

## Strategic construal of *in* and *out* in English particle verbs (PVs)

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### ABSTRACT<sup>1</sup>

The central aim of this work is to describe the strategic construal of *in* and *out* in English particle verbs. The term strategic construal assumes the following: 1) exploration of strategic thinking in L2 learning and processing, and 2) exploration of dynamic and subjective construction of meaning pertaining to the human ability to understand and portray the same situation in alternate ways (Langacker 1987). In other words, the paper relies on two theoretical paradigms with self-evident commonalities – a strong link between language and cognition, and the insistence on the individual and subjective nature of meaning construction. The aim was to investigate whether L2 users of English are aware of the symbolic nature of language when dealing with highly schematic linguistic categories. Our hypotheses were that construal of *in* and *out* is comparable to their cognitive linguistic description in English as L1 and that it shows a cognitively motivated path from the topological to the aspectual. Both hypotheses have been confirmed.

**Key words:** *strategic construal, particle verbs, in, out*

### I. INTRODUCTION

The acquisition of particle verbs (PVs) constitutes one of the greatest difficulties when it comes to learning English as a second language. PVs vary considerably in the degree of opacity/transparency<sup>2</sup> they exhibit, which raises the question as to the possible strategies the second-language user needs to develop in order to learn them. Two obvious examples of this are *put out* in (1) and *take in* in (2):

#### *Put out*

1. a. 'turn off the light'
- b. 'to injure your back, shoulder or hip'
- c. 'make somebody go to sleep or unconscious'
- d. 'broadcast, publish or issue'
- e. 'make a figure, result, etc. wrong'
- f. 'make trouble, problems or extra work'

*Take in*

2. a. 'introduce something in a pocket'
- b. 'make a piece of clothing narrower or tighter'
- c. 'make somebody believe something that is not true'
- d. 'understand or absorb something'

Given such array of meanings one may simply assume that the second-language user has no other choice than learn the idiom by rote. A less passive interpretation may wonder about possible strategies the L2 user could employ and whether they resemble the processes claimed to be activated in the first language learning and meaning construction, that is those used by native speakers. One obvious strategy is to use full compositionality by adding the meaning of the verb to that of the particle as expected in examples like (1a) and (2a). Yet, other possibilities are also at hand, particularly when abstract and metaphorical readings are at play, as in cases (b) to (f). Given the fact that not everything is transparent, learners may attend mainly to the meaning of the verb and pay little attention to *in* or *out*. Alternatively, they may also focus on the value of the particle as a schematic representation determining the behaviour of the verb. In this paper we focus on the way the particle is interpreted by L2 users of English. The particle may be interpreted in more or less schematic terms. Of course, metaphorical and metonymic connections could allow further interpretations such that *out* and *in* could be seen as representing enclosed or non-enclosed locations, abstract areas, different abstract situations and events, and even aspectual meanings related to the terminal or the initial part of an event.

As we show in the next section, a considerable amount of research has been conducted on the construal of PVs, particles, and prepositions in L1. What has not been identified with enough precision are the specific strategies employed by L2 users in the process of constructing meaning of English PVs, and even more specifically, whether these strategies resemble processes assumed to be activated by native speakers of English. Another issue of strategic meaning construal that has not been properly addressed is whether the strategies employed by L2 users are applied randomly to tackle individual problems or they follow general cognitive principles to construct language. In this study we attempt to identify the strategies employed to make sense of the meaning of PVs with *in* and *out* through experimental data from Croatian and Mexican users of English.

Having two groups of speakers of unrelated languages will enable us to identify both the language-specific strategic features developing from each language as well as the strategic coincidences suggesting the presence of general cognitive patterns operating in the acquisition of English PVs.

## II. THEORETICAL BACKGROUND

According to cognitive grammar (Langacker 1987, 1991, 2000a), “complex expressions exhibit only *partial compositionality*” (Langacker 2000a: 16, original emphasis). The meaning of a complex expression constitutes either an elaboration or an extension in relation to what is expected as compositional value. When a novel expression is used for the first time, its meaning is constructed in a given context. The conventionally determined import of the expression at best approximates its actual contextual understanding. Over time, and through frequency of usage, it achieves the status of a lexical item. In the process of fixation, recurrent aspects of its meaning, including some of a non-compositional origin “become entrenched and establish themselves as a part of what eventually emerges as its conventional linguistic value” (Langacker *ibid.*: 15). Thus, complex expressions are partially compositional because, on the one hand, the relationship between a composite structure and its components is not arbitrary and, on the other hand, a composite structure is not constructed out of its components, nor it is fully predictable. Langacker concludes (*ibid.*: 16, original emphasis):

Rather than *constituting* a composite structure, the component structures *correspond* to certain facets of it, offering some degree of *motivation* for expressing the composite conception in the manner chosen. And because the composite structure represents a distinct entity that is not in general reducible to its components, a construction is described as an assembly of symbolic structures.

For the analyses offered in this work, the most important dimension of lexical semantics is analysability, that is, “the extent to which speakers are cognizant of the presence and the semantic contribution of component symbolic elements” (Langacker *ibid.*: 127). A novel expression is easily analysable because a speaker manipulates the components in the process of constructing it. If we transfer this phenomenon from the first language domain, i.e. the native speaker’s perspective, into the domain of second language, we shall notice considerable parallelism: when they come across a new construction, second-language users may attempt to analyse it in terms of its components, especially

when individual components are already well entrenched in their L2, as is frequently the case with PVs. However, L2 users soon realize that the expected compositional meaning is far from a simple sum of meanings. They appreciate that components are not predetermined or fixed, and that complex structures are not put together in a strictly compositional manner. Over time, most learners abandon the idea of the building-block metaphor<sup>3</sup>, which implies that smaller constituents are building blocks out of which larger constituents are constructed, and their expectations change. What follows runs roughly in two directions: a) L2 users either start believing that whatever happens in the process of constructing and making sense of meaning is too elusive to be captured and understood, so they stop thinking about meaning and attempt to store whatever they encounter “intact” and in larger chunks, or b) despite having rejected the idea of the building-block metaphor, they tacitly nurture the idea of linguistic motivation, and they attend to various aspects of meaning and form. Naturally, their attention depends on various language-internal and language-external factors, and their strategic meaning construal is deeply immersed in prior linguistic and world experience (see Figure 1).

The theoretical framework assumed in this paper, and shown schematically in Figure 1, suggests the following: first, language is an experiential phenomenon and it is intimately related to other cognitive processes, such as attention, comparison, perspective and gestalt. In broader terms, the emergence of complex language representations results from “simple learning mechanisms operating in and across human systems of perception, motor action and cognition while exposed to language data in communicatively rich human social environments” (Ellis 2003)<sup>4</sup>. Furthermore, meaning construal is dynamic and subjective, and construal operations (e.g. metonymy, metaphor, fictive motion, categorization, deixis, etc.) are viewed as instances of the abovementioned general cognitive processes as aspects of a conceptual structure. Finally, strategic meaning construal and L2 learning inevitably depend on whatever precedes. Being entangled with L1 and experiential knowledge of the world, L2 both relies on and mirrors various cognitive processes that constitute conceptual structure in L1. However, this specific cognitive state of L2 users, burdened with prior linguistic knowledge and experience (MacWhinney 2001, 2006), also functions as a constraint in the process of language acquisition and strategic meaning construal<sup>5</sup>.

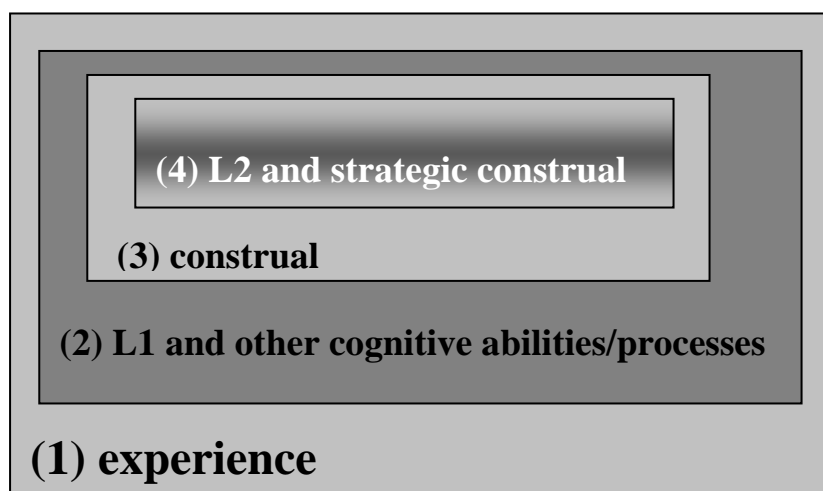


Figure 1. Integrated model of second-language acquisition (Geld 2006: 108).

