Cognate and locative complements: their effect on (a)telicity and their semantic relation to the verb

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Introduction*

Halliday (1967, 1985) has proposed that cognate complements, e.g.

- (1) *He was dancing **a rather clumsy waltz** with Violet.* (CB)¹

and locative complements, as in

- (2) *Some of that care and attention on slippery tracks can include the use of a higher gear than normal when trying to climb **wet creek banks**.* (CB)

express the same semantic role. Both are only a “pseudo-participant” in the process whose “extent” or “scope” they specify, and whose semantic role can therefore be labelled the “range” of the process. Halliday then further characterizes the cognate and locative subtypes of range. The first type “relabels” the process; it is “co-extensive with, is indeed merely a nominalization of the process” (Halliday 1967: 58-59). It is either lexically cognate in the strict sense with the verb (e.g. *dance a dance*) or it is a hyponym of that lexical cognate (as in *dance a waltz*). The second type of range is an entity which exists independently of the process but which indicates “the domain over which the process takes place” (Halliday 1985: 134), as in *Mary climbed the mountain* (1985: 134).

This first distinction is cross-classified by Halliday with a “further distinction [...] between quality range and quantity range” (Halliday 1967: 59). The former specifies type, as in *he plays tennis*, *he climbs mountains*, or quality, as in *they played a good game*. The latter specifies measure, as in *the dormouse crossed the court, they played five games* (Halliday 1985: 135). The fact that cognate and locative range share this quality-quantity subclassification can be taken as another argument for viewing them as one semantic role.

Traditionally, by contrast, the postverbal NPs in examples (1) and (2) tend to be viewed as distinct semantic roles: *a rather clumsy waltz* is generally called a “cognate object”, while *wet creek banks* is commonly analysed as a bare (i.e. preposition-less) locative complement (Levin 1993: 43).

In this article we will examine whether Halliday is justified in collapsing cognate with locative complements into one semantic role. To answer this question, we will develop two lines of argumentation. Firstly, we will propose that the pragmatic-semantic phenomena which Halliday seeks to describe by the quality–quantity distinction are better captured in terms of the telic or atelic effect of cognate and locative complements (section 1). Secondly, we will defend the position that cognate and locative complements participate in a different way in the process expressed by the verb and, hence, cannot be viewed as having the same semantic role (section 2).

To address these two issues, we worked with datasets of cognate and locative complements extracted from the COBUILD corpus Wordbanks online. For the

cognate complement dataset, we selected, on the basis of Levin's (1993: 95) list of verbs taking cognate objects, six verbs that were semantically differentiated and yielded a reasonable number of this low-frequency construction², viz. *breathe*, *cough*, *dance*, *die*, *dream*, *smile*. Tokens with cognate complements were extracted by using queries containing all the morphological forms of the verbs, e.g. "breathe |breathes| breathed| breathing", and all the possible determiner types of cognate complements. To find and include cognate complements without overt determiner, queries containing the verb forms and grammatical tags for 'singular noun' and 'plural noun' were entered, the results of which required extensive sorting but also yielded examples with bare cognate complements. The resulting dataset of 262 tokens thus contains all the cognate complements found with these verbs in the COBUILD corpus.

For the locative complements, we used the dataset compiled by Rymen (1999). Likewise with reference to Levin (1993: 43), she had selected six verbs taking bare locative phrases: *climb*, *descend*, *jump*, *prowl*, *row* and *skate*. She had made complete extractions for *descend*, *prowl*, *row* and *skate*, but had gathered random samples for the very frequent *climb* and *jump* (consisting of respectively one third and one quarter of the complete extractions for these verbs). The extractions on these verbs contained pure intransitive clauses, clauses with locative prepositional phrase and clauses with bare locative complement. It is the last subset, totalling 420 examples, that was used for this study.

These two sets, each extracted on six verbs, and which, except for *jump* and *climb* contain all examples of the constructions with respectively cognate and bare locative complements in the corpus, were felt to form an adequate empirical basis for the present investigation.

