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## Endocentric and exocentric verb typology: Talmy revisited – on good grounds\*

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#### 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 lexicalization patterns for motion verbs with some elaboration and refinement of the Manner-path distinction, and it is generalized 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 generalized in Romance (secondary) lexicalization patterns—parasynthetic derivation—than normally assumed.

KEYWORDS: lexicalization patterns, manner-path distinction, motion verbs, parasynthetic derivation.

## 1. 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 lexicalization in the various languages and language families and groups (cf. Herslund, 1997, p. 16). Leonard Talmy's work on motion verb typology – especially Talmy (1985, 2000) – remains a cornerstone for research on motion verb lexicalization, and the Talmyan framework has also greatly inspired a Danish research group, TYPOlex, in its taxonomic distinction between the

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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 ('exocentric' = 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 lexicalization 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 generalizations of verb (and, briefly, noun) lexicalization 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.

## 2. Talmy (briefly) revisited

It is well known that Talmy (1985, pp. 62–76; 2000, pp. 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, p. 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 lexicalize 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 (Talmy, 2000, p. 222).

Regarding the three principal lexicalization types, Talmy adds (2000, p. 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 ... <sup>1</sup> 'walk, swim, roll, dance'

According to Talmy (2000, p. 60), the three patterns are also "apparently the main ones found across languages", leaving the semantic component GROUND generally unlexicalized:

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. (Talmy, 2000, p. 60)<sup>2</sup>

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" (Talmy, 2000, p. 61). However, according to Talmy, "such [larger] systems are not to be found" (p. 61).

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], pp. 307–310)<sup>3</sup> distinguished between MOUVEMENT and DÉPLACEMENT, and characterized 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' (p. 309).

What is new in Talmy's framework is his overall cognitive approach. His distinction between motion with and without the component PATH is

<sup>[1]</sup> Cf. Tables 9 and 10 for more examples. See also, e.g., Alonge (1997, 1998), Baron and Herslund (2005), Herslund (2000, 2003a); Korzen (2005a, 2008), Levin and Rappaport (1992), and 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 (2005a, 2005b).

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

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

summarized 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, pp. 35–36, cf. also pp. 25–26). 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, 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, 2005b) proposal for a synthesis between Talmy's original analyses, the verb typology of Durst-Andersen (e.g., 1992, 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, and Thomsen (2013).

## 3. Looking more closely into MANNER and PATH

## 3.1. THE 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;<sup>5</sup> see also Dellen and Wessel (2009). In the same vein, Dodge and Lakoff (2005) quote neuroscientific research revealing that the same brain structures are used when imagining or talking about an action and when actually executing the same action (pp. 73–74). These 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. (Dodge & Lakoff, 2005, p. 83)

<sup>[4]</sup> 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, 2005a, 2005b, 2009). See also Section 3.

<sup>[5] &</sup>quot;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, p. 297).

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" (p. 627). Conceptual motion implies a different kind of processing, called a "cognitive simulation" (p. 627). Such processing is of a much more abstract nature and "has little restriction on the visual tokens that may be displaced" (p. 627). 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" (p. 627), conceptual motion "would seem to be distinctly second-class" (p. 627) and dependent on the aforementioned cognitive simulation of perceptual motion.

#### 3.2. DURST-ANDERSEN AND SMITH

Within the linguistic cognitive research, Durst-Andersen (1992, pp. 53–63, 2000, pp. 59–66) takes his starting point in "the perceptual notion of picture" (2000, p. 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. Action verbs are verbs such as give, sell, buy, leave, kill, etc.

<sup>[6] &</sup>quot;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, p. 61).

Smith (e.g., 2005a, 2005b, 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" (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" (§2.2.).

# 4. 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 of studying typological differences in lexicon and text structure between Germanic and Romance languages. The overall starting point of the TYPOlex project is the wellestablished fact that languages subdivide the world in different ways according to their lexicalization patterns (e.g., Herslund & Baron, 2003; Hjelmslev, 1993 [1943], p. 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, p. 236) so aptly puts it. In their efforts to work out a general typological description of lexicalization patterns in different language families and groups, these researchers were particularly inspired by Talmy's framework regarding motion verb lexicalization and by elements of Pustejovsky's (e.g., 1995, pp. 76-104) QUALIA STRUCTURE regarding noun lexicalization.

