	*spantanare*	*embourber – débourber*
podere 'farm, estate'		*spoderare*	
polvere 'dust'	*impolverare*		*poudrer*
proda 'bank'	*approdare*		
sabbia 'sand'	*insabbiare*		*ensabler*
sole 'sun'	*assolare*		*ensoleiller*

terra 'land, earth'	*atterrare / interrare*		*atterrir, enterrer*
valle 'valley'	*avvallare / divallare*		*avaler / dévaler*

Botany:

albero 'tree'	*inalberare*		
bosco 'forest'	*imboscare*		
paglia 'straw'	*impagliare*	*spagliare*	*empailler – dépailler*
pioppo 'poplar'	*appioppare*		

Cities, neighbourhoods (also metaphorically):

cantone 'corner'		*scantonare*	*coin → coincer*
pista 'track, trail'		*depistare*	*dépister*
rotta 'course', 'route'		*dirottare*	
strada 'street'	*instradare*		
urbs [Latin] 'city'	*inurbarsi*		*s'urbaniser*
via 'road'	*avviare*	*de-/dis-/s-/traviare*	*dévier, fourvoyer*
vicolo 'alleyway'		*svicolare*	

Transportation:

barca 'ship'	*imbarcare*	*sbarcare / disbarcare*	*embarquer – débarquer*
bordo 'railing'	*abbordare*	*debordare / trasbordare*	*aborder – déborder*
prua 'bow'	*appruare*		

Footnotes

---

* I am grateful to Michael Herslund and the two anonymous reviewers for very valuable comments and suggestions.

[1] Cf. Tables 9-10 below for more examples. See also e.g. Alonge (1997, 1998); Baron & Herslund (2005); Herslund (2000, 2003); Korzen (2005a, 2008); Levin & Rappaport (1992); Smith (2009). In fact, the literature dealing with these topics seems almost endless, and the reference list at the end of this paper offers but a few suggestions for further reading. For further references, see e.g. Smith (2005).

[2] Instead of GROUND, some scholars (e.g. Pascual Aransáez, 1999; Slobin, 1996; Zlatev, 2007) talk about LANDMARK. In Sen & Janowicz's (2005: 2) system, LANDMARK contains two categories, GROUND (a non-relative indication such as *Rome*) and RELATIVE (such as *here*).

[3] Tesnière worked on his book from before 1939 until 1950. He died in 1954, and his book was published posthumously.

[4] Other terms for 'translational motion' – apart from Tesnière's (1982 [1959]) 'déplacement' – are e.g. MOTION EVENTS (Gennari, Sloman, Malt & Fitch, 2002), DIRECTED MOTION (Mora Gutiérrez, 2001) and RELOCATION (Smith, 2005; 2009). See also the following section.

[5] "Thinking about how the nervous system extracts motion information, one might imagine that it compares successive images to measure the displacement of a certain object." (Borst & Egelhaaf 1989: 297).

[6] "The concept of action is thus a collective concept of events and processes – just as the concept of human being is a collective concept of men and women." (Durst-Andersen 2000: 61).

[7] The project is led by Michael Herslund and the group includes Irene Baron, Hanne Korzen, Lita Lundquist (who, apart from Danish and English, specialize in French), Henrik Høeg Müller (Spanish, Danish and English), Viktor Smith (Russian, Danish and English) and the author of this paper (Italian, Danish and English). The project's international publications include e.g. Baron (ed.) (2003), Cresti & Korzen (eds.) (2010), Herslund (ed.) (2003), Herslund & Baron (eds.) (2005), Korzen & D'Achille (2005), Korzen, Ferrari & De Cesare (2014), Korzen, Lammert & Vassiliadou (eds.) (2007), Korzen & Lavinio (eds.) (2009), and Korzen & Marello (eds.) (2000).

[8] In Talmy's (2000: 53-57) framework, these three elements are comprised by the VECTOR, which together with the CONFORMATION and the DEICTIC constitute the three main components of PATH. Alonge (1997) and (1998) subdivide PATH in SOURCE ('sorgente') and TARGET ('meta').

[9] Talmy (ibid.: 58) also quotes verb roots in Atsugewi (a Native American language of Northern California) that distinguish between "small shiny spherical objects, smallish planar objects, slimy lumpish objects, limp linear objects, loose dry dirt and runny icky material".