1. The effect of cognate and locative complements on the (a)telicity of the described situation

As a starting point we take the observation that Halliday's distinction between quality and quantity Ranges cannot be applied systematically to actual examples. For instance, the cognate complement clearly specifies a subtype of the process (i.e. quality) in cases like *climb stairs* and the situation type is measured (quantity) in examples such as *walk a mile*. However, examples such as *he played three new songs* and *they played a nimble game* show that the quality-quantity distinction is neither mutually exclusive nor unequivocally applicable. The first example illustrates that cognate complements can contain information about both quantity (*three*) and quality (*new*). The second example, which would presumably have to be classified as a quality Range because of the adjective *nimble*, illustrates that the notion of 'measuring' the process is not clearly defined in Halliday's approach. A *nimble game* can be argued to measure the situation just as much as Halliday's example *play five games*. As pointed out by Declerck (2006: 63), indefinite NPs occurring in the predicate may have the effect of implying inherent boundaries of, and thus measuring, the situation, i.e. of turning the description of the situation into a telic one. A *nimble game* implies, rather than indicates, the endpoint of the situation in the sense that a *game* is conceived of as having an end and as constituting a unit of (soccer-)playing in other words, its telic effect is pragmatic (Declerck 2006: 63). This implication of measuring can be invoked to classify *a nimble game* as a quantity Range. The

discussion of *they played a nimble game* thus also shows that semantic as well as pragmatic distinctions come into play here.

We will argue in this section that the phenomena under discussion can in fact be captured more correctly and more systematically in terms of the **telic** or **atelic** effect of cognate and locative complements. In section 1.1, we will first set out the definition of (a)telicity that we are assuming and the tests and formal properties by which it can be recognized. In section 1.2., we will investigate which types of cognate and locative complements have a telicizing effect, paying particular attention to the role played by specific determiner types. In section 1.3, we will discuss the types of cognate and locative complements that do not have a telic effect but merely semantically refine the atelic situation type expressed by the verb. In the conclusion to this section (1.4), we will summarize why the treatment in terms of (a)telicity is more precise and systematic than Halliday's quality-quantity distinction.

1.1 Telicity

It has been suggested by a number of linguists (Brinton 1995, Felser & Wanner 2001, B. Levin p.c.) that the difference between using a simple intransitive verb or using a construction with cognate complement can in many cases be captured in terms of *Aktionsart*, i.e. the way the lexical material of the predicate inherently represents the situation (Declerck 1991: 57). Brinton (1995: 34-37), for instance, approached the difference between intransitive verbs and constructions with light verbs plus deverbal complements in terms of **boundedness**. For instance, while a verb such as *walk* depicts a continuous non-bounded activity, the zero-suffixed nominalization in *have a walk* excerpts a bounded stretch of the activity (Brinton 1995: 35).

However, we will argue that the *Aktionsart* distinction relevant to the use of cognate complements is telic-atelic, rather than bounded–nonbounded, and that (a)telicity also captures a systematic distinction in the choice of locative complements. The definition of (a)telicity that we assume is that developed by Declerck (1991, 2006) and Depraetere (1995, 1996), who, while taking a number of elements from Vendler (1967), Dowty (1977, 1986) and Smith (1991), have defined a personal position that also differs in some ways from this tradition. Declerck (1991, 2006) and Depraetere (1995, 1996) stress that boundedness and telicity have to be distinguished from each other on principled grounds.

Boundedness, which (Declerck 2006: 72) refers to as actualization aspect, pertains to the **actualized** situation referred to by the finite clause. A clause can be said to be bounded if it represents a situation as reaching a temporal terminal point. In principle, any argument constituent as well as certain adverbials may add the idea of a temporal endpoint to the represented situation, e.g.