Comparing the Germanic and the Romance languages, the TYPOlex scholars were able to ascertain an overall difference in what they label as CONCRETENESS vs. ABSTRACTNESS in the lexicalization of verbs and nouns. By 'concreteness', the group refers to the denotation of an exterior, visible

<sup>[7]</sup> The project is led by Michael Herslund and the group includes Irene Baron, Hanne Korzen, Lita Lundquist (who all, 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 (2003), Cresti and Korzen (2010), Herslund (2003b), Herslund and Baron (2005), Korzen and D'Achille (2005), Korzen, Ferrari, and De Cesare (2014), Korzen, Lammert, and Vassiliadou (2007), Korzen and Lavinio (2009), and Korzen & Marello (2000).



Fig. 1. Representations of motion expressed by MANNER verbs.

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.

## 4.1. GERMANIC AND ROMANCE LEXICALIZATION OF VERBS

Regarding verb lexicalization, 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.

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. 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 and Sperling (2007, p. 627) put it, cf. section 3.1.

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

Unlike the Italian verb *entrare*, but like the English MANNER verbs (the first ones mentioned in the right-hand column of Table 1), 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 lexicalization

<sup>[8]</sup> In Talmy's (2000, pp. 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, 1998) subdivides PATH in SOURCE ('sorgente') and TARGET ('meta').

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

Italian (PATH: idea)		Danish  (MANNER: picture)		English (MANNER/PATH)	
l'uomo	entra (correndo)	manden	løber ind	the man	runs in / enters (running)
l'uomo	entra (in macchina)	manden	$\pmb{\textit{kører ind}}\ (i\ bil)$	the man	drives in / enters (driving a car)

such as the one found in English verbs like *min* and *spit* (cf. Talmy, 2000, pp. 57–58). Other cases of primary figure lexicalization 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. <sup>10</sup>

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

<sup>[9]</sup> Talmy (2000, p. 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".

<sup>[10]</sup> 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.



Fig. 2. Representations of 'MEANS OF MOTION verbs'.

### 4.2. 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 in 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.<sup>11</sup> 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<sup>12</sup>

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

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 lexicalized 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'

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

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

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. <sup>13</sup>

Thus, whereas the verbs in (3) and (4), illustrated in Figure 2, are very similar to other Manner verbs, both syntactically and in their frequency in the two language families, the verbs in (6) should be analyzed 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'.

# 4.3. EXTENSIONS OF THE MOTION VERB LEXICALIZATION 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 section, I cite a few Italian–Danish examples; many more French–Danish examples can be found in Herslund (1997, pp. 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.<sup>14</sup>

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

<sup>[13]</sup> Sgattaiolare can have both an unaccusative telic and an unergative atelic meaning and is therefore placed in the left-hand column of 10 in section 4.6.

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











Fig. 3. Representations of position expressed by MANNER verbs.

TABLE 2. Examples of position verbs in Italian and Danish

talian .	Dani	Danish	
Lo zucchero 'the sugar' Lo zucchero Il libro 'the book' Il libro La radio 'the radio' L'arrosto 'the roast' Il tumore 'the tumor' La coperta 'the blanket' La chiave 'the key' La chiave La chiave	olo 'on the table' olo olo 'in the shelf' affale 'on the shelf' affale 'stå (vertically) affale 'on the shelf' o'in the oven' o'in the chest' o'on the bed' orta 'in the door' oro on the wall' olo 'on the table'  stå 'stand' (a p ligge (horizont stå (vertically) stå (vertically) stå 'stå 'sidde 'sit' ligge orta 'in the door' sidde hænge 'hang' olo 'on the table'	g or loose) cally)	
		0	

choice between the abovementioned position verbs in Danish. In all cases, the Italian verb, 'V', can be *essere*, *stare*, or *trovarsi* 'be (located)'. <sup>15</sup>