For example, Mexican users of English, coming from a linguistic environment that maps the core schema exclusively onto the verb, are likely to encounter considerable problems while processing English particle verbs where the core schema<sup>6</sup> is mapped onto the particle (see Geld this volume). However, if their attention shifts to form, it might activate aspects of conceptual structure, such as underlying image schemas or metaphorical mappings in cases of non-literal meanings, which, in turn, might facilitate input being processed and transformed into intake. Thus, specific language realizations inherited from L1 might constrain and filter L2 input, but, on the other hand, the activation of underlying cognitive processes, which have been proved to be common cross-linguistically, is likely to facilitate the recognition of how form encodes meaning.

Returning to the issue of how L2 users perceive language, we wish to suggest that all of them, irrespective of their inclination to view language either as an arbitrary or as a cognitively motivated system, process language and construct meaning by attending to both meaning and form. In other words, their attention is constant but it varies quantitatively and qualitatively. This line of thought is in accordance with theoretical linguistic constructs such as Langacker's analysability (1987, 2000a), as well as with L2 research results on implicit vs. explicit knowledge, and their relation to consciousness (see for example Doughty 2001, Hulstijn 1989, and Schmidt 1990, 1993a, 1993b, 1994a, 1994b, 1998, 2001). Describing native speaker's understanding of semantic structure and the concept of analysability, Langacker discusses terms like "aware", "cognizant" and "recognize", and asks whether the claim that a speaker is "aware" or

“cognizant” of the components within a composite structure implies that “these components are consciously recognized and attended to”, and he proceeds by suggesting the following (1987: 459-460):

There is nothing in the definition of analysability (characterized at the level of cognitive events) that inherently restricts it to the domain of consciousness. Recognition is accomplished through acts of comparison, which are assumed to be ubiquitous to all domains and levels of cognitive processing.

If we relate this to the issue of the relationship between explicit and implicit knowledge in the process of learning a second language, we cannot but agree with Schmidt (1990), who suggests that the explicit/implicit contrast represents a continuum and that there is no learning without ‘noticing’. However, we wish to challenge his doubt that learning that occurs without learners’ being aware of learning plays a minor role in the field of second language (Schmidt 1998, 2001). Having embraced the insights from cognitive psychology, and hence assuming that various cognitive processes such as attention or comparison are present in all domains and levels of cognitive processing and construction of meaning, we may conclude that the abovementioned continuum is by itself sufficient to describe the nature of knowledge. In other words, in the process of learning, learners both consciously and subconsciously attend to various aspects of language and pass judgments that result in constant restructuring of their knowledge. Thus, if we wish to investigate the process of strategic construal, i.e. meaning construal in L2, it is legitimate to do so by shifting our learners’ attention to form and asking specific questions about meaning. We will ask questions about the meaning of a PV attending to the meaning of its components and the way they interact to form the PV’s complex meaning. The learner’s conscious reasoning about composite wholes, such as particle verbs, might tell us a great deal about how components motivate and highlight selected facets of the composite meaning. Naturally, analysability of composite wholes very much depends on the life they live as conventional units. They have an elaborate semantic value which lies in their extra-compositional specifications that correspond to facets of contextual meaning and, in addition to that, they diverge from their specifications by extension or elaboration (Langacker 1987).

In the case of particle verbs, dramatically extended meanings often prevent the activation of component meanings along with the meaning of the whole. However, we wish to suggest that comprehension failures that are likely to occur while processing

input containing these constructions tend to trigger focus on form, which is characterized by specific (re)-allocations of attention that are determined by the semantic “weight” of their components<sup>7</sup>. Thus, as shown by Geld (this volume), we might expect focus on particles when they collocate with semantically light lexical parts<sup>8</sup> and, conversely, more focus on lexical parts when they are heavy verbs that are bound to make a more substantial semantic contribution. The aim of this paper is to offer a more detailed description of the contribution of particles, and to investigate the semantic nature of *in* and *out* in L2 in terms of its resemblance to the nature of these particles in English as L1.

### **II.1. How *in* and *out* structure space**

Space and spatial relations have been of central importance for linguists for decades (see for example Bennett 1975, Bowerman 1996a, 1996b, Bowerman and Choi 2003, Brugman 1981, Casad and Langacker 1985, Choi and Bowerman 1991, Fillmore 1968, Herskovits 1982, Jackendoff 1983, Johnson 1987, Lakoff 1987, Langacker 1982, 1987, Lindner 1981, Talmy 1982, 1983, 2000a, 2000b, Tenbrink 2007, Vandeloise 1984, 1991, 1994, Zubin and Svorou 1984). Likewise, the properties of *in* and *out* in coding fundamental spatial relations have attracted a number of authors, such as Herskovits (1982, 1988), who gives detailed and much-quoted accounts of *in*; Lindner (1981), whose account of *out* is an exhaustive analysis of its roles in PV constructions; Rudzka-Ostyn (2003), with her insightful applied work on the role of particles in PV constructions; Dewell (2005), who contributes with a fresh account of the old issue of the dynamicity of CONTAINMENT (Johnson 1987, Lakoff 1987); and Evans and Tyler (2004), who, on the other hand, argue against the assumption that there are “dynamic” prepositions that denote motion. Instead, they propose that there are clear principles when a particular sense is conventionalized, i.e. instantiated in memory, and when it is a contextualized usage.

There are several distinct meanings of *in* and *out* that are directly relevant to our central discussion. First, the meanings of *out* described by Lindner (1982: 81-140): a) *out* that codes “the removal or departure of one concrete object from within another object or space”; b) *out* whose meaning codes foregrounding a single (static) configuration; c)

meaning extensions pertaining to abstract displacement (landmarks are: some abstract, coherent complex of information; abstract neighbourhood of possession; privacy; change from hiddenness to accessibility; change from accessibility to inaccessibility, including non-function/non-existence; d) extensions and expansions in time and space, including full temporal extension of an event; and e) the meaning of “moving away”, including the spatial dimension and the sense of initiation, i.e. the start of a particular activity.

Second, the following meanings of *in*: a) the prototypical meaning of containment with both its static topology and dynamic characterization (Dewell 2005, Herskovits 1982, 1988, Johnson 1987, Lakoff 1987), and b) the vantage point as an interior/exterior cluster (Evans and Tyler 2004).

### **III. RESEARCH**

#### **III.1. The hypotheses, instrument, sample and procedure**

As already suggested, the aim of the research was to establish what cognitive (learning) strategies (see Geld 2006, Geld and Letica Krevelj 2011, O’Malley and Chamot 1990), as aspects of meaning construal, reveal about the nature and role of particles in PV constructions.

Our hypotheses were the following:

- 1) L2 users are aware of the symbolic nature of language even while dealing with highly schematic linguistic categories;
- 2) strategic construal of *in* and *out* is comparable to their cognitive linguistic description in English as L1;
- 3) strategic construal of *in* and *out* shows a cognitively motivated path from the topological to the aspectual;

Our overall aim was twofold: first, to investigate semantic determination in terms of the lexical (verb dominant), topological (schematic particle dominant), and compositional (verb particle sum) nature of construal of the composite wholes<sup>9</sup> in question (see Geld,



this volume), and second, to investigate the construal of particles in greater detail, as evident from the hypotheses stated above.

The sample consisted of 100 users of English – 68 English majors from Croatia and 32 from Mexico. The instrument used was a questionnaire that contained 20 particle verbs combining light (*go, take and put*) and heavy (*call, cut, break, draw, pull, shut and write*) lexical parts with *in* and *out*. The 46 meanings selected for the research material were those qualified as obscure (metaphorical) by a triangulation study<sup>10</sup> conducted prior to the main stage of the research.