- (3) *Three litres of water will run out of this tap.* (The cardinal number in the subject NP indicates a precise quantity and therefore also specifies a temporal boundary.) (Declerck 2006: 79)
- (4) *Judith played in the garden for an hour.* (The adverbial imposes time limits.) (Depraetere 1995: 4)

Tense and aspect also affect the (non)boundedness of the clause and may overrule the effect of NPs and adverbials. For instance, progressive aspect may render the situation

referred to unbounded by excluding reference to the endpoint (Declerck 2006: 82), as in

- (5) [...] *he is descending **the wrong garden path***. (CB)

Conversely, the indefinite perfect in (6), notwithstanding the progressive aspect, implies a temporal endpoint and hence makes the clause bounded (Depraetere 1996: 31).

- (6) *He's been drinking beer. [That's why he can't walk straight anymore.]*
(Depraetere 1996: 31)

Telicity, then, is a property of the situation **type** depicted by the lexical verb and its complements (Declerck 2006: 61). The distinction pertains to how a type of situation is conceptualized and lexicalized (Declerck 2006: 72). The representation of a situation type is telic if it has a natural (inherent) or intended “telos”, i.e. a point of completion which has to be reached for the situation to be complete and beyond which it cannot continue (Depraetere 1995: 3). The telicity of the represented situation type is affected mainly by constituents of the predicate³ and adverbials, and only marginally by tense and aspect⁴. Mass and plural count nouns without overt determiner make the description of the situation atelic, e.g. *drink milk, eat apples* (Depraetere 1995: 9-13). By contrast, if the predicate contains an NP with an indefinite article, an indefinite quantifier such as *some*, a cardinal number or any definite determiner (Declerck 2003: 61), then it is telic, as a point of completion is either indicated or implied, as in *eat an apple/two apples/the apples*. Directional PPs and adverbials of span and duration, which specify the exact location of the point of completion in time or space (Declerck 2006: 63), likewise make the description of a situation type telic, e.g. *walk to the station, study till six, read for two hours*.

It is this understanding of telicity that we will bring to bear on the difference between using a verb intransitively or using that verb with a cognate or locative complement. Of the intransitive verbs considered in this study only *die* and *jump* on its punctual reading may be considered as telic according to a broad definition of telicity⁵. All the others, viz. *dance, dream, smile, breathe, cough, climb, descend, prowl, row* and *skate*, are atelic. In section 1.2 we will argue that adding cognate and locative complements to these verbs offers language users the possibility of representing the situation types as telic ones. As we will see, looking at the contrast between, for instance, *dance* and *dance two more numbers* in terms of the distinction atelic – telic allows one to make more systematic generalizations than is possible with the distinction nonbounded - bounded. It has to be noted in this context that an atelic verb such as *dance* can be used in a bounded clause such as *He danced till he was eighty*, and a telic predicate with complement such as *dance a waltz* can be unbounded by the use of the progressive, as in *He was dancing a rather clumsy waltz*. The (a)telicity of lexical predicates such as *dance* and *dance a waltz* is independent of the choices of tense and aspect which, as just illustrated, do affect the (non)boundedness of the clause.

1.2 Cognate and locative complements with a telic effect

In this section we will investigate whether the correlations between the determiner types of NPs and their telicizing effect, which were discussed in the previous section, apply to cognate and locative complements.

We will begin by looking at the **cognate** complements. The determiner types found in them in our dataset and their relative frequencies are represented in Table 1.

proper name	1.9% (5)
pronoun	2.3% (6)
definite article + cognate complement	23 % (61)
demonstrative determiner + cognate complement	0.7% (2)
possessive determiner or genitive + cognate complement	8.3% (22)
indefinite article (<i>a/an</i>) + cognate complement	57% (151)
zero-article + cognate complement	5% (13)
cardinal number + cognate complement	1.1% (3)
indefinite absolute quantifier (<i>a few</i>) + cognate complement	0.7% (2)
total	100% (265)

Table 1. Relative frequency of determiner types in cognate complements

The principles formulated by Depraetere and Declerck predict that cognate complements with zero-article and *a few* will not be telicizing. These cognate complement types will be discussed in section 1.3. By contrast, cognate complements are expected to have a telic effect if they have an indefinite article, a cardinal number or any of the definite determiner types (definite article, demonstratives, possessives and genitives, as well as pronouns and proper names). Cognate complements with all these determiner types will be considered in this section. As pointed out by Brinton (1995), the different effects of deriving deverbal nouns from different types of predicates also have to be taken into account.