[10] Like the English *drive,* the Danish verb *køre* indicates that the movement is performed with the aid of a vehicle with wheels (or on runners such as sleighs); therefore, the specification *by car / i bil* may be necessary. Whereas *køre* does not specify or limit the number of wheels, for which reason it can be used e.g. about bicycling*, drive* specifies that the vehicle has more than two wheels.

[11] I here choose to ignore collocations and corresponding real-life situations such as *travel on foot.*

[12] Regarding *køre,* cf. footnote 10. To the English *ski* corresponds the Danish phrasal verb *stå på ski* 'stand on skis'.

[13] *Sgattaiolare* can have both an unaccusative telic and an unergative atelic meaning and is therefore placed in the left hand column of Table 10 below.

[14] Possibly, in the case of *hanging,* a specification is more frequent; here, also the Italian verb *pendere* 'hang' may be used.

[15] In several of the cases of Table 2, the Danish verb *være* 'be' is not excluded, but the specific position verbs cited in the Table are much more frequent.

[16] A similar but intra-Germanic comparison is carried out by Majid, Gullberg, van Staden & Bowerman (2007) who investigate English, German, Dutch and Swedish verbs of "cutting and breaking". The project IMAGACT, based at three Tuscan Universities, has produced a large-scale cross-linguistic ontology of action with the identification of more than 1,000 high-frequency action concepts and the definition of correspondences between verbs and actions in Italian, English, Chinese and two varieties of Spanish. Cf. e.g. Moneglia & Panunzi (2010), Moneglia, Gagliardi,

Gregori, Panunzi, Paladini & Williams (2012), Moneglia, Monachini, Calabrese, Panunzi, Frontini, Gagliardi & Russo (2012), and the project's web site: http://www.imagact.it.

[17] Except for *rompere il legno* 'chop the wood', which however has been confirmed by native speakers.

[18] Whereas *lugter* may be used both positively and negatively, *dufter* always conveys a positive evaluation.

[19] The Italian hyperonym *veicolo* covers the types mentioned in the top part of Table 6 but unlike Danish *vogn* also includes means of transportation able to travel in space. The same is true of English *vehicle*.

[20] Lexicalisation of natural objects is parallel to that of artefacts: In Germanic languages, natural objects are generally lexicalised at a hyperonymic level compared with Romance languages. See examples in Herslund (ibid.), and Korzen (2000).

[21] TYPOlex "borrowed" the terms *endocentric* and *exocentric* from Bloomfield (1933: 194-196 and *passim*), who however confined their use to the description of noun phrase structure.

[22] See also Talmy (2000: 52).

[23] The three last mentioned verbs are derivatives of the nouns *kryds* 'cross', *land* 'land' and the adjective *let* 'light', respectively; *forsvinde* derives from a complex verb in mediaeval Low German. Furthermore, the verbs *tage*, lit. 'take', and *drage,* lit. 'drag, draw', can be used in collocations such as *tage/drage af sted, tage/drage på landet, tage/drage til byen...* 'depart', 'go to the countryside', 'go to town'.

[24] This has prompted Baron and Herslund (2005: 24-26) to name the Romance PATH and MANNER verbs 'series 1' and 'series 2' verbs, respectively.

[25] See also Herslund (ed.) (1997: 21)

[26] For diachronic and cross-Romance comparisons, see also Herslund (2014).

[27] The two verbs are very commonly used with the meaning illustrated in (7), which could however be considered as metaphorical, the literal (intransitive) meaning of *girare* being 'to turn', 'to rotate', and that of *circolare* 'to circulate', e.g. about the blood in veins and arteries.

[28] For interesting discussions of a longer list of English GROUND verbs and a distinction between "Locatum verbs" (where "putting x in y" is a canonical use of x) and "Location verbs" (where "putting x in y" is a canonical use of y), see Kiparsky (1997).

[29] On parasynthesis in Italian, see also Iacobini (2004). On French and some German parasynthetic derivations, see Rousseau (1995) and (1998).

[30] The Google search was conducted on October 25th 2012. *Sfornare* also has a metaphorical sense of 'producing, putting out (in great quantity)', which explains the higher number of hits.

[31] Regarding natural objects, see footnote 20.

[32] Since derivatives generally maintain the lexico-semantic components of the original stem, these Romance verbs differ from the typical exocentric verb pattern by having a precise and specific meaning.

[33] I owe the French list to Michael Herslund. I also thank Hanne Korzen for French tips. None of the lists pretend to be complete.

[34] Only metaphorical usage.

[35] According to *Lo Zingarelli 2010* this verb dates back to 1961.