The first step in the main stage<sup>11</sup> of the research was to test our research participants' language proficiency. After the proficiency test, the participants were scheduled to attend two separate sessions to complete the research questionnaire. In order to conduct both quantitative and qualitative analyses, all the answers were first copied, grouped and sequenced alphabetically.

A methodological assumption should be put forward. Given the fact that there is considerable literature on the construal of *in* and *out* in native speakers, we will contrast our results with well establish findings on the topic. Thus there will not be a control group.

### **III.2. The data and results**

We obtained 4198 answers (2207 for *out* and 1991 for *in*). Since we were interested in the construal of particles, we focused on the following two categories: 1) topological determination, and 2) compositional meaning<sup>12</sup>.

The answers were further categorized according to the construal of the particles. Ten categories were established for *out* and 9 categories for *in*. The categories correspond to schematic representations of our participants' construals.

#### ***III.2.1 Classification of verb groups***

In order to discuss specific construals of particles, we first grouped the meanings of the PVs used in the research questionnaire<sup>13</sup>:

- 1) Processual topology (concrete) involves motion, entering or leaving some space (G2): *put out* ('to injure your back, shoulder or hip'); *go in* ('become hidden'); *take in* ('make a piece of clothing narrower or tighter'); *call out* ('ask somebody to come and help you when there is an emergency'); *cut out* ('prevent something from reaching somewhere'); *break out* ('become covered in something); *break out* ('escape'); *shut out* ('stop something from entering'); *call in* ('send for somebody professional and official'); *call in* ('make a short visit, usually on the way to another place'); *break in* ('to wear something until it is comfortable'); *draw in* ('become dark as the sun hides earlier when winter approaches'); *pull in* ('move to the side of the road to stop'); *shut in* ('trap or injure something by closing something tightly around it'); *write in* ('write and send a message to ask or complain').
- 2) Processual topology (abstract) (G4) involves a participant who becomes or stops being a part of some state or abstract dominion: *take out* ('kill somebody'); *take out* ('obtain an official document or a service'); *put out* ('make somebody go to sleep or unconscious'); *put out* ('broadcast, publish or issue'); *put out* ('make a figure, result, etc. wrong); *put out* ('make trouble, problems or extra work'); *go in* ('be understood'); *take in* ('make somebody believe something that is not true'); *take in* ('understand or absorb something'); *put in* ('officially make a claim'); *put in* ('to spend time or effort doing something'); *put in* ('interrupt'); *put in* ('elect political party as the government'); *draw out* ('make somebody feel less nervous or shy'); *draw out* ('make something last longer'); *pull out* ('stop being involved in something'); *shut out* ('refuse to allow a person to share your thoughts or feelings'); *call in* ('make a public request for a product to be returned'); *cut in* ('interrupt somebody's conversation'); *break in* ('interrupt a conversation'); *break in* ('get somebody accustomed to something new'); *pull in* ('attract people in large numbers').
- 3) Aspect (termination) (G5): *go out* ('stop burning'); *go out* ('stop being fashionable'); *put out* ('switch something off'); *put out* ('extinguish, stop from burning'); *cut out* ('stop working'); *cut out* ('stop doing something'); *write out* ('write something and include all the necessary information').

- 4) Aspect (inception) (G6): *break out* ('begin suddenly').

In the first part of the research each answer was first labelled with a general code referring to the type of determination<sup>14</sup> (or another general code if determination could not be defined). In the cases of topological determination and compositionality, the answer was also given a numerical code denoting the meaning of the topological part of the construction.

### III.2.2. Results for out

In this section we list the types of strategic construal of *out* for each group of meanings outlined in the previous section. Having the meanings organized in the abovementioned four groups, what we needed to find out were the type of strategies our participants stated that they used to figure out the meaning of the PV. In what follows "PC+Number" stands for the coding of the particle. The percentage in brackets shows the number of answers containing explanations of the particle stated after the colon.

1) For the first group of meanings (G2 = processual topology – concrete) the meaning of *out* was construed as follows:

a) PC1 (11.50%) – processual topology (concrete/physical). *Out* is: going out or leaving an enclosed space; going out of anything that surrounds you or confines you; going out or leaving a container (human bodies, houses, buildings, drawers, etc) – very literal, physical, and concrete images.

The meaning could be shown schematically in the following way:

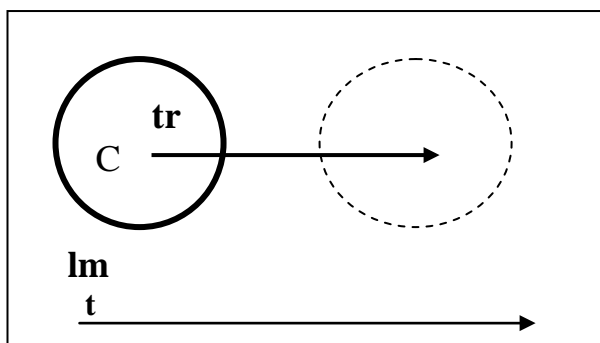


Figure 2. Strategic construal of *out* – processual topology (1).

b) PC3 (12.10%) – static topology (concrete/physical) – out of our dominion or out of the ‘usual’ place. *Out* is: out of where we are; out of our world; out of our reach; out of the normal position; out of its place; displaced; out of its physical boundaries; out of its physical limits (see Figure 3).

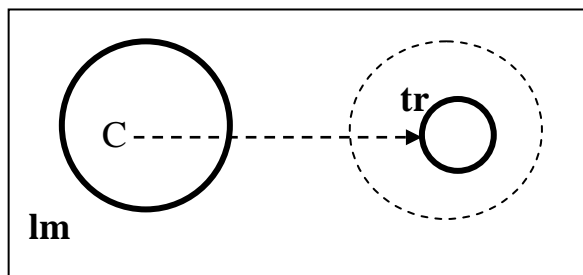


Figure 3. Strategic construal of *out* – static topology (1).

c) PC2 (3.25%) – abstract topology (static displacement/change of state). *Out* is: out of the previous state; out of the previous activity; out of the original state; out of the normal state; out of routine; out of the usual; out of order; out of the circuit; out of what is expected or correct. The change of state implied in the construal described above could be graphically approximated in the following way:

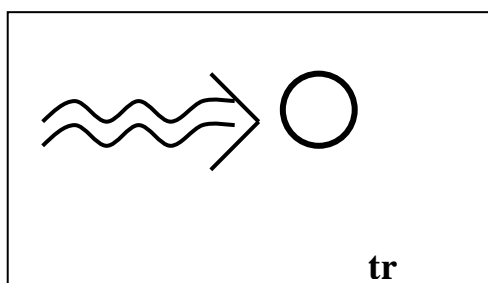


Figure 4. Strategic construal of *out* – change of state.

d) PC4 (0.2%) – *out* is: absence; absent; isolation; not present; not here; not seen; not visible (see Figure 5).

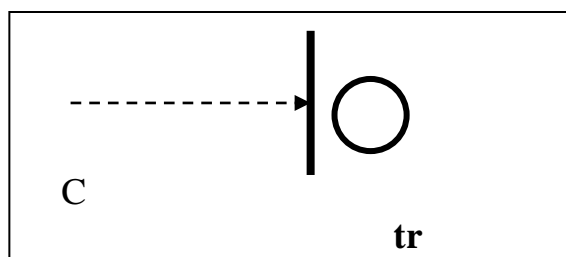


Figure 5. Strategic construal of *out* – invisibility & inaccessibility.

e) PC5 (1.0%) – processual topology without direct reference to the container. *Out* is: disappear; disappearing; leaving (see Figure 6).

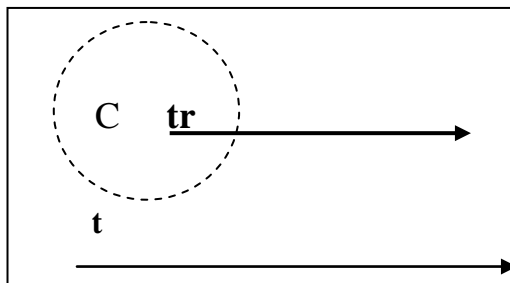


Figure 6. Strategic construal of *out* – processual topology (2).

f) PC7 (1.20%) – aspectual (termination) – *out* is: something finished; something ended; end; completely; completely stopping; termination; all of something (see Figure 7).