With verbs depicting continuous activities like *dream* and *smile*, the cognate complements are typically deverbal and mark off a “portion” (Brinton 1995: 35) of the activity. This has a telicizing effect as the portion implies a point of completion Declerck’s (2006: 63). These cognate complements most commonly have an indefinite article, measuring off one such portion as in (7)

(7) *She smiled **an infinitely inviting smile**.* (CB)

Examples (8) illustrate that the less common case of cognate complements with a possessive determiner, which expresses the subject of the activity, can also introduce a new instance of the activity-type.

(8) *I’ve got a funny feeling that she made me dream **my dream**, that it was her mischievous way of attuning me to her work.* (CB)

Verbs like *cough* and *breathe* can receive either a semelfactive reading, referring to a single event, or an iterative reading, in which they represent a multiple event activity (Smith 1991: 55-6). Deverbal cognate complements of these verbs most commonly depict one “unit” (Brinton 1995: 34) of the event, thus telicizing it, as in (9).

(9) *He breathes **a sigh of sadness** and turns to the sport that is his consuming passion.* (CB)

A few examples such as (10) can arguably be given an iterative reading, contextually supported in this case by contextual elements such as *shaker* and *thunder*. Here the cognate complement has a telicizing effect by indicating a stretch or portion of the iterative activity.

- (10) *We all paused while Tinker coughed a majestic mansion-shaker of a cough. It faded like distant thunder.* (CB)

The next verb to be considered is *dance*, which describes a continuous activity. It is occasionally used with deverbal cognate complements marking a portion of this activity and telicizing it, e.g.

- (11) *I'd pretend I was an elfin child and dance a moonlight dance for you, Torvald.* (CB)

In our data it is more often used with cognate complements referring to a specific dance, a role in a ballet, a piece of choreography, etc, which make the description telic because they imply an endpoint. For instance,

- (12) *She has danced a foxtrot with pop star Elton John and performed a musical comedy routine to entertain a friend.* (CB)
 (13) *That's what was worn when they first danced the Can Can over 100 years ago.* (CB)
 (14) *Steven Heathcote dances Sharpless with an integrity that highlights Pinkerton's character greyness.* (CB)
 (15) *I had to choreograph a ballet and then dance it.* (CB)

Die finally is the only intransitive verb in this dataset, which might be viewed as referring to an event with an inherent endpoint, i.e. as telic (see footnote 5). According to Declerck (2006: 59), however, *die* is a transitional rather than a telic verb. Leaving aside the question of its (a)telicity, the cognate complements used with it do have telic value, because they represent the event as one unit (Brinton 1995: 35).

- (16) *His beloved wife, worn out by fatigue and anxiety, died a lonely death in the deserts of Sindh.* (CB)

In summary, we can conclude that in the overwhelming majority of cases, 94.3%, the cognate complements in our data have a telicizing effect, by either marking a unit or portion of the activity with implied endpoint, or, as with *dance*, by referring to an abstract pre-existing pattern with an inherent endpoint

We will now apply the same questions to the **locative** complements. Do these NPs, if they have determiner types said to influence telicity, in effect telicize the description of the situation type? And how can we conceive of this telic effect in relation to the situation type depicted by the verb? With the exception of *jump*, which on the punctual reading it has in this data set may be viewed as telic, all verbs depict continuous atelic activities. Table 2 lists the determiner types found in the locative complements in our dataset. The locative complements with determiner types expected not to have a telicizing effect (zero-article and indefinite quantifier) will be discussed in section 1.3.

proper name	8.1% (34)
personal pronoun	8.1% (34)
definite article + locative complement	36.7% (154)
interrogative determiner + locative complement	0.2% (1)
demonstrative determiner + locative complement	2.9% (12)
possessive determiner or genitive + locative complement	3.1% (13)
indefinite article (<i>a/an</i>) + locative complement	15.2% (64)
zero-article + locative complement	16.7% (70)
cardinal number + locative complement	4.7% (20)
non-specific absolute quantifier + locative complement	2.4% (10)
relative quantifier + locative complement	1.9% (8)
total	100% (420)