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 fifteen different Danish verbs: *brække*, *knække*, *bryde*, *gennembryde*, *afbryde*, *flække*, *knalde*, *knuse*, *mase*, *baldre*, *smadre*, *odelægge*, *kløve*, *hugge*, and *brænde* depending on the MANNER of the action and the FIGURE of the object destroyed. The Italian examples in Table 3 all come from *Lo Zingarelli 2010*. <sup>17</sup>

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

<sup>[16]</sup> A similar but intra-Germanic comparison is carried out by Majid, Gullberg, van Staden, and 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 and Panunzi (2010), Moneglia, Gagliardi, Gregori, Panunzi, Paladini, and Williams (2012), Moneglia, Monachini, Calabrese, Panuzi, Frontini, Gagliardi & Russo (2012), and the project's web site: <a href="http://www.imagact.it">http://www.imagact.it</a>.

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

TABLE 3. Italian and Danish 'verbs of destruction'

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

Table 4 cites some Italian and Danish (transitive and intransitive) kitchen verbs. Again, the Italian verbs are more abstract and denote what are, 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.

And while we are in the kitchen region: 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.

In all the cases cited in this section, 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.

## 4.4. GERMANIC AND ROMANCE LEXICALIZATION 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 lexicalization patterns. Compared with Romance lexicalization of nouns, Germanic primary lexicalization

## 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',
(bollire 'boil', friggere 'fry', arrostire 'roast', imburrare 'butter')	spejle (et æg) 'fry (an egg)', syde 'sizzle', smøre (madder) 'butter (sandwiches)'

TABLE 5. Italian and Danish evaluation expressions

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

(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 lexicalization, a Germanic language will typically create a N+N compound, as is seen in Table 6.

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 Table 6 shows, Italian does not have a hyperonym equivalent to *stol*.<sup>19</sup>

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 lexicalization at a hyponymic level (e.g., *throne*, *pulpit*, *court*).

The (primary) Germanic and Romance lexicalization of artefacts can be seen in the light of the four semantic components, or 'explanatory categories' (Müller, 2005, p. 65), that Pustejovsky (1995, pp. 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

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

<sup>[19]</sup> 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*.

TABLE 6. Two examples of nominal lexicalization in Italian, Danish, and English

Italian	Danish	English vehicle	
veicolo	vogn		
automobile (macchina)	personvogn 'person-'	car	
camion	last <b>vogn</b> 'cargo-'	lorry	
furgone	vare <b>vogn</b> 'goods-'	van	
autogrù	kran <b>vogn</b> 'crane-'	breakdown <b>van</b>	
taxi	hyre <b>vogn</b> 'hire-' (or taxa)	taxi	
tram	sporvogn 'tracks-'	tram	
vagone	tog <b>vogn</b> 'train-'	wagon, carriage	
carrozza	heste <b>vogn</b> 'horse-'	carriage	
carrozzina/carrozzella	barne <b>vogn</b> 'child-'	pram, baby carriage	
carrello indkøbs <b>vogn</b> 'shopping		trolley	
	stol	chair	
sedia	spisestue <b>stol</b> 'dining room-'	dining room chair	
poltrona	læne <b>stol</b> 'lean-'	arm <b>chair</b>	
sdraio	ligge <b>stol</b> 'lie-'	deck <b>chair</b>	
trono, seggio	tron <b>stol</b> 'throne-'	throne	
pulpito, pergamo	prædike <b>stol</b> 'preach-'	pulpit	
podio	taler <b>stol</b> 'speaker-'	rostrum	
corte, tribunale	dom <b>stol</b> 'sentence-'	court (of law)	

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 lexicalization is based on EXTERNAL, VISIBLE ASPECTS of the object (corresponding to the CONSTITUTIVE 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 and Baron (2003) and Herslund (1997, pp. 30–43); for Spanish examples, see Müller (2005).<sup>20</sup>

# 4.5. 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 lexicalization 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 lexicalization tends to produce abstract verbs, based on a generalized

<sup>[20]</sup> Lexicalization of natural objects is parallel to that of artefacts: in Germanic languages, natural objects are generally lexicalized at a hyperonymic level compared with Romance languages. See examples in Herslund (1997), and Korzen (2000).