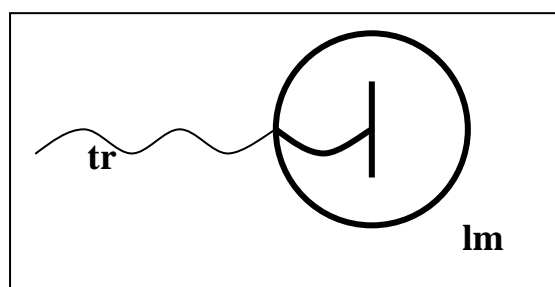


Figure 7. Strategic construal of *out* – aspect (termination).

g) PC9 (7.55%) – static topology (both concrete and abstract) – focus on the space outside our immediate dominion. *Out* is: outside, “out” where other people are; visible; not hidden; out in the open; out in the larger area; out in all directions or surrounding space. The construal is shown in Figure 8.

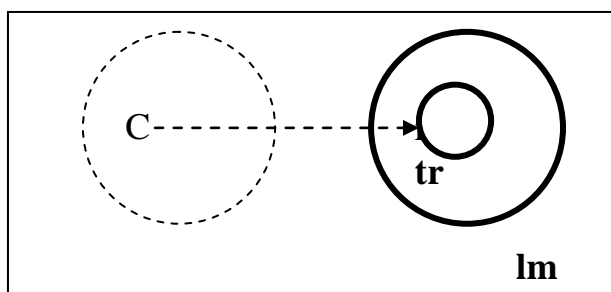


Figure 8. Strategic construal of *out* – static topology (2).

h) PC12 (0.6%) – established metaphor. *Out* is: out of the group; not belonging; free; freedom; something discarded; something unacceptable; something negative (see Figure 9).

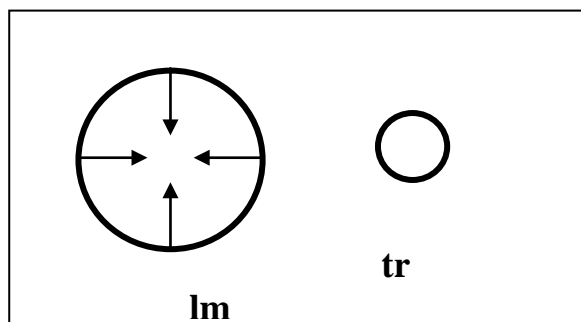


Figure 9. Strategic construal of *out* – ‘out of the group’.

i) PC14 – (2.7%): there is some kind of reverse viewing; change of focus. The meaning of *out* in, for example, *take out* meaning ‘kill’ is interpreted in two ways: a) ‘a person is taken out of life’, or b) ‘life is taken out of a person’s body; or, for example, in *draw out* meaning ‘make less nervous or shy’, *out* is: a) ‘out of the state of nervousness, or b) ‘nervousness taken out of the body’.

2) The second group of meanings is G4 (processual topology – abstract). The meaning of *out* was construed as follows:

a) PC1 (6.51%) – processual topology (concrete/physical) (see Figure 2).

b) PC3 (5.61%) – static topology (concrete/physical) (see Figure 3).

c) PC2 (17.64%) – abstract topology (static displacement) (see Figure 4).

d) PC4 (0.87%) – *out* is: absence; absent; not present; not here; isolation; not seen; not visible (see Figure 5).

e) PC5 (0.55%) – processual without direct reference to the container (see Figure 6).

f) PC7 (0.73%) – aspectual (termination) (see Figure 7).

g) PC9 (8.28%) – static topology (both concrete and abstract) focus on the space outside our immediate dominion (see Figure 8).

h) PC12 (1.13%) – established metaphor. *Out* is: out of the group; not belonging; free; freedom; something discarded; something unacceptable; something negative (see Figure 9).

i) PC14 (5.41%) – reverse viewing (change of focus).

3) For the third group of PV meanings (G5: aspectual – termination), the construals are the following:

a) PC1 (3.97%) – processual topology (concrete/physical) (see Figure 2).

b) PC3 (6.51%) – static topology (concrete/physical) (see Figure 3).

c) PC2 (8.10%) – abstract topology (static displacement) (see Figure 4).

d) PC4 (3.94%) – *out* is: absence; absent; not present; not here; isolation; not seen; not visible (see Figure 5).

e) PC5 (2.06%) – processual without direct reference to the container (see Figure 6).

f) PC7 (11.61%) – aspectual (termination) (see Figure 7).

g) PC8 (0.43%) – *out* emphasizes the action.

h) PC9 (1.14%) – static topology (both concrete and abstract) (see Figure 8).

i) PC12 (1.0%) – established metaphor. *Out* is: out of the group; not belonging; free; freedom; something discarded; something unacceptable; something negative (see Figure 9).

j) PC14 (2.43%) – there is some kind of reverse viewing (change of focus).

4) For the fourth group of PV constructions (G6: aspectual – inception), the following construals of *out* were established:

a) PC1 (7.61%) – processual topology (concrete/physical) (see Figure 2).

b) PC2 (3.26%) – abstract topology (static displacement) (see Figure 3).

c) PC9 (11.96%) – static topology (both concrete and abstract) (see Figure 8).

d) PC13 (7.61%) – aspectual (inception). *Out* is: the action starts; the activity is in effect; things are in effect; things are in existence; things begin, see Figure 10 below.

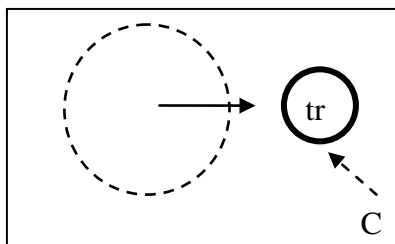


Figure 10. Strategic construal of *out* – aspect (inception).

Table 1. Strategic construal of *out* – summary.

|  | <b>G2<br/>processual<br/>topology<br/>concrete</b> | <b>G4 processual<br/>topology<br/>abstract</b> | <b>G5<br/>aspectual<br/>termination</b> | <b>G6<br/>aspectual<br/>inception</b> |
|--|--|--|---|---------------------------------------|
| <b>PC1 – processual<br/>topology<br/>(concrete/physical)</b>                             | 11.50%   | 6.51%  | 3.97%                                   | 7.61%                                 |
| <b>PC2 – abstract<br/>topology (static<br/>displacement/change of<br/>state)</b>         | 3.25%  | 17.64%   | 8.10%                                   | 3.26%                                 |
| <b>PC3 – static topology<br/>(concrete/physical)</b>                                     | 12.10%   | 5.61%  | 6.51%                                   | 0.00%                                 |
| <b>PC4 – absence</b>   | 0.20%  | 0.87%  | 3.94%                                   | 0.00%                                 |
| <b>PC5 – processual<br/>topology (without<br/>direct reference to the<br/>container)</b> | 1.00%  | 0.55%  | 2.06%                                   | 0.00%                                 |
| <b>PC7 – aspectual<br/>(termination)</b>   | 1.20%  | 0.73%  | 11.61%                                  | 0.00%                                 |
| <b>PC8 – emphasis on the<br/>action</b>  | 0.00%  | 0.00%  | 0.43%                                   | 0.00%                                 |
| <b>PC9 – static topology<br/>(both concrete and<br/>abstract)</b>                        | 7.55%  | 8.28%  | 1.14%                                   | 11.96%                                |
| <b>PC12 – established<br/>metaphor</b>   | 0.60%  | 1.13%  | 1.00%                                   | 0.00%                                 |
| <b>PC13 – aspectual<br/>inception</b>  | 0.00%  | 0.00%  | 0.00%                                   | 7.61%                                 |
| <b>PC14 – reverse viewing</b>  | 2.70%  | 5.41%  | 2.43%                                   | 0.00%                                 |

### III.2.3. Discussion for out

For the group of PV meanings labelled G2, 11.50% of the answers implied concrete processual topology (PC1), which means that their strategic construal of the particle corresponds to our (i.e. researchers’/linguists’) construal of the whole PV construction.