Table 2. Relative frequency of determiner types in locative complements

Whereas *prowl*, *row* and *skate* describe motion along a horizontal axis, *climb*, *descend* and *jump* have a more vertical orientation. The locative complements used with them specify the distance covered vertically or horizontally. The following examples illustrate locative complements with a proper name (17), a pronoun (18), an indefinite article (19), a definite article (20), a possessive determiner (21), a cardinal number (22), a relative quantifier (23) respectively.

- (17) *Day 2. The chance to climb **Ayers Rock** or tour the base.* (CB)
- (18) *The man for whom the peak is named, Zebulon M. Pike, tried to climb **it** in 1806.* (CB)
- (19) *You can climb **a mountain ridge** for a view of a big glacier basin.* (CB)
- (20) *Marlin and sailfish tended to prowl **the edges of those streams**.* (CB)
- (21) *[...] the Untersberg. You can climb **its 6,000ft**.* (CB)
- (22) *Be prepared to climb **153 steps** to the island's plateau.* (CB)
- (23) *[...] they discussed which of the two lower peaks to climb. Or should we climb **either**?* (CB)

Some of these locative complements explicitly measure the distance covered by the motion activity, and thus specify the exact location of the point of completion, as in (21). Even if no conventional measure units such as feet are given, such locative complements still measure the activity by specifying the location to be negotiated, as in (19).

We can conclude that with locative complements too, the majority, in this case (80.9%), has a telicizing effect. The locative NPs with the determiner types said to be telicizing by Declerck and Depraetere measure the spatial distance covered by the motion activities.

1.3. Cognate and locative complements that do not affect the telicity of the verb

In this section we will verify the prediction that uncount and plural count NPs without overt determiner and with indefinite quantifiers do not have a telicizing effect. We will first look at **cognate** complements as in

- (24) *He is scheduled to dance **roles** in the Burrow, Divertimento No.15, Swan Lake.* (CB)

(25) *We were just beginning to relax a little and breathe **a few sighs of relief**.* (CB)

(26) *Alicia, 22, dances **cabaret** and on pop videos and concerts.* (CB)

In contrast to singular count NPs with *a(n)*, bare plural count NPs, e.g. (24), do not indicate a boundary of the situation. Neither do plural count NPs with indefinite quantifiers such as *a few* as in (25). They merely semantically refine the atelic description of the situation type given by the verb into a more detailed atelic description. Bare uncount cognate complements as in (26) clearly do not have any telicizing effect, but specify a subtype of the atelic situation expressed by the verb.

With **locative** complements, then, plural count NPs with zero-determiner or indefinite quantifier do not indicate any inherent point of completion. Predicates such as *climb (some) trees*, *descend stairs*, etc. are simply atelic descriptions of situation. Bare uncount locative complements were not attested in our data, but on the web examples such as *I haven't climbed ice in two years* can be found, which clearly illustrate that they do not telicize the atelic situation type but merely semantically refine it.

1.4. Conclusion

In this section we have argued that Halliday's quality-quantity distinction cannot be applied unequivocally to cognate and locative complements. We have proposed that the telic-atelic distinction captures the difference between the complements' measuring or subclassifying of the process more accurately, both descriptively by offering a systematic classification, and theoretically by allowing the analyst to distinguish between directly expressed and pragmatically implied meanings. The most important descriptive generalization which it has revealed about cognate and locative complements is that they have in a majority of cases, 93.4% with cognate and 80.9% with locative complements, a telicizing effect on the verb they are used with. The choice between using the intransitive verb or the verb with complement thus largely coincides with conceptualizing the situation referred to in telic or atelic terms.