Table 7. Typical lexicalization 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)

and/or conceptualized IDEA of the verb situation, and precise nouns based on the external aspects, the PICTURE, of the object. This can be illustrated as in Table 7.

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, as stated in the 'Introduction', 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. <sup>21</sup>

### 4.6. MOTION VERBS DIFFERING FROM THESE PATTERNS

The lexicalization patterns shown in Table 7 describe important tendencies, but not, however, rules without exceptions. Although Talmy has a point in stating (with respect to the lexicalization of motion) that a language uses only one lexicalization type for the verb "in its most characteristic expression of Motion" (cf. Section 2), 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).

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).<sup>22</sup>

<sup>[21]</sup> TYPOlex 'borrowed' the terms *endocentric* and *exocentric* from Bloomfield (1933, pp. 194–196 and passim), who, however, confined their use to the description of noun phrase structure.

<sup>[22]</sup> This has prompted Baron and Herslund (2005, pp. 24–26) to name the Romance PATH and MANNER verbs 'series 1' and 'series 2' verbs, respectively.

#### 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 ... <sup>23</sup>

Danish: komme 'come', ankomme 'arrive', passere 'pass', forsvinde 'disappear', (be)stige 'climb', falde 'fall', flygte 'escape', krydse 'cross', lande 'land', lette 'take off' ...<sup>24</sup>

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.

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 Section 4.7, 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 and 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).<sup>25</sup>

Like the MANNER verbs listed in Table 1, 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 lexicalization 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 lexicalization type, a type D, in addition to the three mentioned by Talmy (cf. Section 2):

D. MOTION + PATH + MANNER (+ FIGURE)

<sup>[23]</sup> See also Talmy (2000, p. 52).

<sup>[24]</sup> The three last mentioned verbs are derivatives of the nouns kryds 'cross', land 'land', and the adjective let 'light', respectively; forwinde derives from a complex verb in medieval 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'.

<sup>[25]</sup> For diachronic and cross-Romance comparisons, see also Herslund (2014).

## Table 9. French motion verbs<sup>26</sup>

Unaccusative telic PATH verbs, aux. être aller, venir, arriver, entrer, sortir, partir ...

Unergative atelic MANNER verbs, aux. avoir marcher, courir, rouler, nager, sauter, danser ...

## 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

correre 'run', saltare 'jump', volare 'fly', rotolare 'roll', rimbalzare 'bounce', sgattaiolare 'sneak out', colare 'drip', gocciolare 'drip', fluire 'flow, stream', sgorgare 'gush, spout' ...

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.'

Always unergative atelic MANNER verbs, aux. avere

camminare/passeggiare 'walk', nuotare 'swim, danzare/ballare 'dance', scivolare 'slide', dondolare 'swing', viaggiare 'travel', sciare 'ski', pattinare 'skate' ...

where the component figure is 'primarily' lexicalized only in colare, gocciolare, fluire, sgorgare.

Referring to "a minor system" in Atsugewi, Talmy (2000, p. 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'.

<sup>[26]</sup> See also Herslund (1997, p. 21)

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'. <sup>27</sup>

# 4.7. CONCLUSION: ITALIAN AND FRENCH AS EXOCENTRIC

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, Mancini, Vedovelli, & Voghera, 1993), consisting of 490,000 words, gave the results shown in Table 11.

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. Section 4.6) – 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 & 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.

## 5. The component GROUND

As anticipated in Section 2, 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, pp. 62, 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' (cited as fictitious cases by Talmy, 2000, p. 61)

<sup>[27]</sup> 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 blood in veins and arteries.