This strategic construal overlaps with the prototypical meaning of *out*, as described by Lindner (1982). It should be repeated here that our selection of PVs was based on the triangulation study conducted with the aim of discriminating literal from metaphorical meanings. All the PVs used in the research were those whose rating had shown tendencies towards the metaphorical interpretation. However, even within that sample of PVs certain meanings were conducive to particles being construed as implying concrete, physical processes and topology. This is more than evident in the group of meanings discussed in this section.

The second type of strategic construal, PC3 (static topology), which is almost as frequent as the previous one (12.10%), points to a more static construal of the particle. If we consider the fact that we are dealing with the construal of particles in the cases of both topological determination and compositional meanings, this particular construal of the particle might be interpreted in two ways. First, if this static topology refers to the previously established topological determination, it suggests that, in the process of constructing meaning, a certain number of L2 users of English more readily attend to the resultant stage of the event described ('out of our world', 'out of our reach', 'out of the normal position', etc.). Second, if the static topology refers to the construal of the particle in the cases of established compositionality, it suggests that the verb denotes the process and the particle denotes the final stage. In either case the final state is what is most relevant.

The same dual interpretation can be given for the construal involving abstract topology (PC2). Even though only 3.25%<sup>15</sup> of the participants construed this rather concrete group of meanings in a more abstract way, it still might be taken as a piece of evidence signalling that L2 users have different starting points within a lexical category<sup>16</sup>. Where and how they start is likely to depend on various aspects of their experience and knowledge. For example, the meaning of *out* in the verb *put out* meaning 'to injure your back, shoulder or hip' is more likely to be construed as concrete and topological by someone who knows exactly what happens when such an injury occurs – a particular bone gets 'out of its place'. However, it can be easily identified with a more abstract meaning such as 'out of the original or normal state'. This also relates to what was suggested by Lindner, who stresses that we should not attempt to categorize particular meanings as an exclusive member of only one category<sup>17</sup>. Speakers (of L1) extract

regularities from particular constructions and construct meanings accordingly, but they are free to extract multiple patterns from a given set of forms. We believe that the same process may be claimed for L2 speakers/learners. This is particularly the case since the concrete and the abstract interpretation have enough commonalities to construe the event in alternate ways.

The third most frequent construal, PC9 (concrete and abstract static topology – 7.55%), also implies static topology. However, this construal involves an important new element – focus on the space outside our immediate dominion. Furthermore, it includes the concept of visibility and accessibility described in Lindner in English as L1. These meanings are often related to the non-transparency of LMs. They hide their contents and make them invisible, but they are often only vaguely specified and they refer to various states denoting obscurity. Thus, *out* often denotes ‘change of state from non-visible to visible’. This resultant change approximates the strategic construal of *out* labelled PC9.

The second group of meanings (G4) had been classified as denoting abstract processual topology. The most frequent construal of the particle in this group was PC2 (17.64%) – abstract topology (static displacement). This static aspect of the construal is actually the central element found for this group of meanings. This is confirmed by the frequencies established for PC3 (5.61%) and PC9 (8.28%), which both imply static topology, and the only difference between them is the viewing arrangement. More specifically, the construal labelled PC3 is deictic and partly egocentric. The location of the speaker operates as a reference point to calculate the location of others. This is evidenced by answers describing *out* as ‘out of our world’, ‘out of our reach’ or ‘out of where we are’, as opposed to answers belonging to PC9, which describe *out* as ‘outside where other people are’, ‘out in the open’, ‘out in the larger area’, and so forth, which do not have a deictic organization. In terms of what has been said about the nature of *out* in English as L1, these two meanings are consistent with what Lindner explained by using the model of an evolutionary cycle. There are two basic viewer-defined regions (the potential private and the actual public) that serve as LMs for *out*. Both Mexican and Croatian users of English have recognized these two regions as an important aspect in the process of meaning construction of this particle. However, 6.51% of the answers referred to concrete processual topology, which suggests that degrees of concreteness and literalness are indeed very subjective. In this particular case, our participants’ strategic

construal showed a tendency towards the concrete whereas ours leaned towards the more abstract. This may be a consequence of the pervasiveness of the concrete construal to operate as the base for the construction of abstract meanings. Thus L2 users may take advantage of the concrete representation in order to interpret abstract configurations. In contrast, the linguist's view may be used to assume such a concrete basis and allow for the abstract representations to be profiled. In other words, common speakers tend to be more conservative than linguists, particularly cognitive linguists, who see metaphorical extensions as the natural shape of human language.

Finally, 5.41% of the answers implied a kind of reverse viewing pertaining to our bodies being perceived as containers. Thus, for example, the meaning of *take out* 'kill' is explained by saying that 'life is taken out of a person's body' or 'one's soul is taken out of someone's body' instead of 'body being taken out of life'. It would be rather callous to attribute this kind of construal to a single factor, but it is reasonable to speculate that the following factors may have contributed to this interesting reversal: a) the centrality of body in human conceptualization; b) the importance of body as a source of containment; c) cultural significance of, for example, the body being the seat of the soul; d) a lack of linguistic context; e) level of language proficiency. The prominence of the body as a container metaphor is well established, at least in western civilization, and happens to be a quite productive schematic representation - ideas escape our minds, we can get people out of our hearts, viruses enter our bodies, and so on. The reverse construal is thus to be expected. Rather than being naïve, second language learners may be using basic metaphorical construals in acquiring new concepts.

The third group of meanings (G5) had been classified as aspectual (termination). As expected, 11.61% of the participants' answers suggest that the meaning of the particle denotes some sort of termination. However, a very large number of answers relate to less grammaticalized meanings of *out*, which again is likely to indicate that linguistic categories may be entered at various points in the process of language acquisition and development. Thus, the second most frequent construal (8.10%) implies that the particle stands for static displacement. Then, 6.51% of the answers point to the static topology focused on the space where the conceptualizer is situated, 3.97% of the answers say that the particle denotes concrete processual topology (together with 2.06% of the cases with no container specified), and 3.94% of the answers indicate that *out* stands for some sort

of inaccessibility and absence (PC4). If we reorder these answers into a sort of gradient line denoting the process of grammaticalization, we might obtain the order as shown in Figure 11.

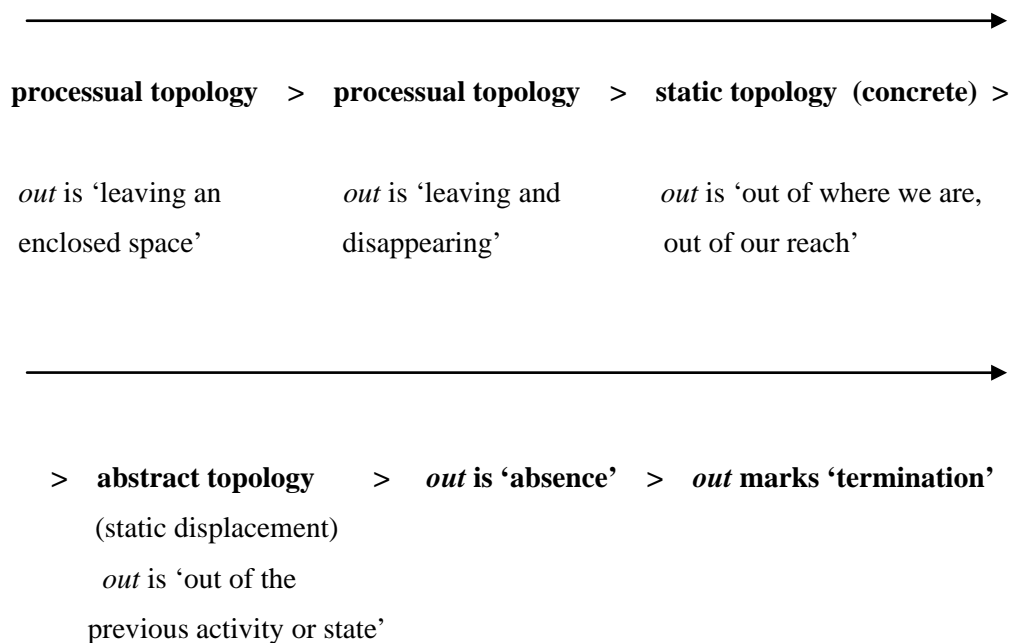


Figure 11. A potential path of grammaticalization in the strategic construal of *out* (1).