2. The semantic relation to the verb of cognate and locative complements

Having established the very similar effects cognate and locative complements have on the (a)telicity of the described situation type in section 1, we will investigate in this section whether cognate and locative complements can be said to fulfil a semantic 'hyperrole' like Halliday's Range. We will argue that they have a very different semantic relation to the verb, and therefore have to be treated as fulfilling different roles in the semantics of the clause. We will show that the distinct semantic roles of the two complements are reflected in the different distribution of determiners and modifiers found in them, and are particularly brought to the fore by the different ways in which all these elements of NP-structure have to be interpreted semantically.

2.1 The semantic relation between verb and cognate complement

We agree with Halliday (1967: 58-59) that cognate objects essentially **re-label** the intransitive process. As we saw in section 1.3, they do this in a minority of cases by

merely adding a nominal element to the description of the process given by the lexical verb, as in *dance cabaret/roles/a few steps*. These NPs have non-specific determination, mostly the zero-determiner, and are basically incorporated in the verb (cf Herslund 2002: 21ff). In Langacker's (1991: Ch.5) terms, these cognate objects become part of the **type specifications** of the lexical verb.

In most cases, however, cognate objects constitute a second description of the process-**instance** designated by the VP. All the elements of their NP structure have to be interpreted as conveying 'verbal' semantics, i.e. semantic specifications of the process-instance in question. As Langacker (1991: 364) puts it, the cognate object construction is enabled by "two factors: our capacity for conceptual reification, which allows an event to be coded in nominal form; and the tolerance of redundancy, up to and including full overlap between the components of a complex expression." For instance in

- (27) *He is still gorgeously asleep as Part Four opens, but is now dreaming a dreadful dream.* (CB)

is dreaming depicts an ongoing instance of 'dreaming', and *a dreadful dream* refers to exactly the same process.

Referring back to Table 1, which lists and quantifies the determiner types found in our cognate complement dataset, we will discuss and interpret these data in the light of the cognate complement being a restatement of the verb. As correctly predicted in the literature (Halliday 1967, Moltmann 1989, Massam 1990), cognate complements mostly have indefinite determiners. Adding up indefinite articles, zero-articles, cardinal numbers and indefinite quantifiers, we find a total proportion of 63.8%. As noted above, cognate objects with *a(n)* or cardinal number (58.1%) redescribe the process-instance also referred to by the verb, as in (7) above and (27). Strictly speaking, the process-instance has already been introduced into the discourse by the verb and, given another discourse environment, it would have to be referred back to by a NP with definite determiner, as in

- (28) *But the officer, instead of flying into a rage, took the rifle and laughed. That laugh reminded me more than ever of Randlebury.* (Google: www.athelstane.co.uk/bainreed/guinwtch/gwtch27.htm - 19k)

But the cognate object construction does not embody a lapse in processing time leading to definite marking of the cognate object. Verb and cognate object are construed as co-extensive and the typical use of indefinite reference with the cognate object is a device contributing to the liveliness of the presentation.

However, 36.2% of the cognate objects in our sample have definite determiners. Some of these are found in examples in which the instance of the activity depicted by the cognate complement is related to other instances of that type of activity, either by the same actor, in which case habituality may be suggested, as in (29), or by another actor, in which case those two instances are compared to each other as in (30), (31).

- (29) *The result is that these folks remain in their rut, dreaming **their dreams**, and never really taking a chance on life.* (CB)
 (30) *He became so absorbed in Walker, he realized he was licking his lips in unison with him, imitating his expressions, breathing **the same breaths**.* (CB)

(31) *Then Lyman danced **his own rough struggle** from the freezing muscle of water where he had jumped in to grab Henry back, and failed.* (CB)

It can be observed here that the possessive determiners in (29) and (31) have to be related to the processual semantics of the nominalized cognate objects: *their* and *his* refer to the actors involved in these activities.

In 20% of cases, the cognate complements are proper names or pronouns (against Halliday 1985: 136). In our data, both of these were found with *dance*, as illustrated by (14) and (15) above. The definiteness of these cognate objects is motivated by the pre-existence of the choreography, but note that, in keeping with its processual semantics, the cognate complement refers to the actual dancing.