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 venire 'come' 1013 tornare 'return' 185 arrivare 'arrive' 494 cadere 'fall' 64 passare 'pass' 314 scendere 'descend' 44 entrare 'enter' 225 salire 'move up' 35 uscire 'exit' 196 scappare 'escape' 27		sparire 'disappear' 19 avanzare 'advance' 12 comparire 'appear' 10 fuggire 'flee' 3
MOTION + MANNER: a to correre 'run' 29 saltare 'jump' 23 camminare 'walk' 18	otal of 8 types, 108 tokens volare 'fly' 17 scivolare 'slide' 14 viaggiare 'travel' 3	passeggiare 'walk' 2 sciare 'ski' 2

"are not to be found" (p. 61). 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" (p. 62).<sup>28</sup>

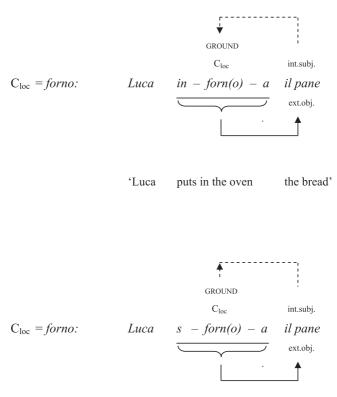
Herslund (1997, p. 18) suggests that the component GROUND could be considered as lexicalized in Danish verbs such as *soppe* 'paddle' and as a distinctive feature in cases such as *flyde* 'float in water' vs. *svæve* 'float in the air' and *svømme* 'swim' vs. *flyve* 'fly', but admits that this component is not dominant in the lexicalization patterns of motion verbs. Baron (2007, pp. 109–110; 2009, pp. 235–236) argues that GROUND is in fact lexicalized 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).

However, the assumption of the component GROUND as rare in exocentric motion verbs is only correct if confined strictly to primary lexicalization. Cases equivalent to the 'fictitious' Talmy examples in (8) are not only frequent, they form an entirely productive derivation pattern, i.e., a secondary lexicalization 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, p. 93), in Italian consisting of a prefix, either *a-/in-* (when the GROUND is the point of arrival) or *de-/dis-/s-* (when the GROUND is THE point of departure), and the suffix *-are* (in rare cases *-ire*).<sup>29</sup>

<sup>[28]</sup> 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).

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



'Luca takes out of the oven the bread'

Fig. 4. Italian parasynthetic structures with ground = forno 'oven' as stem and point of arrival and departure, respectively.

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.

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,

TABLE 12. Italian parasynthetic GROUND verbs with a metaphorical meaning

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

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 fourteenth and fifteenth centuries, 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'.

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.<sup>30</sup> Other derivatives are more rare and/or archaic, in some cases limited to specialized text genres or metaphorical usages.

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

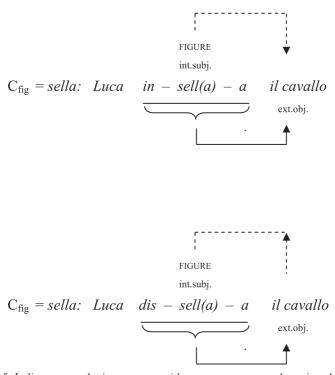


Fig. 5. Italian parasynthetic structures with figure as stem and moving object.

# 6. Parasynthetic verbs lexicalizing 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 (see Figure 5).

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

## 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'

confine myself to a few other cases in this context; a list 100 examples of such derivatives can be found in Korzen (2008).

#### 7. 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 lexicalization 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 lexicalization 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 generalized 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 lexicalize the CONFIGURATION of artefacts, <sup>31</sup> i.e., a lexicalization that depends on the externally visible PICTURE of the object, whereas Germanic lexicalization depends more abstractly on the FUNCTION of the object, i.e., on the IDEA of the purpose that the object can serve.

<sup>[31]</sup> Regarding natural objects, see footnote 20.

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 lexicalization patterns, it must be concluded that these two components very much conflate with Romance motion verbs to form specialized systems for expressing motion.

The component GROUND can be seen as a sort of 'specialized PATH component'. Therefore, it is not surprising that we find this lexicalization 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].<sup>32</sup>

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' conveys a more precise semantic content than both the English stab and the equivalent Danish stikke, i.e., "to pierce or injure with a sharp pointed instrument" (Collins English Dictionary), namely "to pierce or injure with the instrument un coltello 'a knife'".