Finally, it is interesting to note the difference in frequencies between the two construals implying static topology (PC3 and PC9). Whereas the frequency of PC3 (concrete static topology with the focus on the conceptualizer's space) is 6.51%, the frequency of PC9 (concrete and abstract topology with the focus outside the conceptualizer's space) is only 1.14%. This may indicate that in terms of the stages in the process of developing or acquiring a network of meanings, the construal of *out* involving the conceptualizer's space and the construal of *out* involving the space outside the conceptualizer's dominion are not equally distant from the aspectual meaning of *out*. In other words, the construal of *out* involving the conceptualizer's space is closer to the aspectual meaning of *out* than the construal involving the space outside the conceptualizer's dominion. This again shows the pervasiveness of the concrete and deictic representation of *out* operating as the base for alternative readings.

The last group of meanings of PVs (G6) is also aspectual, but the meanings seem to be inceptive. Contrary to the results for *out* denoting termination, the most frequent answers for this group of meanings are not those that refer explicitly to the aspectual

nature of the particle. The most frequent answers are those labelled PC9 (11.96%), which imply static topology with the focus on an outer space. We hypothesize that for L2 users of English, the beginning of an activity is identified with the space entering their immediate dominion. Things do not seem to be leaving the space of the conceptualizer, but they become accessible from a hidden region. Things start as they become visible. The accessibility construal is generally quite pervasive. The sun and the moon come out, as well as actors on stage, water from fountains, and so on. It is reasonable to assume that L2 users exploit that kind of construal from their basic experience. Concrete processual topology and explicit reference to aspect are the second most frequent kinds of construal (7.61%). In the case of processual topology, the users seem to construe the inceptive nature of PVs by assigning it to the particle denoting the process of a TR leaving an enclosed space (and the space is often described as something that confines the TR). Finally, 3.26% of the answers refer to abstract topology (PC2). In sum, in a similar manner to *out* signalling termination, strategic construal of *out* that marks inception shows stages that resemble the process of grammaticalization that is implied in L1 descriptions of this particle (see Figure 12).

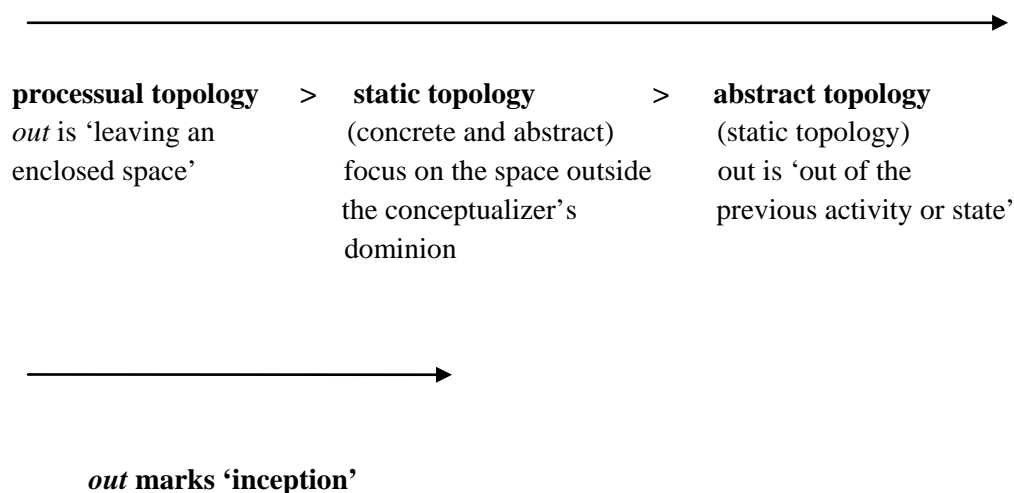


Figure 12. A potential path of grammaticalization in the strategic construal of *out* (2).

#### III.2.4. Results for in

1) For the group of meanings classified as G2 (processual topology – concrete), the meaning of *in* was construed as follows:

a) PC1 (15.37%) – processual topology (concrete/physical). *In* is: entering a new space; getting (in)to a new space (there is some kind of movement involved); getting into a container and the container is specified; going into a certain space; going into a designated area; into a certain piece of space; into a place (see Figure 13).

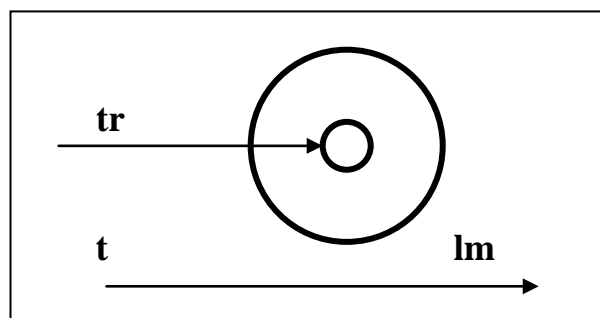


Figure 13. Strategic construal of *in* – processual topology.

b) PC3 (12.80%) – static topology (concrete/physical) – there is no motion, just physical space and location. *In* is: a place; a location; space; limited space; confined space; something like a hiding place (see Figure 14).

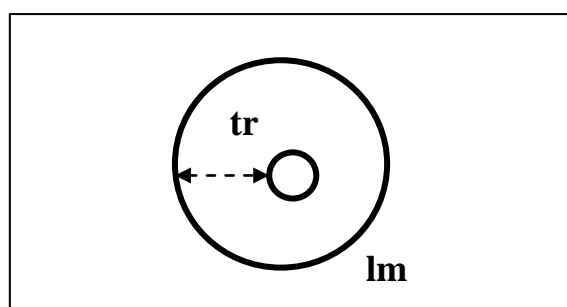


Figure 14. Strategic construal of *in* – static topology.

c) PC2 (2.48%) – abstract topology leaning towards the inceptive aspect. *In* is: be/get (in)to a new activity; be/get (in)to a new situation; (in)to a (new/another) group of people; entering a new situation; beginning of something; starting to get involved. See Figure 15, which represents the inceptive nature of the process constituting this construal<sup>18</sup>.

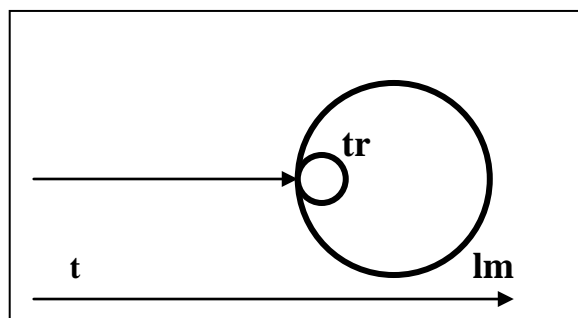


Figure 15. Strategic construal of *in* – inceptive process.

d) PC4 (3.47%) – static topology – focus on the subject’s dominion. *In* is: where the subject is, i.e. his/her world; control; dominion; power.

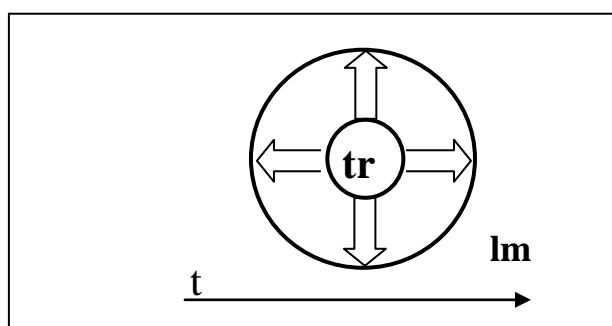


Figure 16. Strategic construal of *in* – control within dominion.

e) PC5 (2.01%) – process (concrete and physical, but no container specified). *In* is: going into; jumping into; moving towards inside; moving inwards; entering; returning (see Figure 17).

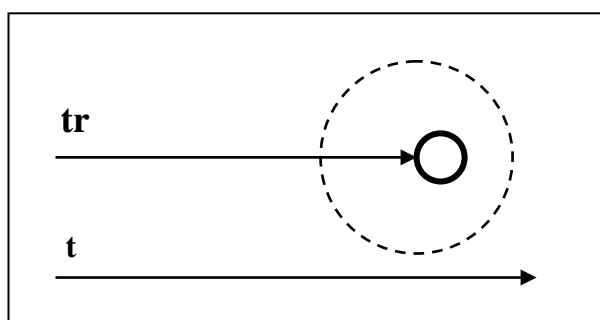


Figure 17. Strategic construal of *in* – entrance – no container specified.

f) PC6 (2.01%) – *in* is: inside, inside of something (not very informative).

g) PC8 (0.11%) – *in* intensifies the action.

h) PC11 (2.48%) – reverse topology.