The quantifiers used with cognate objects similarly have to be interpreted specifications of the process-instances, locating them for instance in time relative to previous instances, as in

(32) *She wanted to die. He danced **two more numbers** with her, and then he thanked her and moved away, just as Nina had known he would.* (CB)

or expressing iterativity as in

(33) *We were just beginning to relax a little and breathe **a few sighs of relief**.* (CB)

We now turn to the descriptive modifiers found in cognate objects. Table 3 gives the numbers found in the dataset of premodifying classifiers and attributes, and of postmodifiers. It has to be noted that some cognate objects have more than one modifier, e.g. *die an early, heroin-related death*, while others have none.

classifier	16
attribute	74
postmodifier	88

Table 3. Numbers of modifiers in cognate complements

Classifiers do not occur very commonly, but when they do, they specify a finer subtype of the activity referred to by the head noun, as in

(34) *Wife and Gypsy dance **a love duet**.* (CB)

More common are the prenominal attributes ascribed to the nominalized head. As observed by Stein (1979: 109) and Ryman (1999) such qualitative adjectives often specify the manner in which the act depicted by the cognate object is carried out, as in (1) above, and in

(35) *Byrne smiles and laughs **a light, dry laugh**.* (CB)

In Ryman (1999) these make up about 65%. Another function that may be fulfilled by attributive adjectives is speaker-evaluation of the whole event, as in

(36) *Before you finish this letter, 18 children will die **preventable deaths**.* (CB)

The largest subset is formed by postmodifiers. These give additional information about the activity, such as the content of the dream in (37).

(37) *Sophronia Tibbles, a lazy and evil-minded Persian, dozed oblivious, dreaming **dreams of the slow dismembering of mice**.* (CB)

With reference both to determiners and quantifiers, it has thus been shown that the elements of the NPs realizing cognate complements have to be interpreted in terms of the ‘processual’ semantics of the latter, rather than in terms of the typical functions of NPs, which are to refer to and describe ‘things’. Cognate complements are prototypically nominalizations in which the head noun depicts a unit or portion of an activity, the actor of which is identified by a possessive determiner and the manner described by a qualitative adjective. The meaning of quantifiers and determiners in cognate complements also invokes the temporal domain of instantiation of processes rather than the spatial domain of things (Langacker 1991).

2.2 The semantic relation between verb and locative complement

We now turn to the locative complements to investigate their semantic relation to the verb, as reflected by the elements of their NP-structure. The main point we will make is that locative complements designate pre-existent entities – not unfolding activities – and that the choices of determiners (Table 2 above) and modifiers (Table 4) also say a lot about how these entities are construed as relating to the motion activities expressed by the verbs.

Starting with the relative frequency of identifiers in locative complements, it has to be noted that, in contrast to cognate complements, locative complements have predominantly definite identification, viz. 59.1%, versus 40.9% indefinite. This is because often an identifiable location is referred to, either by a proper name (17), a personal pronoun (18), or any definitely determined NP with count noun (e.g. 20). The reference of locative complements with indefinite identification is occasionally specific, i.e. known to the speaker but first mentioned in the discourse (38), but it is much more commonly non-specific, i.e. the speaker does not have specific referents in mind (39).

(38) [...] *my father told me he once had to climb **a the factory chimney*** [...] (CB)⁶

(39) [...] *everybody accepted that boys climb **trees***. (CB)

As we saw in section 1.2, most locative complements in our dataset have a telic effect, that is, they measure the spatial extent covered by the motion. Precise measuring information can be conveyed by a number of structural elements in the NPs realizing locative complements. In our dataset 9% are introduced by quantifiers, as in (22), but quantitative information may also be included in post-initial position, as in (21).

Modifiers are relatively less frequent with locative complements than with cognate complements. They describe the locations, attributing properties to them, e.g. *rivers that must descend large vertical differences*, and subcategorizing them, e.g. *climb the social ladder*.

classifier	42
attribute	62
postmodifier	51

Table 4. Numbers of modifiers in locative complements

A distinctive semantic motif expressed by qualitative adjectives is resistance of the location to its being negotiated (example 2 above and 40), or its facilitation of that activity (41).