All in all, there are many good grounds for including both GROUND and FIGURE in the (secondary) lexicalization 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 risporse 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. (Ed.) (2003). Language and culture (Copenhagen studies in language 29). Copenaghen: Samfundslitteratur.
- 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., & 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.

<sup>[32]</sup> 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.

- 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 in Neurosciences, 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 endocentric/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* (pp. 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 (pp. 57–91). Berlin: De Gruyter.
- Durst-Andersen, P. (1992). *Mental grammar: Russian aspect and related issues*. Columbus, OH: 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* (pp. 118–143). Oxford: Oxford University Press.
- 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. (Ed.) (1997). Det franske sprog: Kapitel I. Grundlag. Copenhagen: Copenhagen Business School.
- Herslund, M. (2000). Tipologia grammaticale e tipologia lessicale. In I. Korzen & C. Marello (Eds.) (2000, pp. 11–18).
- Herslund, M. (2003a). Pour une typologie lexicale. In M. Herslund (Ed.) (2003b, pp. 13-28).
- Herslund, M. (Ed.) (2003b). Aspects linguistiques de la traduction. Bordeaux: Presses Universitaires de Bordeaux.
- 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 I. Korzen, A. Ferrari, & A.-M. De Cesare (Eds.) (2014, pp. 75–93).
- 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, MA: 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 pragma-testuale 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) (pp. 123–134). Copenhagen: Samfundslitteratur Press.

- 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 unaccusativity. In I. M. Roca (Ed.), *Thematic structure: its role in grammar* (pp. 247–269). Berlin: Foris Publications.
- 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., 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). Paris: European Language Resources Association (ELRA).
- Moneglia, M., & Panunzi, A. (2010). I verbi generali nei corpora di parlato: un progetto di annotazione semantica cross-linguistica. In E. Cresti & I. Korzen (Eds.) (2010, pp. 27–45).
- 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 (Eds.) (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, MA & London: MIT Press.
- Roberts, M. H. (1939). The problem of the hybrid language. 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, L. Dam, H. Dam-Jensen, S. S. Fernández. (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, online: <a href="http://ifgi.uni-muenster.de/~sumitsen/Sen%26Janovicz.pdf">http://ifgi.uni-muenster.de/~sumitsen/Sen%26Janovicz.pdf</a>.
- 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). From motion events to(wards) a semantics of relocation. Paper presented at 'New Directions in Cognitive Linguistics', Brighton, 23–25 October, online: <www.sugartexts.dk/oxford\_pd\_vs.pdf>.
- Smith, V. (2005b). Modeling the semantics of relocation. For SugarTexts and beyond. In B. N. Madsen & H. E. Thomsen (Eds.). *Terminology and concept development. Proceedings of the 7th International Conference on Terminology and Knowledge Engineering* (pp. 225–236). Copenhagen: Litera.
- 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, MA & London: MIT Press.
- Tesnière, L. (1982<sup>4</sup> [1959]). Éléments de syntaxe structurale. Paris: Klincksieck.
- Whorf, B. L. (1956 [1940]). Science and linguistics. In Carroll, J. B. (Ed.), Language, thought and reality: selected writings of Benjamin Lee Whorf (pp. 207-219). Cambridge, MA: MIT Press.
- Lo Zingarelli 2010: vocabolario della lingua italiana. Bologna: Zanichelli.
- Zlatev, J. (2007). Spatial semantics. In D. Geeraerts & H. Cuyckens (Eds.), The Oxford handbook of cognitive linguistics (pp. 318–350). Oxford: Oxford University Press.

## Appendix

Italian and French parasynthetic verbs that lexicalize 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 <sub>loc</sub> )	C <sub>loc</sub> arrival point	C <sub>loc</sub> departure point	Parallel French cases <sup>33</sup>
Body parts (human a	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	c.:		
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	3	enflammer
guscio 'shell'	v	degusciare, sgusciare	
padella 'frying pan'		spadellare	
pane 'bread'	impanare	-	paner
viscere 'guts'	inviscerare		•
Liquids, substances,	and materials:		
<i>amido</i> 'starch'	inamidare		
gesso 'plaster'	ingessare		plâtre 'plaster' → plâtrer
gomma 'rubber'	ingommare	sgommare	(en)gommer – dégommer
pania 'birdlime'	impaniare	spaniare	(en)gommer – uegommer
pece 'pitch'	impaniare impeciare	spamare	
pece pitch' pegola 'pitch'	impeciare impegolare		goudron 'tar' →
pegota pitch	impegoiare		goudronner goudronner
Tools etc.:			
asta 'pole'	inastare		embrocher – débrocher
canna 'pipe, tube'	incannare	tracannare	embobiner – débobiner
r r .,	incoccare	scoccare (una freccia)	