- i) PC12 (0.11%) – established metaphor. *In* is: acceptable and accepting.
- 2) For G4 – processual topology (abstract), the meaning of *in* was construed in the following ways:
- a) PC1 (17.85%) – processual topology (concrete/physical). See Figure 13.
- b) PC2 (16.91%) – abstract topology leaning towards the inceptive aspect. See Figure 15.
- c) PC3 (3.55%) – static topology (concrete/physical). See Figure 14.
- d) PC4 (2.75%) – static topology – focus on the subject’s dominion.
- e) PC5 (1.2%) – process (concrete and physical, but no container specified). See Figure 16.
- f) PC6 (2.29%) – *in* is: inside, inside of something (not very informative).
- g) PC8 (0.34%) – *in* intensifies the action.
- h) PC11 (3.08%) – reverse topology.
- i) PC12 (0.17%) – established metaphor. *In* is: acceptable and accepting.

Table 2. Strategic construal of *in* – summary.

|   | <b>G2 (processual topology – concrete)</b> | <b>For G4 (processual topology – abstract)</b> |
|---|--|--|
| <b>PC1 – processual topology (concrete/physical)</b>                          | 15.37%                                     | 17.85%   |
| <b>PC2 – abstract topology leaning towards the inceptive aspect</b>           | 2.48%                                      | 16.91%   |
| <b>PC3 – static topology (concrete/physical)</b>                              | 12.80%                                     | 3.55%  |
| <b>PC4 – static topology – focus on the subject’s dominion</b>                | 3.47%                                      | 2.75%  |
| <b>PC5 – process (concrete and physical, but no container specified)</b>      | 2.01%                                      | 1.20%  |
| <b>PC6 – <i>in</i> is: inside, inside of something (not very informative)</b> | 2.01%                                      | 2.29%  |



|   |       |       |
|---|-------|-------|
| <b>PC8 – <i>in</i> intensifies the action</b>   | 0.11% | 0.34% |
| <b>PC 11 – reverse topology</b>                 | 2.48% | 3.08% |
| <b>PC12 – established metaphor ‘acceptable’</b> | 0.11% | 0.17% |

### III.2.5. Discussion for *in*

The first and the most obvious observation is that *in* is less informative than *out*, which is relevant to various aspects of the results in both parts of the research (see Geld, this volume). Secondly, there are fewer types of the construal with *in* than with *out*, and the learners’ answers are shorter and/or less specified in the case of *in*. Finally, with both groups of meanings (G2 and G4) there are a certain number of answers that explicitly say that *in* is ‘not very informative’ (PC6). This is probably due to the much-discussed pervasiveness of the experience of boundedness and containment (Dewell 2005, Johnson 1987, Lakoff 1987), which results in containment being perceived as some kind of ‘regular’, ‘natural’ or ‘neutral’ state of being that is taken for granted. Moreover the marked character of *in* corresponds to other conceptual phenomena well attested in language. We naturally see and conceptualize what is in front of us, what is on stage (Langacker 2000). Looking at the space we actually occupy implies special effort. This correlates with abundant asymmetry facts in language such as the unmarked status of 3<sup>rd</sup> person over 1st in pronominal marking, the marked character of reflexive, as opposed to transitive constructions, and the special treatment of inalienable possession. To the extent that *in* normally designates the location where the conceptualizer is located, the marked character of *in* is to be expected.

Let us now take a look at the two groups separately. For the group of meanings classified as G2 (processual topology – concrete), the most frequent construal was PC1 (concrete processual topology with reference to the container). Together with PC5 (concrete processual topology with no reference to the container), 17.38% of the participants identified the meaning of the particle with the meaning we had assigned to the whole PV. The second most frequent construal, PC3 (static topology – 12.80%), suggests that the participants attended only to the resulting state of the whole image, and they formed a completely stationary image, independent from a preceding path. Considering the fact that our participants were all adults, in whose L1 semantic system

static locations are considered to be more basic than motion events, it is not surprising that so many of them ignored the dynamic aspect of the underlying schema while constructing this particular meaning in L2.

The last two types of construal that deserve our attention for this group of meanings are PC4 (static topology with the focus on the subject's dominion) and PC11 (reverse or non-egocentric viewing). As stressed by Evans and Tyler in their description of *in*, there are two clusters of meaning related to the conceptualizer's vantage point: a) the cluster related to the spatial scenes in which the vantage point is located within the location being conceptualized, and b) the cluster related to the spatial scenes in which the vantage point is located outside the spatial region being conceptualized. What the data for G2 show is that, for some users, the most important aspect of meaning construal is the one pertaining to the viewing arrangement in which the vantage point is located within the spatial scene being conceptualized. Thus, 3.47%<sup>19</sup> of the participants stressed that the most salient aspect of the construal was the focus on the participant's/conceptualizer's dominion. Moreover, a smaller number of them (2.48%) did the same even when the particle does not actually code this particular viewing arrangement (e.g. *in* in the PV construction *write in* meaning 'write to ask or complain' does not code the subject's dominion). If we treat the latter not simply as an error, we may conclude that L2 users recognize certain, more general, facets of the meaning of the particle even when they are not coded in a particular sense that is being processed. This might lead us to believe and conclude that their strategic thinking involves various cognitive processes, such as for example those pertaining to viewing arrangement, which tend to be activated whenever they constitute aspects of construal in L1. In other words, having encountered various facets of meaning and having abstracted a variety of regularities in the process of their L2 learning and processing, users are likely to employ them and construct meaning strategically whenever they face something they do not know or understand completely. Consequently, their strategic thinking does involve errors in a narrow sense of the meaning, but, in broader terms, they should be treated as a meaningful and constructive stage in their progress.

Finally, for the group of meanings G4 (processual topology – abstract), the situation is somewhat different. Even though there is a high percentage of answers implying concrete processual topology (PC1 – 17.85%), there is also a high percentage of

answers (16.91%) pointing to the inceptive aspect of the construal (PC2). The recognition of the abstract nature of the particle in this particular group of meanings is not that surprising. What is more surprising is the users' tendency to go a step further and describe the role of the particle in terms of its aspectual nature. The inceptive aspect of the particle is defined either overtly by using descriptions such as 'beginning of something' or 'starting to get involved', or in a more covert manner by describing its meaning as, for example, 'getting (in)to a new activity' or 'entering a new situation'. Thus, we must conclude that our L2 users of English recognized the aspectual nature of the particle where we, i.e. linguists and researchers, had neither expected nor done so ourselves. A closer look at the two sources for inceptive meanings suggests that this construal is the mirror image of the inceptive meaning provided for *out*. In the case of *out* events are initiated as they become accessible from a hidden location. In the case of *in* accessibility is the default, no hidden location is required. As soon as mental contact is established the event gets started. The high frequency for inceptive *in* is thus to be expected.