- (40) *Anti-lock brakes overcome the problem of front wheel locking, when descending **slippery hills** [...]* (CB)
 (41) *You can climb **the easy side of Lambert Dome**.* (CB)

As observed by Langacker (1991: 303), in such transitive constructions with prepositionless complements, the locations may, as it were, be construed as adversaries to be conquered.

Conclusion

In this article we have investigated Halliday's (1985) twofold proposal to collapse the traditionally distinct cognate and locative complements into the one semantic role of Range and then subclassify it into quality and quantity Ranges. To give this discussion an empirical basis, we compiled datasets of cognate and locative complements, each extracted on six verbs, from the COBUILD corpus.

First we argued that Halliday's point about both complements measuring the event has to do with pragmatic-semantic phenomena rather than semantic roles. We proposed to analyse the measuring effect which both cognate and locative complements typically have (in respectively 94.3% and 80.9% of cases in our datasets) as a telicizing effect. The minority of complements that do not influence the telicity of the intransitive verb they are used with leave its - typically atelic - status intact.

Focusing on the level of semantic relations, then, we showed that the two complements stand in a very different relation to the verb. Cognate complements restate the intransitive process, mostly in the form of a nominalization which redescribes the process-instance also depicted by the verb. All the elements of its NP-structure contribute semantic specifications about this process-instance, such as its location in time, its actor, the manner in which it is carried out, etc. Locative complements profile the part of the location involved in the process. This also influences the choice of identifiers (reference to identifiable locations), quantifiers (extent of the location) and other modifiers (ease or difficulty with which the location can be negotiated). Hence, they have to be regarded, in our view, as fulfilling distinct semantic roles.

In short, it is in our view, not warranted to subsume NPs refining or redescribing the process (cognate complements) and NPs profiling locations involved in motion activities (locative complements) under one semantic role. The functional similarity between these two types of complements is situated at a more abstract pragmatic-semantic level, where it can be captured in terms of telicity.

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Summary

In this article we investigate Halliday's proposal to collapse cognate and locative complements into one semantic role, which he divides into a quality and quantity subtype. As empirical data we use sets of examples with cognate and locative complements extracted from the COBUILD corpus. The examples have been analysed and quantified in terms of the determiner and modifier types of the complements, which will be shown to be central to the research questions. In the first section we argue that Halliday's semantic quality-quantity distinction should be replaced by the pragmatic-semantic distinction telic-atelic. In the second section we show that cognate and locative complements have a very different semantic relation to the verb, which does not warrant the claim that they fulfil the same semantic role.

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¹ The COBUILD corpus Wordbanks online consists of about 56 million words. It is geographically diversified, containing mainly British English subcorpora, but also some American English datasets and one Australian English subcorpus. It is also diversified in terms of register, containing spontaneous spoken language, newspaper articles, radio broadcasts, novels, and ‘ephemera’ such as advertisements and procedural texts. All examples marked CB are extracted from the COBUILD corpus Wordbanks online and are reproduced here with the kind permission of HarperCollins.

² Rymen (1999) found that uses of verbs with cognate complements account on average for less than 3% of all uses of these verbs.

³ Declerck (2006: 63) stresses that the Subject NP does not play a part in making descriptions of situation-types (a)telic.

⁴ To the extent that tense expresses the temporal location of the situation vis-à-vis the time of utterance, it does not affect the question of the situation having or not having an inherent telos. However, habits, which can also be expressed by tense and aspect, are viewed as intrinsically atelic (Depraetere 1995: 5).

⁵ In contrast with Declerck (2006), Depraetere (1996: 8) views punctual verbs such as *hit* and presumably *jump* and transitional ones such as *faint* and presumably *die* as implying a natural point of completion.

⁶ Interestingly, the speaker first uses the indefinite article, only to shift to the definite article within the same NP.