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

## Appendix (Cont.)

GROUND (C <sub>loc</sub> )	C <sub>loc</sub> arrival point	C <sub>loc</sub> departure point	Parallel French cases <sup>33</sup>
manette 'handcuffs'	ammanettare	. 1	menotter
palo 'pole'	impalare	spalare	empaler
Containers, boxes, e			
borsa 'bag' botte 'barrel'	(r)imborsare imbottare	(di) $sbors are$	(r)embourser – débourser tonne $\rightarrow$ entonner caque $\rightarrow$ encaquer
bottiglia 'bottle'	imbottigliare		embouteiller
buca 'hole, mailbox'	imbucare	sbucare	poster
casella 'room (in box)'	incasellare	soucure	poster
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 asses at			
Packaging, cases et bozzolo 'cocoon'	<b>U</b>	(s)bozzolare	
carta 'paper'	incartare	scartare	
fagotto 'bundle'	infagottare	scarrare	
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		$poche \rightarrow empocher$
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'	abbotton are	sbotton are	$bout onner-d\'e bout onner$
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

## Appendix (Cont.)

GROUND (C <sub>loc</sub> )	C <sub>loc</sub> arrival point	C <sub>loc</sub> departure point	Parallel French cases <sup>33</sup>
guinzaglio 'leash' laccio 'lace' pastoia 'hobble' vincolo 'bond, constraint'	allacciare impastoiare	sguinzagliare slacciare spastoiare svincolare	lacer – délacer
Traps, cages, prison carcere 'prison'	incarcerare	scarcerare	incarcérer
gabbia 'cage'	ingabbiare	sgabbiare	encager
prigione 'prison'	imprigionare	sprigionare	emprisonner
rete 'net'	irretire	op rigionare	emprioriner
trappola 'trap'	intrappolare		piège → piéger
Nature, landscapes	, sea (also metaphorica	ally):	
abisso 'abyss'	inabissare		$ab \hat{\imath} mer$
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 <sup>34</sup>	sfognare	
fondo 'bottom' fossa 'ditch, pit'	affondare infossare	of an area	
luna 'moon'	allunare <sup>35</sup>	sfossare	alunir
mare 'sea'	ammarare		amerrir
pantano 'swamp, bog'	impantanarsi	spantanare	embourber – débourber
podere 'farm, estate'	imponion	spoderare	
polvere 'dust'	impolverare	1	poudrer
proda 'bank'	approdare		-
sabbia 'sand'	in sabbiare		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'	арріорраге		
	ods (also metaphorica	lly):	
cantone 'corner'		scantonare	$coin \rightarrow coincer$
pista 'track, trail'		depistare	dépister
rotta 'course', 'route'		dirottare	
strada 'street'	instradare		a'r arb amin ar
urbs [Latin] 'city'	inurbarsi		s'urbaniser

<sup>[34]</sup> Only metaphorical usage.

<sup>[35]</sup> According to *Lo Zingarelli 2010*, this verb dates back to 1961.

## Appendix (Cont.)

GROUND (C <sub>loc</sub> )	C <sub>loc</sub> arrival point	C <sub>loc</sub> departure point	Parallel French cases <sup>33</sup>
via 'road' vicolo 'alleyway'	avviare	de-/dis-/s-/traviare svicolare	dévier, fourvoyer
Transportation: barca 'ship' bordo 'railing' prua 'bow'	imbarcare abbordare appruare	sbarcare/disbarcare debordare/trasbordare	embarquer – débarquer aborder – déborder