#### IV. CONCLUSIONS

Users of English as L2 find both lexicon and grammar meaningful, and they are aware of the symbolic nature of language. The cognitive linguistic premise that language is intimately related to other cognitive processes finds its evidence in the nature of learning strategies employed by L2 users. More specifically, meaning construal in L2 is comparable to meaning construal in L1. This is especially apparent in users' construal of particles. They recognize the complexity of their semantic networks proposed and described in English as L1. Their answers clearly imply the problem of dynamic aspects of the construal of particles as well as the importance of cognitive processes such as attention and perspective (e.g. their answers imply gradience from the literal to the metaphorical, aspects of viewing arrangement, and mental scanning). In other words, their cognitive strategies employed in the process of meaning construction in L2 reflect general cognitive processes described as aspects of construal in L1. Even though the realizations of these processes are language-specific and languages have different inventories for building their conceptual structures, the fact that cognitive processes are

intimately related to language enables L2 users to activate them in the process of meaning construal. What the data show is that their ability to go from the literal and concrete to the abstract and metaphorical results in a variety of strategically constructed meanings amounting to a gradient scale resembling a grammaticalization path of English particles. For example, their answers for *out* in the group of PV meanings implying aspect (termination) indicate that they make sense of meanings in a linguistically motivated way, that they are tacitly aware of the fact that lexicon and grammar form a continuum, and that their meaning construal involves general cognitive processes such as attention, comparison and perspective, i.e. linguistic construal operations such as selection, scalar adjustment, metaphor, vantage point, and so forth, as instances of these general processes. This is made clear in the following grammaticalization path: *out* is ‘leaving an enclosed space’ (processual topology) > *out* is ‘leaving and disappearing’ (processual topology, no container specified) > *out* is ‘out of where we are, out of our reach’ (static topology – concrete) > *out* is ‘out of the previous activity or state (abstract topology - static displacement) > *out* is ‘absence’ > *out* marks ‘termination’. The path also shows an obvious subjectification path where the core meaning undergoes attenuation (Langacker 2000b). Some properties of the basic meaning of *out* lose prominence in favour of a less central feature to actually construe more schematic representations. First the notion of boundary is lost, and then the presence of the source locations is blurred. Moreover, the space is no longer a concrete one and finally abandonment of a previous stage triggers the aspectual notion of termination. We may claim that the basic notion of containing space remains at the base to support the emergence of abstract meanings.

Another example of our users’ varying attention relates to the mental scanning underlying dynamic and static aspects of their meaning construal. For example, even though conceptual scanning processes are an essential element for both path schemas and stative relations, our learners’ attention was often rather selective and they attended only to the resulting states and described completely stationary images rather than processes.

Finally, aspects of viewing arrangement pertaining to the general cognitive process of perspective are more than evident in the types of strategic construal implying the

importance of the conceptualizer's dominion or the space outside of her/his dominion (see construals PC3 and PC9 for *out*, and PC4 for *in*).

The way our participants constructed particular meanings supports the idea that speakers of English have different starting points within a lexical category. It is true that the topological representation is dominant, but alternative ways of construing meaning are at hand. Where and how they start is likely to depend on various factors pertaining to their experience and knowledge (e.g. the work they do, hobbies they have, places they live in), and to individual strategies employed to conform to events. For example, there are users who construct concrete meanings in a more abstract way. The meaning of *out* in the verb *put out* meaning 'to injure your back, shoulder or hip' is more likely to be construed as concrete and topological by someone who knows exactly what happens when such an injury occurs – a particular bone gets 'out of its place'. On the other hand, it can be easily identified with a more abstract meaning such as 'out of the original or normal state' by those who have never seen or experienced such an injury or have never thought about it. However, predicting our learners' starting points within a lexical category, if possible at all, would require the introduction of a number of relevant variables and a thorough investigation of various aspects of language learning. However, we can still conclude that our participants' meaning construction supports the idea that the best way to deal with complex lexical categories is to avoid strict categorization which assumes fixed and predictable places of particular meanings within a particular category. Our participants' construals exhibit partial compositionality which is evident in their selection of one or two outstanding properties from the whole set of possible features of each PV. Furthermore, they seem to extract regularities from particular constructions and construct meaning accordingly, but they are free to pull out multiple patterns from a given set of forms. Crucially, these patterns do not vary in all possible directions. They exploit the possibilities of the base form in patterns of attenuation and subjectification that profile different facets of the base form as pertaining to the dominion they apply. The flexibility to construe *in* or *out*, in a concrete or an abstract manner, simply obeys the most fundamental topological schematic representation of these forms in such a way that the freedom in the conceptualizer's vantage point is framed by the basic cognitive patterns we have sketched in this paper.

Given these cognitive patterns, the abundant similarities in event construal between second- and first-language users' strategic construal should be anything but surprising.

## Notes

<sup>1</sup>See also Geld this volume as a complement to this article.

<sup>2</sup>Discussions on degrees of idiomaticity of English particle verbs as composite wholes are numerous (see for example Bolinger 1971, Celce-Murcia and Larsen-Freeman 1999, Cornell 1985, Dagut and Laufer 1985, Dirven 2001, Gries 2003, Laufer and Eliasson 1993, Liao and Fukuya 2004, Lindner 1981, Makkai 1972, McPortland 1989, O' Dowd 1998, Quirk et al. 1985). Even the content of phrasal-verb dictionaries varies according to the type of meanings included: for example, Sinclair and Moon (1989) and Cullen and Sargeant (1996) include both literal and idiomatic phrasal verbs, whereas Cowie and Mackin (1993) exclude the former. See also Cappelle (2005: 120) for a two-way grid classifying particle verbs in terms of literal and idiomatic meanings assigned to their component parts.

Relevant parallelism related to gradient idiomaticity is also found in the field of idioms. For example, Gibbs claims that *chew the fat* and *kick the bucket* are much less analyzable than e.g. *pop the question* or *blow your stack* (1995: 100).

<sup>3</sup>The building-block metaphor was used by Langacker (1987, 2000) to portray the way linguists tend to think about morphological and syntactic composition.

<sup>4</sup>This view of language acquisition is shared by various constructivists, for example, the connectionists (Christiansen and Chater 2001, Christiansen et al. 1999, Plunkett 1998), functional linguists (Bates and MacWhinney 1981, MacWhinney and Bates 1989), emergentists (Elman et al. 1996), cognitive linguists (Croft and Cruse 2004, Lakoff 1987, Langacker 1987, 1991), constructivist child-language researchers (Slobin 1997, Tomasello 1992, 1995, 2000) and many others.

<sup>5</sup>These constraints are especially evident in adult L2 learning (see for example Doughty 2003).

<sup>6</sup>See the introduction of Geld (this volume) to have the typology explained.

<sup>7</sup>For issues related to negotiation of form prompted by negotiation of meaning see e.g. Brock et al. (1986), Day et al. (1983), Foster and Ohta (2005), Skehan and Foster (2001).

<sup>8</sup>See also the results in Section IV of Geld's article (this volume).

<sup>9</sup>See Geld's abstract (this volume).

<sup>10</sup>See Section III.1, The instrument, in Geld's article (this volume).

<sup>11</sup>The main stage was preceded by a pilot study to test the reliability of the questionnaire.

<sup>12</sup>The third category was lexical determination. The three categories (topological, lexical and compositional) were the results of the first part of the research (see Geld this volume).

<sup>13</sup>The following learners' dictionaries were consulted while designing the questionnaire used in this research: *Oxford Phrasal Verbs: Dictionary for Learners of English* (Parkinson 2001) and *Cambridge Phrasal Verbs Dictionary* (Walter 2006).

<sup>14</sup>See Section III-3 in Geld's article (this volume) for complementary data.

<sup>15</sup>It should be stressed that this percentage (3.25%) is viewed in relation to the frequency of other contributions. In other words, if we know that there were 10 types of construal identified for *out*, and that the highest percentage for this group of meanings was 12.10%, followed by 11.50% and 7.55%, and that most other frequencies were below 2.0%, it seemed reasonable to consider PC2 (3.25%) in our discussion and attempt to interpret its contribution.

<sup>16</sup>Rice analysed longitudinal data obtained from the CHILDES corpus for two English-speaking children and the results showed that there are significant differences in usage patterns for the prepositions she studied, and that each child has a "different point of entry" into one of the nine lexical categories (2003: 272). Rice concludes that the findings suggest that semantic extension within a lexical category proceeds outwardly only partially from some basic, concrete sense, and that the child language evidence presented in the analysis is "inconclusive about any parallelisms which might obtain between developmental and diachronic extension" (*ibid.*: 273).

<sup>17</sup>Here, Lindner uses the term *category* in a narrower sense of its meaning. It actually refers to a cluster of meanings that make similar semantic contributions in particular groups of PV constructions.

<sup>18</sup> This particular construal combines two important aspects of the construal of *in* in L2. First, it implies abstract topology and, second, it points to a more grammaticalized meaning that codes the inceptive aspect that has not been discussed for *in* in L1.

<sup>19</sup> We believe that a qualitative analysis such as ours needs to include and interpret even seemingly less significant contributions, especially in the light of our insistence on illuminating subjective and idiosyncratic aspects of (strategic) construal.

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